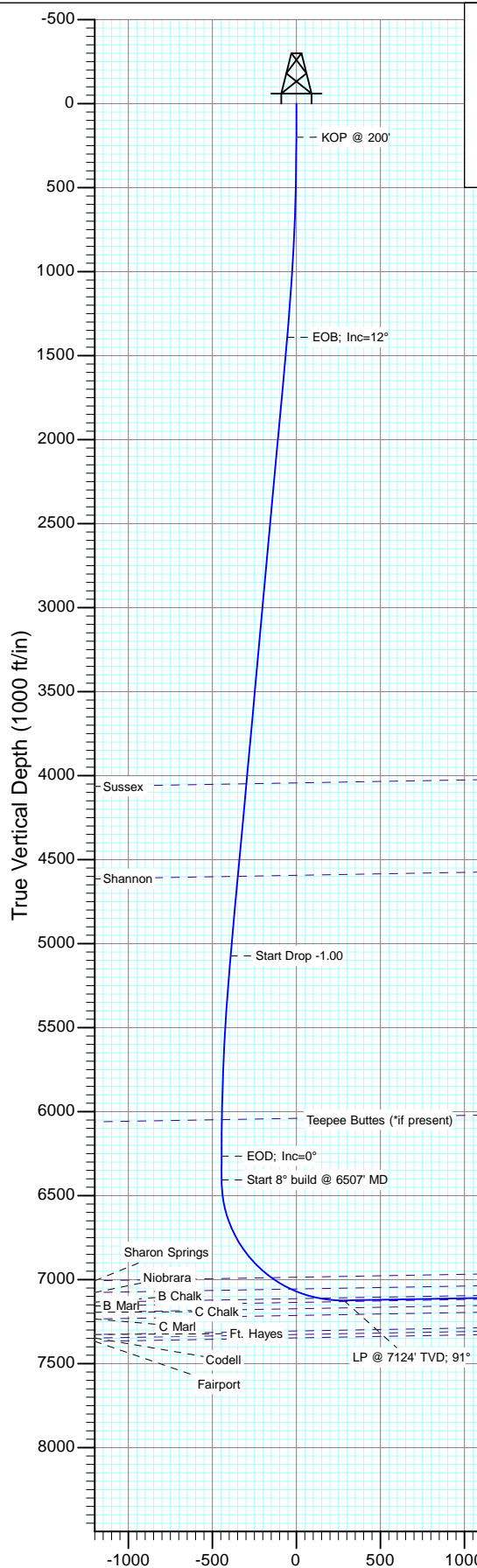


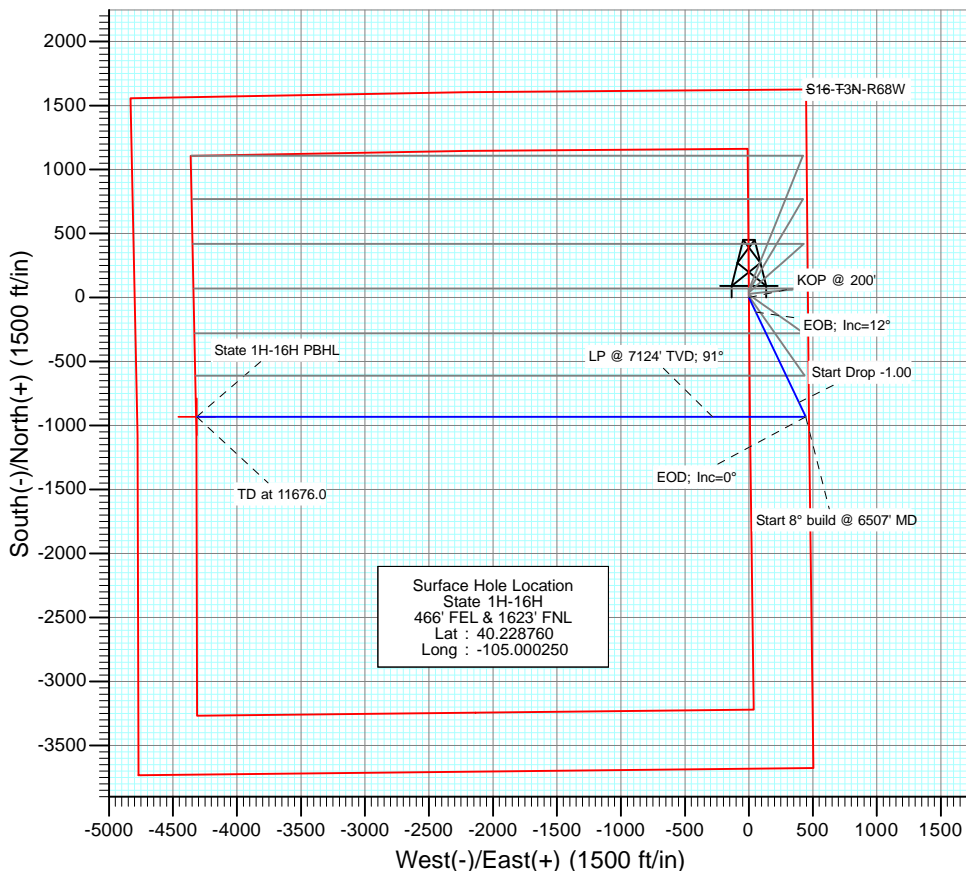


Project: DJ Wattenberg
Site: S16-T3N-R68W (State)
Well: State 1H-16H
Wellbore: Hz
Design: Plan #1



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	1400.0	12.00	154.50	1391.2	-113.0	53.9	1.00	154.50	-53.9	
4	5165.0	12.00	154.50	5074.0	-819.5	390.9	0.00	0.00	-390.9	
5	6365.0	0.00	0.00	6265.2	-932.5	444.8	1.00	180.00	-444.8	
6	6507.7	0.00	0.00	6408.0	-932.5	444.8	0.00	0.00	-444.8	
7	7645.2	91.00	270.00	7124.0	-932.5	-283.9	8.00	270.00	283.9	
8	11676.0	91.00	270.00	7053.7	-932.2	-4314.0	0.00	0.00	4314.0	State 1H-16H PBHL

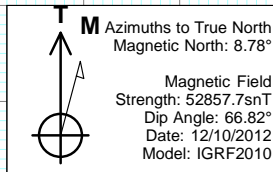


DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
State 1H-16H PBHL	-932.2	-4314.0	1325618.63	3135233.95	40.226200	-105.015700

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4049.2	4117.3	Sussex
4600.1	4680.5	Shannon
6048.7	6148.5	Teepee Buttes (*if present)
6989.6	7186.5	Sharon Springs
7057.5	7321.4	Niobrara
7111.6	7498.4	B Chalk



Plan #1
State 1H-16H
12xxx; LR
WELL @ 5039.0ft (Original Well Elev)
Ground Elevation @ 5026.0
North American Datum 1983
Well State 1H-16H, True North

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well State 1H-16H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5039.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5039.0ft (Original Well Elev)
Site:	S16-T3N-R68W (State)	North Reference:	True
Well:	State 1H-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 1H-16H					
Well Position	+N/-S	0.0 ft	Northing:	1,326,575.12 ft	Latitude:	40.228760
	+E/-W	0.0 ft	Easting:	3,139,542.66 ft	Longitude:	-105.000250
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,026.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/10/2012	8.77	66.82	52,858

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	270.00

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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,400.0	12.00	154.50	1,391.2	-113.0	53.9	1.00	1.00	0.00	154.50	
5,165.0	12.00	154.50	5,074.0	-819.5	390.9	0.00	0.00	0.00	0.00	
6,365.0	0.00	0.00	6,265.2	-932.5	444.8	1.00	-1.00	0.00	180.00	
6,507.7	0.00	0.00	6,408.0	-932.5	444.8	0.00	0.00	0.00	0.00	
7,645.2	91.00	270.00	7,124.0	-932.5	-283.9	8.00	8.00	0.00	270.00	
11,676.0	91.00	270.00	7,053.7	-932.2	-4,314.0	0.00	0.00	0.00	0.00	State 1H-16H PBHL

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well State 1H-16H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5039.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5039.0ft (Original Well Elev)
Site:	S16-T3N-R68W (State)	North Reference:	True
Well:	State 1H-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	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	KOP @ 200'
300.0	1.00	154.50	300.0	-0.8	0.4	-0.4	1.00	1.00	
400.0	2.00	154.50	400.0	-3.2	1.5	-1.5	1.00	1.00	
500.0	3.00	154.50	499.9	-7.1	3.4	-3.4	1.00	1.00	
600.0	4.00	154.50	599.7	-12.6	6.0	-6.0	1.00	1.00	
700.0	5.00	154.50	699.4	-19.7	9.4	-9.4	1.00	1.00	
800.0	6.00	154.50	798.9	-28.3	13.5	-13.5	1.00	1.00	
900.0	7.00	154.50	898.3	-38.5	18.4	-18.4	1.00	1.00	
1,000.0	8.00	154.50	997.4	-50.3	24.0	-24.0	1.00	1.00	
1,100.0	9.00	154.50	1,096.3	-63.7	30.4	-30.4	1.00	1.00	
1,200.0	10.00	154.50	1,194.9	-78.6	37.5	-37.5	1.00	1.00	
1,300.0	11.00	154.50	1,293.3	-95.0	45.3	-45.3	1.00	1.00	
1,400.0	12.00	154.50	1,391.2	-113.0	53.9	-53.9	1.00	1.00	EOB; Inc=12°
1,500.0	12.00	154.50	1,489.1	-131.8	62.9	-62.9	0.00	0.00	
1,600.0	12.00	154.50	1,586.9	-150.5	71.8	-71.8	0.00	0.00	
1,700.0	12.00	154.50	1,684.7	-169.3	80.8	-80.8	0.00	0.00	
1,800.0	12.00	154.50	1,782.5	-188.1	89.7	-89.7	0.00	0.00	
1,900.0	12.00	154.50	1,880.3	-206.8	98.7	-98.7	0.00	0.00	
2,000.0	12.00	154.50	1,978.1	-225.6	107.6	-107.6	0.00	0.00	
2,100.0	12.00	154.50	2,075.9	-244.4	116.6	-116.6	0.00	0.00	
2,200.0	12.00	154.50	2,173.8	-263.1	125.5	-125.5	0.00	0.00	
2,300.0	12.00	154.50	2,271.6	-281.9	134.5	-134.5	0.00	0.00	
2,400.0	12.00	154.50	2,369.4	-300.7	143.4	-143.4	0.00	0.00	
2,500.0	12.00	154.50	2,467.2	-319.4	152.4	-152.4	0.00	0.00	
2,600.0	12.00	154.50	2,565.0	-338.2	161.3	-161.3	0.00	0.00	
2,700.0	12.00	154.50	2,662.8	-357.0	170.3	-170.3	0.00	0.00	
2,800.0	12.00	154.50	2,760.7	-375.7	179.2	-179.2	0.00	0.00	
2,900.0	12.00	154.50	2,858.5	-394.5	188.2	-188.2	0.00	0.00	
3,000.0	12.00	154.50	2,956.3	-413.3	197.1	-197.1	0.00	0.00	
3,100.0	12.00	154.50	3,054.1	-432.0	206.1	-206.1	0.00	0.00	
3,200.0	12.00	154.50	3,151.9	-450.8	215.0	-215.0	0.00	0.00	
3,300.0	12.00	154.50	3,249.7	-469.6	224.0	-224.0	0.00	0.00	
3,400.0	12.00	154.50	3,347.5	-488.3	232.9	-232.9	0.00	0.00	
3,500.0	12.00	154.50	3,445.4	-507.1	241.9	-241.9	0.00	0.00	
3,600.0	12.00	154.50	3,543.2	-525.9	250.8	-250.8	0.00	0.00	
3,700.0	12.00	154.50	3,641.0	-544.6	259.8	-259.8	0.00	0.00	
3,800.0	12.00	154.50	3,738.8	-563.4	268.7	-268.7	0.00	0.00	
3,900.0	12.00	154.50	3,836.6	-582.2	277.7	-277.7	0.00	0.00	
4,000.0	12.00	154.50	3,934.4	-600.9	286.6	-286.6	0.00	0.00	
4,100.0	12.00	154.50	4,032.2	-619.7	295.6	-295.6	0.00	0.00	
4,117.3	12.00	154.50	4,049.2	-622.9	297.1	-297.1	0.00	0.00	Sussex
4,200.0	12.00	154.50	4,130.1	-638.5	304.5	-304.5	0.00	0.00	
4,300.0	12.00	154.50	4,227.9	-657.2	313.5	-313.5	0.00	0.00	
4,400.0	12.00	154.50	4,325.7	-676.0	322.4	-322.4	0.00	0.00	
4,500.0	12.00	154.50	4,423.5	-694.7	331.4	-331.4	0.00	0.00	
4,600.0	12.00	154.50	4,521.3	-713.5	340.3	-340.3	0.00	0.00	
4,680.5	12.00	154.50	4,600.1	-728.6	347.5	-347.5	0.00	0.00	Shannon
4,700.0	12.00	154.50	4,619.1	-732.3	349.3	-349.3	0.00	0.00	
4,800.0	12.00	154.50	4,716.9	-751.0	358.2	-358.2	0.00	0.00	
4,900.0	12.00	154.50	4,814.8	-769.8	367.2	-367.2	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well State 1H-16H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5039.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5039.0ft (Original Well Elev)
Site:	S16-T3N-R68W (State)	North Reference:	True
Well:	State 1H-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
5,000.0	12.00	154.50	4,912.6	-788.6	376.1	-376.1	0.00	0.00	
5,100.0	12.00	154.50	5,010.4	-807.3	385.1	-385.1	0.00	0.00	
5,165.0	12.00	154.50	5,074.0	-819.5	390.9	-390.9	0.00	0.00	Start Drop -1.00
5,200.0	11.65	154.50	5,108.2	-826.0	394.0	-394.0	1.00	-1.00	
5,300.0	10.65	154.50	5,206.3	-843.5	402.3	-402.3	1.00	-1.00	
5,400.0	9.65	154.50	5,304.8	-859.4	409.9	-409.9	1.00	-1.00	
5,500.0	8.65	154.50	5,403.5	-873.7	416.7	-416.7	1.00	-1.00	
5,600.0	7.65	154.50	5,502.5	-886.5	422.8	-422.8	1.00	-1.00	
5,700.0	6.65	154.50	5,601.7	-897.8	428.2	-428.2	1.00	-1.00	
5,800.0	5.65	154.50	5,701.1	-907.4	432.8	-432.8	1.00	-1.00	
5,900.0	4.65	154.50	5,800.7	-915.5	436.7	-436.7	1.00	-1.00	
6,000.0	3.65	154.50	5,900.5	-922.1	439.8	-439.8	1.00	-1.00	
6,100.0	2.65	154.50	6,000.3	-927.0	442.2	-442.2	1.00	-1.00	
6,148.5	2.17	154.50	6,048.7	-928.9	443.0	-443.0	1.00	-1.00	Teepee Buttes (*if present)
6,200.0	1.65	154.50	6,100.2	-930.4	443.8	-443.8	1.00	-1.00	
6,300.0	0.65	154.50	6,200.2	-932.2	444.6	-444.6	1.00	-1.00	
6,365.0	0.00	0.00	6,265.2	-932.5	444.8	-444.8	1.00	-1.00	EOD; Inc=0°
6,400.0	0.00	0.00	6,300.2	-932.5	444.8	-444.8	0.00	0.00	
6,500.0	0.00	0.00	6,400.2	-932.5	444.8	-444.8	0.00	0.00	
6,507.7	0.00	0.00	6,408.0	-932.5	444.8	-444.8	0.00	0.00	Start 8° build @ 6507' MD
6,600.0	7.38	270.00	6,500.0	-932.5	438.9	-438.9	8.00	8.00	
6,700.0	15.38	270.00	6,597.9	-932.5	419.2	-419.2	8.00	8.00	
6,800.0	23.38	270.00	6,692.2	-932.5	386.0	-386.0	8.00	8.00	
6,900.0	31.38	270.00	6,780.9	-932.5	340.0	-340.0	8.00	8.00	
7,000.0	39.38	270.00	6,862.4	-932.5	282.2	-282.2	8.00	8.00	
7,100.0	47.38	270.00	6,935.0	-932.5	213.6	-213.6	8.00	8.00	
7,186.5	54.30	270.00	6,989.6	-932.5	146.6	-146.6	8.00	8.00	Sharon Springs
7,200.0	55.38	270.00	6,997.3	-932.5	135.5	-135.5	8.00	8.00	
7,300.0	63.38	270.00	7,048.2	-932.5	49.5	-49.5	8.00	8.00	
7,321.4	65.09	270.00	7,057.5	-932.5	30.3	-30.3	8.00	8.00	Niobrara
7,400.0	71.38	270.00	7,086.7	-932.5	-42.7	42.7	8.00	8.00	
7,498.4	79.25	270.00	7,111.6	-932.5	-137.8	137.8	8.00	8.00	B Chalk
7,500.0	79.38	270.00	7,111.9	-932.5	-139.4	139.4	8.00	8.00	
7,600.0	87.38	270.00	7,123.4	-932.5	-238.7	238.7	8.00	8.00	
7,645.2	91.00	270.00	7,124.0	-932.5	-283.9	283.9	8.00	8.00	LP @ 7124' TVD; 91°
7,700.0	91.00	270.00	7,123.1	-932.5	-338.6	338.6	0.00	0.00	
7,800.0	91.00	270.00	7,121.3	-932.5	-438.6	438.6	0.00	0.00	
7,900.0	91.00	270.00	7,119.6	-932.5	-538.6	538.6	0.00	0.00	
8,000.0	91.00	270.00	7,117.9	-932.5	-638.6	638.6	0.00	0.00	
8,100.0	91.00	270.00	7,116.1	-932.5	-738.6	738.6	0.00	0.00	
8,200.0	91.00	270.00	7,114.4	-932.5	-838.6	838.6	0.00	0.00	
8,300.0	91.00	270.00	7,112.6	-932.4	-938.6	938.6	0.00	0.00	
8,400.0	91.00	270.00	7,110.9	-932.4	-1,038.5	1,038.5	0.00	0.00	
8,500.0	91.00	270.00	7,109.1	-932.4	-1,138.5	1,138.5	0.00	0.00	
8,600.0	91.00	270.00	7,107.4	-932.4	-1,238.5	1,238.5	0.00	0.00	
8,700.0	91.00	270.00	7,105.6	-932.4	-1,338.5	1,338.5	0.00	0.00	
8,800.0	91.00	270.00	7,103.9	-932.4	-1,438.5	1,438.5	0.00	0.00	
8,900.0	91.00	270.00	7,102.1	-932.4	-1,538.5	1,538.5	0.00	0.00	
9,000.0	91.00	270.00	7,100.4	-932.4	-1,638.4	1,638.4	0.00	0.00	
9,100.0	91.00	270.00	7,098.7	-932.4	-1,738.4	1,738.4	0.00	0.00	
9,200.0	91.00	270.00	7,096.9	-932.4	-1,838.4	1,838.4	0.00	0.00	
9,300.0	91.00	270.00	7,095.2	-932.4	-1,938.4	1,938.4	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well State 1H-16H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5039.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5039.0ft (Original Well Elev)
Site:	S16-T3N-R68W (State)	North Reference:	True
Well:	State 1H-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
9,400.0	91.00	270.00	7,093.4	-932.4	-2,038.4	2,038.4	0.00	0.00	
9,500.0	91.00	270.00	7,091.7	-932.4	-2,138.4	2,138.4	0.00	0.00	
9,600.0	91.00	270.00	7,089.9	-932.3	-2,238.4	2,238.4	0.00	0.00	
9,700.0	91.00	270.00	7,088.2	-932.3	-2,338.3	2,338.3	0.00	0.00	
9,800.0	91.00	270.00	7,086.4	-932.3	-2,438.3	2,438.3	0.00	0.00	
9,900.0	91.00	270.00	7,084.7	-932.3	-2,538.3	2,538.3	0.00	0.00	
10,000.0	91.00	270.00	7,082.9	-932.3	-2,638.3	2,638.3	0.00	0.00	
10,100.0	91.00	270.00	7,081.2	-932.3	-2,738.3	2,738.3	0.00	0.00	
10,200.0	91.00	270.00	7,079.5	-932.3	-2,838.3	2,838.3	0.00	0.00	
10,300.0	91.00	270.00	7,077.7	-932.3	-2,938.2	2,938.2	0.00	0.00	
10,400.0	91.00	270.00	7,076.0	-932.3	-3,038.2	3,038.2	0.00	0.00	
10,500.0	91.00	270.00	7,074.2	-932.3	-3,138.2	3,138.2	0.00	0.00	
10,600.0	91.00	270.00	7,072.5	-932.3	-3,238.2	3,238.2	0.00	0.00	
10,700.0	91.00	270.00	7,070.7	-932.3	-3,338.2	3,338.2	0.00	0.00	
10,800.0	91.00	270.00	7,069.0	-932.3	-3,438.2	3,438.2	0.00	0.00	
10,900.0	91.00	270.00	7,067.2	-932.2	-3,538.2	3,538.2	0.00	0.00	
11,000.0	91.00	270.00	7,065.5	-932.2	-3,638.1	3,638.1	0.00	0.00	
11,100.0	91.00	270.00	7,063.8	-932.2	-3,738.1	3,738.1	0.00	0.00	
11,200.0	91.00	270.00	7,062.0	-932.2	-3,838.1	3,838.1	0.00	0.00	
11,300.0	91.00	270.00	7,060.3	-932.2	-3,938.1	3,938.1	0.00	0.00	
11,400.0	91.00	270.00	7,058.5	-932.2	-4,038.1	4,038.1	0.00	0.00	
11,500.0	91.00	270.00	7,056.8	-932.2	-4,138.1	4,138.1	0.00	0.00	
11,600.0	91.00	270.00	7,055.0	-932.2	-4,238.1	4,238.1	0.00	0.00	
11,676.0	91.00	270.00	7,053.7	-932.2	-4,314.0	4,314.0	0.00	0.00	TD at 11676.0 - State 1H-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 1H-16H PBHL - plan hits target center - Point	0.00	0.00	7,053.7	-932.2	-4,314.0	1,325,618.63	3,135,233.95	40.226200	-105.015700

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,117.3	4,044.0	Sussex		-1.00	270.00
4,680.5	4,594.0	Shannon		-1.00	270.00
6,148.5	6,041.0	Teepee Buttes (*if present)		-1.00	270.00
7,186.5	6,987.0	Sharon Springs		-1.00	270.00
7,321.4	7,057.0	Niobrara		-1.00	270.00
7,498.4	7,114.0	B Chalk		-1.00	270.00

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well State 1H-16H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5039.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5039.0ft (Original Well Elev)
Site:	S16-T3N-R68W (State)	North Reference:	True
Well:	State 1H-16H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP @ 200'
1,400.0	1,391.2	-113.0	53.9	EOB; Inc=12°
5,165.0	5,074.0	-819.5	390.9	Start Drop -1.00
6,365.0	6,265.2	-932.5	444.8	EOD; Inc=0°
6,507.7	6,408.0	-932.5	444.8	Start 8° build @ 6507' MD
7,645.2	7,124.0	-932.5	-283.9	LP @ 7124' TVD; 91°
11,676.0	7,053.7	-932.2	-4,314.0	TD at 11676.0

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S16-T3N-R68W (State)

State 1H-16H

Hz

Plan #1

Anticollision Report

14 December, 2012

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 1H-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5039.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5039.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 1H-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	12/14/2012		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	11,676.0	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 1B-16H - Hz - Plan #1	200.0	200.0	61.9	61.3	94.866	CC, ES
State 1B-16H - Hz - Plan #1	700.0	691.9	101.5	99.1	42.180	SF
State 1C-16H - Hz - Plan #1	200.0	200.0	51.0	50.3	78.124	CC, ES
State 1C-16H - Hz - Plan #1	600.0	596.7	70.3	68.3	34.252	SF
State 1D-16H - Hz - Plan #1	200.0	200.0	40.1	39.4	61.382	CC, ES
State 1D-16H - Hz - Plan #1	600.0	598.5	55.1	53.0	26.819	SF
State 1E-16H - Hz - Plan #1	200.0	200.0	29.1	28.5	44.640	CC, ES
State 1E-16H - Hz - Plan #1	600.0	599.7	42.2	40.1	20.566	SF
State 1F-16H - Hz - Plan #1	200.0	200.0	21.9	21.2	33.478	CC, ES
State 1F-16H - Hz - Plan #1	900.0	901.3	47.9	44.7	15.073	SF
State 1G-16H - Hz - Plan #1	200.0	200.0	10.9	10.3	16.736	CC, ES
State 1G-16H - Hz - Plan #1	11,676.3	11,845.7	379.8	189.3	1.994	SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 1H-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5039.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5039.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 1H-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 1B-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	61.9	0.0	61.9					
100.0	100.0	100.0	100.0	0.2	0.2	0.00	61.9	0.0	61.9	61.6	0.30	203.908		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	61.9	0.0	61.9	61.3	0.65	94.866 CC, ES		
300.0	300.0	299.0	299.0	0.5	0.5	-154.54	62.7	0.3	63.5	62.5	1.00	63.496		
400.0	400.0	397.8	397.8	0.7	0.7	-154.65	65.1	1.3	68.3	66.9	1.35	50.626		
500.0	499.9	496.4	496.2	0.9	0.9	-154.79	69.0	2.9	76.2	74.5	1.70	44.863		
600.0	599.7	594.4	594.1	1.1	1.1	-154.95	74.5	5.1	87.3	85.2	2.05	42.559		
700.0	699.4	691.9	691.3	1.3	1.3	-155.09	81.5	7.9	101.5	99.1	2.41	42.180 SF		
800.0	798.9	788.7	787.7	1.5	1.5	-155.20	89.9	11.3	118.8	116.1	2.77	42.966		
900.0	898.3	884.6	883.0	1.8	1.7	-155.29	99.8	15.3	139.2	136.1	3.13	44.496		
1,000.0	997.4	979.5	977.1	2.0	2.0	-155.35	111.0	19.8	162.7	159.2	3.50	46.514		
1,100.0	1,096.3	1,073.3	1,070.0	2.3	2.3	-155.38	123.5	24.9	189.1	185.2	3.87	48.859		
1,200.0	1,194.9	1,165.9	1,161.3	2.7	2.6	-155.39	137.2	30.4	218.5	214.3	4.25	51.422		
1,300.0	1,293.3	1,257.1	1,251.1	3.0	2.9	-155.38	152.1	36.4	250.8	246.2	4.63	54.125		
1,400.0	1,391.2	1,346.9	1,339.2	3.4	3.2	-155.35	168.0	42.9	286.0	281.0	5.02	56.917		
1,500.0	1,489.1	1,435.4	1,425.8	3.8	3.5	-155.41	184.9	49.7	323.2	317.8	5.43	59.547		
1,600.0	1,586.9	1,522.9	1,511.1	4.2	3.9	-155.36	202.9	57.0	361.8	355.9	5.84	61.991		
1,700.0	1,684.7	1,609.3	1,595.2	4.5	4.3	-155.24	221.8	64.6	401.6	395.3	6.25	64.281		
1,800.0	1,782.5	1,694.7	1,677.8	4.9	4.7	-155.07	241.7	72.6	442.6	436.0	6.66	66.440		
1,900.0	1,880.3	1,785.2	1,765.2	5.3	5.1	-154.88	263.4	81.4	484.4	477.3	7.09	68.315		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 1H-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5039.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5039.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 1H-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 1C-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	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	167.922		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	51.0	0.0	51.0	50.3	0.65	78.124 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-154.91	51.0	0.0	51.8	50.8	1.00	51.686		
400.0	400.0	399.2	399.2	0.7	0.7	-155.59	51.7	0.4	54.9	53.6	1.35	40.660		
500.0	499.9	498.1	498.1	0.9	0.9	-155.98	53.9	1.7	61.1	59.4	1.70	35.927		
600.0	599.7	596.7	596.6	1.1	1.0	-156.10	57.6	3.9	70.3	68.3	2.05	34.252 SF		
700.0	699.4	694.9	694.6	1.3	1.2	-156.03	62.7	6.9	82.6	80.2	2.41	34.271		
800.0	798.9	792.4	791.8	1.5	1.4	-155.84	69.2	10.7	97.8	95.1	2.77	35.309		
900.0	898.3	889.2	888.1	1.8	1.7	-155.58	77.1	15.4	116.1	113.0	3.14	36.987		
1,000.0	997.4	985.1	983.5	2.0	1.9	-155.31	86.2	20.8	137.3	133.8	3.51	39.078		
1,100.0	1,096.3	1,080.0	1,077.6	2.3	2.1	-155.02	96.7	26.9	161.5	157.6	3.90	41.434		
1,200.0	1,194.9	1,173.9	1,170.5	2.7	2.4	-154.75	108.3	33.8	188.5	184.2	4.29	43.957		
1,300.0	1,293.3	1,266.5	1,261.9	3.0	2.7	-154.48	121.1	41.3	218.4	213.7	4.69	46.576		
1,400.0	1,391.2	1,357.8	1,351.8	3.4	3.0	-154.22	134.9	49.4	251.1	246.0	5.10	49.242		
1,500.0	1,489.1	1,447.9	1,440.3	3.8	3.3	-154.05	149.8	58.2	285.8	280.2	5.52	51.735		
1,600.0	1,586.9	1,539.0	1,529.4	4.2	3.7	-153.79	165.9	67.7	321.6	315.7	5.96	53.982		
1,700.0	1,684.7	1,632.2	1,620.6	4.5	4.0	-153.56	182.6	77.5	357.7	351.3	6.40	55.883		
1,800.0	1,782.5	1,725.5	1,711.8	4.9	4.4	-153.37	199.3	87.3	393.7	386.9	6.85	57.514		
1,900.0	1,880.3	1,818.8	1,803.0	5.3	4.7	-153.21	216.0	97.2	429.8	422.5	7.29	58.927		
2,000.0	1,978.1	1,912.0	1,894.3	5.7	5.1	-153.07	232.7	107.0	465.9	458.2	7.74	60.162		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 1H-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5039.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5039.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 1H-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 1D-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		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		
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	131.936		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	40.1	0.0	40.1	39.4	0.65	61.382 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-155.02	40.1	0.0	40.9	39.9	1.00	40.779		
400.0	400.0	400.0	400.0	0.7	0.7	-156.48	40.1	0.0	43.2	41.9	1.35	31.998		
500.0	499.9	499.4	499.4	0.9	0.8	-157.74	40.6	0.6	47.8	46.1	1.70	28.105		
600.0	599.7	598.5	598.5	1.1	1.0	-157.99	42.3	2.6	55.1	53.0	2.05	26.819 SF		
700.0	699.4	697.4	697.3	1.3	1.2	-157.54	45.2	5.8	65.0	62.6	2.41	26.962		
800.0	798.9	795.8	795.5	1.5	1.4	-156.70	49.1	10.2	77.6	74.8	2.78	27.954		
900.0	898.3	893.7	893.1	1.8	1.6	-155.70	54.2	15.9	92.9	89.7	3.15	29.470		
1,000.0	997.4	991.0	989.9	2.0	1.8	-154.67	60.2	22.8	110.8	107.3	3.54	31.310		
1,100.0	1,096.3	1,087.4	1,085.8	2.3	2.0	-153.69	67.4	30.8	131.5	127.5	3.94	33.343		
1,200.0	1,194.9	1,183.1	1,180.6	2.7	2.3	-152.78	75.5	40.0	154.7	150.4	4.36	35.480		
1,300.0	1,293.3	1,277.7	1,274.3	3.0	2.6	-151.94	84.5	50.3	180.6	175.8	4.80	37.658		
1,400.0	1,391.2	1,371.4	1,366.7	3.4	2.9	-151.18	94.5	61.5	209.1	203.8	5.25	39.833		
1,500.0	1,489.1	1,464.1	1,458.0	3.8	3.2	-150.55	105.4	73.8	239.4	233.7	5.72	41.824		
1,600.0	1,586.9	1,556.1	1,548.3	4.2	3.5	-149.82	117.1	87.1	270.8	264.6	6.21	43.581		
1,700.0	1,684.7	1,649.1	1,639.3	4.5	3.8	-149.06	129.8	101.4	303.2	296.5	6.72	45.135		
1,800.0	1,782.5	1,743.6	1,731.7	4.9	4.2	-148.41	142.8	116.1	335.8	328.6	7.23	46.438		
1,900.0	1,880.3	1,838.1	1,824.1	5.3	4.6	-147.88	155.8	130.8	368.4	360.7	7.75	47.550		
2,000.0	1,978.1	1,932.6	1,916.5	5.7	4.9	-147.43	168.8	145.6	401.0	392.8	8.27	48.509		
2,100.0	2,075.9	2,027.0	2,009.0	6.1	5.3	-147.05	181.9	160.3	433.7	424.9	8.79	49.343		
2,200.0	2,173.8	2,121.5	2,101.4	6.5	5.7	-146.72	194.9	175.0	466.3	457.0	9.31	50.074		
2,300.0	2,271.6	2,216.0	2,193.8	6.9	6.0	-146.44	207.9	189.7	499.0	489.2	9.84	50.721		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 1H-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5039.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5039.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 1H-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 1E-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 (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	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	95.950		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	29.1	0.0	29.1	28.5	0.65	44.640 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-155.22	29.1	0.0	29.9	28.9	1.00	29.872		
400.0	400.0	400.0	400.0	0.7	0.7	-157.15	29.1	0.0	32.3	31.0	1.35	23.919		
500.0	499.9	499.9	499.9	0.9	0.8	-159.81	29.1	0.0	36.4	34.7	1.70	21.389		
600.0	599.7	599.7	599.7	1.1	1.0	-162.65	29.1	0.0	42.2	40.1	2.05	20.566 SF		
700.0	699.4	699.4	699.4	1.3	1.2	-165.33	29.1	0.0	49.7	47.3	2.40	20.725		
800.0	798.9	798.9	798.9	1.5	1.4	-167.67	29.1	0.0	59.0	56.3	2.75	21.502		
900.0	898.3	898.3	898.3	1.8	1.5	-169.62	29.1	0.0	70.1	67.0	3.09	22.692		
1,000.0	997.4	997.4	997.4	2.0	1.7	-171.22	29.1	0.0	83.0	79.6	3.43	24.170		
1,100.0	1,096.3	1,096.7	1,096.6	2.3	1.9	-172.06	29.2	0.8	97.5	93.7	3.78	25.798		
1,200.0	1,194.9	1,195.8	1,195.7	2.7	2.1	-171.93	29.5	3.3	113.3	109.2	4.12	27.466		
1,300.0	1,293.3	1,294.7	1,294.6	3.0	2.2	-171.19	29.9	7.5	130.5	126.0	4.48	29.142		
1,400.0	1,391.2	1,393.4	1,393.1	3.4	2.4	-170.07	30.4	13.4	149.1	144.2	4.84	30.801		
1,500.0	1,489.1	1,491.9	1,491.3	3.8	2.6	-168.69	31.2	21.0	168.2	163.0	5.22	32.199		
1,600.0	1,586.9	1,590.4	1,589.3	4.2	2.8	-167.08	32.1	30.3	187.3	181.6	5.63	33.251		
1,700.0	1,684.7	1,688.4	1,686.9	4.5	3.0	-165.49	33.0	40.4	206.3	200.3	6.05	34.076		
1,800.0	1,782.5	1,786.5	1,784.4	4.9	3.2	-164.17	34.0	50.6	225.5	219.0	6.49	34.757		
1,900.0	1,880.3	1,884.5	1,881.8	5.3	3.5	-163.06	35.0	60.8	244.8	237.8	6.93	35.324		
2,000.0	1,978.1	1,982.5	1,979.3	5.7	3.7	-162.11	36.0	71.0	264.1	256.8	7.38	35.800		
2,100.0	2,075.9	2,080.5	2,076.8	6.1	3.9	-161.29	37.0	81.2	283.5	275.7	7.83	36.203		
2,200.0	2,173.8	2,178.6	2,174.3	6.5	4.1	-160.57	37.9	91.4	303.0	294.7	8.29	36.546		
2,300.0	2,271.6	2,276.6	2,271.8	6.9	4.4	-159.94	38.9	101.6	322.5	313.7	8.75	36.842		
2,400.0	2,369.4	2,374.6	2,369.3	7.3	4.6	-159.38	39.9	111.8	342.0	332.8	9.22	37.097		
2,500.0	2,467.2	2,472.6	2,466.8	7.7	4.8	-158.88	40.9	122.0	361.6	351.9	9.69	37.320		
2,600.0	2,565.0	2,570.6	2,564.2	8.1	5.1	-158.44	41.9	132.2	381.2	371.0	10.16	37.515		
2,700.0	2,662.8	2,668.7	2,661.7	8.5	5.3	-158.03	42.9	142.4	400.8	390.2	10.63	37.688		
2,800.0	2,760.7	2,766.7	2,759.2	8.9	5.6	-157.67	43.8	152.6	420.4	409.3	11.11	37.841		
2,900.0	2,858.5	2,864.7	2,856.7	9.3	5.8	-157.33	44.8	162.8	440.0	428.5	11.59	37.977		
3,000.0	2,956.3	2,962.7	2,954.2	9.7	6.0	-157.03	45.8	173.0	459.7	447.6	12.07	38.099		
3,100.0	3,054.1	3,060.8	3,051.7	10.1	6.3	-156.75	46.8	183.2	479.4	466.8	12.55	38.209		
3,200.0	3,151.9	3,158.8	3,149.1	10.5	6.5	-156.49	47.8	193.4	499.0	486.0	13.03	38.308		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 1H-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5039.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5039.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 1H-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 1F-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	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	21.5	0.30	71.959		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	21.9	0.0	21.9	21.2	0.65	33.478 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-155.45	21.9	0.0	22.6	21.6	1.00	22.601		
400.0	400.0	400.0	400.0	0.7	0.7	-157.93	21.9	0.0	25.0	23.7	1.35	18.536		
500.0	499.9	500.2	500.2	0.9	0.9	-159.84	21.4	0.7	28.6	26.9	1.70	16.783		
600.0	599.7	600.5	600.4	1.1	1.0	-160.01	19.8	2.9	32.6	30.5	2.06	15.859		
700.0	699.4	700.7	700.6	1.3	1.2	-159.00	17.3	6.5	37.1	34.7	2.42	15.376		
800.0	798.9	801.0	800.7	1.5	1.4	-157.23	13.8	11.5	42.2	39.4	2.79	15.148		
900.0	898.3	901.3	900.7	1.8	1.6	-155.00	9.3	18.0	47.9	44.7	3.18	15.073 SF		
1,000.0	997.4	1,001.6	1,000.5	2.0	1.8	-152.53	3.8	25.8	54.2	50.6	3.59	15.083		
1,100.0	1,096.3	1,101.9	1,100.1	2.3	2.1	-149.97	-2.8	35.2	61.2	57.2	4.04	15.135		
1,200.0	1,194.9	1,202.1	1,199.5	2.7	2.4	-147.41	-10.3	45.9	68.9	64.4	4.54	15.199		
1,300.0	1,293.3	1,302.3	1,298.5	3.0	2.6	-144.93	-18.8	58.1	77.4	72.4	5.08	15.256		
1,400.0	1,391.2	1,402.4	1,397.3	3.4	3.0	-142.57	-28.3	71.6	86.7	81.1	5.67	15.300		
1,500.0	1,489.1	1,501.8	1,495.2	3.8	3.3	-140.59	-38.2	85.8	96.5	90.2	6.29	15.345		
1,600.0	1,586.9	1,601.3	1,593.2	4.2	3.6	-138.98	-48.1	99.9	106.4	99.5	6.93	15.362		
1,700.0	1,684.7	1,700.8	1,691.1	4.5	3.9	-137.64	-58.0	114.1	116.3	108.8	7.57	15.361		
1,800.0	1,782.5	1,800.2	1,789.1	4.9	4.3	-136.52	-67.9	128.2	126.3	118.1	8.23	15.351		
1,900.0	1,880.3	1,899.7	1,887.0	5.3	4.6	-135.56	-77.8	142.4	136.4	127.5	8.89	15.335		
2,000.0	1,978.1	1,999.2	1,985.0	5.7	4.9	-134.73	-87.8	156.5	146.4	136.9	9.56	15.316		
2,100.0	2,075.9	2,098.7	2,083.0	6.1	5.3	-134.01	-97.7	170.7	156.5	146.3	10.23	15.296		
2,200.0	2,173.8	2,198.1	2,180.9	6.5	5.6	-133.37	-107.6	184.8	166.6	155.7	10.91	15.275		
2,300.0	2,271.6	2,297.6	2,278.9	6.9	6.0	-132.81	-117.5	199.0	176.8	165.2	11.59	15.255		
2,400.0	2,369.4	2,397.1	2,376.8	7.3	6.3	-132.31	-127.4	213.1	186.9	174.7	12.27	15.236		
2,500.0	2,467.2	2,496.5	2,474.8	7.7	6.6	-131.86	-137.3	227.3	197.1	184.1	12.95	15.217		
2,600.0	2,565.0	2,596.0	2,572.8	8.1	7.0	-131.45	-147.2	241.4	207.3	193.6	13.64	15.199		
2,700.0	2,662.8	2,695.5	2,670.7	8.5	7.3	-131.09	-157.1	255.6	217.5	203.1	14.32	15.182		
2,800.0	2,760.7	2,795.0	2,768.7	8.9	7.7	-130.75	-167.0	269.7	227.6	212.6	15.01	15.166		
2,900.0	2,858.5	2,894.4	2,866.6	9.3	8.0	-130.45	-176.9	283.9	237.8	222.1	15.70	15.151		
3,000.0	2,956.3	2,993.9	2,964.6	9.7	8.4	-130.16	-186.8	298.0	248.0	231.7	16.39	15.136		
3,100.0	3,054.1	3,093.4	3,062.6	10.1	8.7	-129.91	-196.7	312.2	258.3	241.2	17.08	15.123		
3,200.0	3,151.9	3,192.8	3,160.5	10.5	9.1	-129.67	-206.6	326.3	268.5	250.7	17.77	15.110		
3,300.0	3,249.7	3,292.3	3,258.5	10.9	9.4	-129.45	-216.5	340.5	278.7	260.2	18.46	15.098		
3,400.0	3,347.5	3,391.8	3,356.4	11.3	9.8	-129.24	-226.5	354.6	288.9	269.8	19.15	15.086		
3,500.0	3,445.4	3,490.7	3,453.9	11.7	10.1	-129.11	-236.1	368.4	299.2	279.4	19.82	15.093		
3,600.0	3,543.2	3,589.2	3,551.2	12.1	10.4	-129.28	-244.9	380.9	309.7	289.3	20.44	15.157		
3,700.0	3,641.0	3,687.6	3,648.7	12.5	10.7	-129.73	-252.6	392.0	320.6	299.6	20.99	15.275		
3,800.0	3,738.8	3,785.8	3,746.2	12.9	10.9	-130.44	-259.4	401.7	331.9	310.4	21.49	15.446		
3,900.0	3,836.6	3,883.8	3,843.6	13.3	11.2	-131.38	-265.3	410.1	343.5	321.6	21.92	15.670		
4,000.0	3,934.4	3,981.5	3,940.9	13.7	11.4	-132.52	-270.1	417.0	355.6	333.3	22.30	15.950		
4,100.0	4,032.2	4,078.8	4,038.0	14.1	11.6	-133.83	-274.0	422.5	368.3	345.7	22.61	16.290		
4,200.0	4,130.1	4,175.7	4,134.8	14.5	11.7	-135.29	-277.0	426.7	381.6	358.8	22.86	16.693		
4,300.0	4,227.9	4,272.2	4,231.2	14.9	11.9	-136.88	-278.9	429.6	395.7	372.6	23.06	17.162		
4,400.0	4,325.7	4,368.2	4,327.2	15.3	12.0	-138.56	-280.0	431.1	410.6	387.4	23.20	17.702		
4,500.0	4,423.5	4,464.5	4,423.5	15.7	12.1	-140.32	-280.2	431.4	426.4	403.2	23.29	18.308		
4,600.0	4,521.3	4,562.3	4,521.3	16.2	12.2	-142.02	-280.2	431.4	442.8	419.4	23.38	18.938		
4,700.0	4,619.1	4,660.1	4,619.1	16.6	12.3	-143.61	-280.2	431.4	459.5	436.0	23.48	19.573		
4,800.0	4,716.9	4,757.9	4,716.9	17.0	12.4	-145.08	-280.2	431.4	476.5	452.9	23.58	20.209		
4,900.0	4,814.8	4,855.7	4,814.8	17.4	12.5	-146.45	-280.2	431.4	493.8	470.1	23.69	20.845		

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 1H-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5039.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5039.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 1H-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 1G-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	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	35.973		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	10.9	0.0	10.9	10.3	0.65	16.736 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-156.33	10.9	0.0	11.7	10.7	1.00	11.696		
400.0	400.0	400.2	400.2	0.7	0.7	-158.78	10.2	0.5	13.4	12.0	1.35	9.910		
500.0	499.9	500.4	500.3	0.9	0.9	-159.68	8.1	2.0	15.2	13.5	1.70	8.930		
600.0	599.7	600.6	600.5	1.1	1.0	-159.50	4.5	4.5	17.1	15.1	2.06	8.332		
700.0	699.4	700.8	700.5	1.3	1.2	-158.57	-0.6	8.0	19.2	16.8	2.42	7.940		
800.0	798.9	801.1	800.5	1.5	1.5	-157.11	-7.0	12.6	21.4	18.6	2.79	7.670		
900.0	898.3	901.4	900.3	1.8	1.7	-155.31	-14.9	18.1	23.7	20.6	3.18	7.474		
1,000.0	997.4	1,001.7	1,000.0	2.0	1.9	-153.29	-24.2	24.6	26.2	22.6	3.58	7.321		
1,100.0	1,096.3	1,102.1	1,099.5	2.3	2.2	-151.13	-35.0	32.1	28.9	24.9	4.02	7.191		
1,200.0	1,194.9	1,202.4	1,198.7	2.7	2.5	-148.90	-47.2	40.7	31.8	27.3	4.49	7.072		
1,300.0	1,293.3	1,302.8	1,297.7	3.0	2.8	-146.66	-60.8	50.2	34.9	29.9	5.01	6.954		
1,400.0	1,391.2	1,403.2	1,396.4	3.4	3.2	-144.45	-75.8	60.7	38.2	32.6	5.59	6.834		
1,500.0	1,489.1	1,503.6	1,494.8	3.8	3.5	-141.57	-92.3	72.2	41.0	34.8	6.24	6.579		
1,600.0	1,586.9	1,603.6	1,592.6	4.2	3.9	-138.25	-109.3	84.2	43.4	36.5	6.95	6.251		
1,700.0	1,684.7	1,703.5	1,690.3	4.5	4.3	-135.29	-126.3	96.1	46.0	38.3	7.70	5.978		
1,800.0	1,782.5	1,803.5	1,788.1	4.9	4.7	-132.65	-143.3	108.0	48.7	40.2	8.46	5.750		
1,900.0	1,880.3	1,903.4	1,885.8	5.3	5.1	-130.29	-160.3	119.9	51.4	42.2	9.25	5.559		
2,000.0	1,978.1	2,003.3	1,983.6	5.7	5.5	-128.17	-177.4	131.8	54.3	44.2	10.05	5.400		
2,100.0	2,075.9	2,103.3	2,081.3	6.1	5.9	-126.27	-194.4	143.8	57.2	46.3	10.86	5.266		
2,200.0	2,173.8	2,203.2	2,179.1	6.5	6.2	-124.54	-211.4	155.7	60.1	48.5	11.67	5.153		
2,300.0	2,271.6	2,303.2	2,276.9	6.9	6.6	-122.99	-228.4	167.6	63.1	50.6	12.49	5.056		
2,400.0	2,369.4	2,403.1	2,374.6	7.3	7.0	-121.57	-245.4	179.5	66.2	52.9	13.31	4.974		
2,500.0	2,467.2	2,503.0	2,472.4	7.7	7.4	-120.28	-262.5	191.4	69.3	55.1	14.13	4.903		
2,600.0	2,565.0	2,603.0	2,570.1	8.1	7.8	-119.10	-279.5	203.3	72.4	57.4	14.95	4.842		
2,700.0	2,662.8	2,702.9	2,667.9	8.5	8.2	-118.02	-296.5	215.3	75.5	59.8	15.78	4.788		
2,800.0	2,760.7	2,802.9	2,765.6	8.9	8.6	-117.03	-313.5	227.2	78.7	62.1	16.60	4.742		
2,900.0	2,858.5	2,902.8	2,863.4	9.3	9.0	-116.11	-330.6	239.1	81.9	64.5	17.42	4.701		
3,000.0	2,956.3	3,002.7	2,961.1	9.7	9.4	-115.26	-347.6	251.0	85.1	66.9	18.25	4.664		
3,100.0	3,054.1	3,102.7	3,058.9	10.1	9.8	-114.48	-364.6	262.9	88.3	69.3	19.07	4.632		
3,200.0	3,151.9	3,202.6	3,156.7	10.5	10.2	-113.75	-381.6	274.9	91.6	71.7	19.90	4.604		
3,300.0	3,249.7	3,302.6	3,254.4	10.9	10.6	-113.07	-398.6	286.8	94.9	74.1	20.72	4.578		
3,400.0	3,347.5	3,402.5	3,352.2	11.3	11.0	-112.43	-415.7	298.7	98.1	76.6	21.54	4.555		
3,500.0	3,445.4	3,502.4	3,449.9	11.7	11.4	-111.84	-432.7	310.6	101.4	79.0	22.36	4.535		
3,600.0	3,543.2	3,602.4	3,547.7	12.1	11.8	-111.28	-449.7	322.5	104.7	81.5	23.18	4.516		
3,700.0	3,641.0	3,702.3	3,645.4	12.5	12.3	-110.76	-466.7	334.4	108.0	84.0	24.00	4.500		
3,800.0	3,738.8	3,802.3	3,743.2	12.9	12.7	-110.27	-483.7	346.4	111.3	86.5	24.82	4.484		
3,900.0	3,836.6	3,902.2	3,841.0	13.3	13.1	-109.80	-500.8	358.3	114.6	89.0	25.64	4.470		
4,000.0	3,934.4	4,002.0	3,938.6	13.7	13.5	-109.48	-517.6	370.0	118.0	91.6	26.45	4.462		
4,100.0	4,032.2	4,101.5	4,036.3	14.1	13.8	-109.89	-533.1	380.9	121.7	94.5	27.15	4.481		
4,200.0	4,130.1	4,201.0	4,134.3	14.5	14.1	-111.04	-547.2	390.8	125.6	97.9	27.75	4.528		
4,300.0	4,227.9	4,300.3	4,232.4	14.9	14.5	-112.87	-559.9	399.7	130.1	101.9	28.23	4.608		
4,400.0	4,325.7	4,399.5	4,330.6	15.3	14.7	-115.27	-571.3	407.6	135.1	106.5	28.58	4.727		
4,500.0	4,423.5	4,498.3	4,428.7	15.7	15.0	-118.15	-581.1	414.6	140.9	112.1	28.78	4.896		
4,600.0	4,521.3	4,596.9	4,526.7	16.2	15.2	-121.41	-589.6	420.5	147.7	118.8	28.83	5.123		
4,700.0	4,619.1	4,695.1	4,624.5	16.6	15.4	-124.92	-596.7	425.4	155.6	126.9	28.72	5.420		
4,800.0	4,716.9	4,792.8	4,722.0	17.0	15.6	-128.59	-602.3	429.4	164.9	136.5	28.46	5.796		
4,900.0	4,814.8	4,890.1	4,819.1	17.4	15.8	-132.30	-606.6	432.4	175.8	147.7	28.08	6.260		
5,000.0	4,912.6	4,986.8	4,915.8	17.8	15.9	-135.96	-609.6	434.5	188.3	160.7	27.62	6.819		
5,100.0	5,010.4	5,083.0	5,011.9	18.2	16.0	-139.50	-611.1	435.6	202.6	175.5	27.09	7.478		

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 1H-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5039.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5039.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 1H-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 1G-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		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	5,108.2	5,179.3	5,108.2	18.6	16.1	-142.90	-611.5	435.8	218.6	192.0	26.55	8.232		
5,300.0	5,206.3	5,277.4	5,206.3	18.9	16.2	-145.83	-611.5	435.8	234.4	208.3	26.10	8.980		
5,400.0	5,304.8	5,375.8	5,304.8	19.3	16.3	-148.17	-611.5	435.8	249.3	223.5	25.79	9.664		
5,500.0	5,403.5	5,474.5	5,403.5	19.6	16.4	-150.06	-611.5	435.8	263.0	237.4	25.59	10.274		
5,600.0	5,502.5	5,573.5	5,502.5	19.9	16.5	-151.59	-611.5	435.8	275.4	249.9	25.49	10.803		
5,700.0	5,601.7	5,672.8	5,601.7	20.1	16.6	-152.82	-611.5	435.8	286.4	260.9	25.46	11.248		
5,800.0	5,701.1	5,772.2	5,701.1	20.4	16.7	-153.81	-611.5	435.8	296.0	270.5	25.50	11.608		
5,900.0	5,800.7	5,871.8	5,800.7	20.6	16.8	-154.59	-611.5	435.8	304.1	278.5	25.58	11.885		
6,000.0	5,900.5	5,971.5	5,900.5	20.8	16.9	-155.19	-611.5	435.8	310.6	284.9	25.72	12.079		
6,100.0	6,000.3	6,071.4	6,000.3	20.9	17.0	-155.63	-611.5	435.8	315.6	289.7	25.88	12.194		
6,200.0	6,100.2	6,171.3	6,100.2	21.1	17.1	-155.92	-611.5	435.8	319.0	293.0	26.09	12.231		
6,300.0	6,200.2	6,271.3	6,200.2	21.2	17.2	-156.08	-611.5	435.8	320.9	294.6	26.32	12.193		
6,400.0	6,300.2	6,371.3	6,300.2	21.3	17.4	-1.61	-611.5	435.8	321.2	285.5	35.67	9.006		
6,500.0	6,400.2	6,471.3	6,400.2	21.3	17.5	-1.61	-611.5	435.8	321.2	285.3	35.89	8.951		
6,600.0	6,500.0	6,571.0	6,500.0	21.4	17.6	89.45	-611.5	435.8	321.1	293.7	27.37	11.734		
6,621.6	6,521.3	6,592.4	6,521.3	21.4	17.6	90.00	-611.5	435.8	321.1	293.6	27.53	11.665		
6,700.0	6,597.9	6,669.0	6,597.9	21.3	17.7	92.86	-611.5	435.8	321.5	293.2	28.32	11.354		
6,800.0	6,692.2	6,768.8	6,692.2	21.2	17.7	97.64	-611.5	430.6	324.2	294.9	29.29	11.068		
6,900.0	6,780.9	6,873.4	6,800.1	21.1	17.7	102.33	-611.5	410.5	329.3	299.6	29.71	11.085		
7,000.0	6,862.4	6,983.0	6,903.2	20.9	17.5	106.75	-611.5	373.7	336.4	306.9	29.47	11.412		
7,100.0	6,935.0	7,097.8	7,003.9	20.8	17.3	110.80	-611.5	318.8	344.8	316.2	28.67	12.027		
7,200.0	6,997.3	7,218.2	7,098.6	20.7	17.1	114.36	-611.5	244.7	353.9	326.4	27.55	12.847		
7,300.0	7,048.2	7,344.2	7,183.0	20.7	17.0	117.35	-611.5	151.3	362.8	336.2	26.56	13.656		
7,400.0	7,086.7	7,475.4	7,252.1	20.9	17.0	119.71	-611.5	40.0	370.5	344.2	26.34	14.066		
7,500.0	7,111.9	7,610.9	7,300.9	21.3	17.4	121.35	-611.5	-86.2	376.3	348.9	27.39	13.740		
7,600.0	7,123.4	7,749.4	7,325.4	21.9	18.6	122.25	-611.5	-222.2	379.6	349.6	29.98	12.662		
7,700.0	7,123.1	7,869.4	7,326.8	22.8	20.2	122.40	-611.5	-342.2	380.2	347.0	33.18	11.458		
7,800.0	7,121.3	7,969.4	7,325.0	24.1	21.8	122.40	-611.5	-442.2	380.2	344.0	36.18	10.509		
7,900.0	7,119.6	8,069.4	7,323.3	25.6	23.6	122.40	-611.5	-542.2	380.2	340.8	39.39	9.652		
8,000.0	7,117.9	8,169.4	7,321.5	27.2	25.5	122.40	-611.5	-642.2	380.2	337.4	42.77	8.889		
8,100.0	7,116.1	8,269.4	7,319.8	29.1	27.5	122.41	-611.5	-742.2	380.2	333.9	46.28	8.215		
8,200.0	7,114.4	8,369.4	7,318.1	31.0	29.6	122.41	-611.5	-842.1	380.1	330.3	49.89	7.619		
8,300.0	7,112.6	8,469.4	7,316.3	33.0	31.7	122.41	-611.5	-942.1	380.1	326.5	53.59	7.094		
8,400.0	7,110.9	8,569.4	7,314.6	35.1	33.9	122.41	-611.5	-1,042.1	380.1	322.8	57.35	6.628		
8,500.0	7,109.1	8,669.4	7,312.8	37.3	36.2	122.41	-611.5	-1,142.1	380.1	318.9	61.17	6.214		
8,600.0	7,107.4	8,769.4	7,311.1	39.5	38.4	122.41	-611.5	-1,242.1	380.1	315.1	65.03	5.845		
8,700.0	7,105.6	8,869.4	7,309.3	41.7	40.7	122.41	-611.5	-1,342.1	380.1	311.2	68.93	5.514		
8,800.0	7,103.9	8,969.4	7,307.6	43.9	43.0	122.41	-611.5	-1,442.0	380.1	307.2	72.86	5.216		
8,900.0	7,102.1	9,069.4	7,305.8	46.2	45.3	122.41	-611.5	-1,542.0	380.1	303.3	76.82	4.948		
9,000.0	7,100.4	9,169.4	7,304.1	48.5	47.6	122.41	-611.5	-1,642.0	380.1	299.3	80.80	4.704		
9,100.0	7,098.7	9,269.4	7,302.4	50.8	50.0	122.41	-611.5	-1,742.0	380.1	295.3	84.80	4.482		
9,200.0	7,096.9	9,369.4	7,300.6	53.2	52.4	122.41	-611.5	-1,842.0	380.1	291.2	88.82	4.279		
9,300.0	7,095.2	9,469.4	7,298.9	55.5	54.7	122.42	-611.5	-1,942.0	380.0	287.2	92.85	4.093		
9,400.0	7,093.4	9,569.4	7,297.1	57.8	57.1	122.42	-611.5	-2,042.0	380.0	283.1	96.89	3.922		
9,500.0	7,091.7	9,669.4	7,295.4	60.2	59.5	122.42	-611.5	-2,141.9	380.0	279.1	100.95	3.765		
9,600.0	7,089.9	9,769.4	7,293.6	62.6	61.9	122.42	-611.6	-2,241.9	380.0	275.0	105.01	3.619		
9,700.0	7,088.2	9,869.4	7,291.9	65.0	64.3	122.42	-611.6	-2,341.9	380.0	270.9	109.08	3.484		
9,800.0	7,086.4	9,969.4	7,290.1	67.3	66.7	122.42	-611.6	-2,441.9	380.0	266.8	113.17	3.358		
9,900.0	7,084.7	10,069.4	7,288.4	69.7	69.1	122.42	-611.6	-2,541.9	380.0	262.7	117.25	3.241		
10,000.0	7,082.9	10,169.4	7,286.6	72.1	71.5	122.42	-611.6	-2,641.9	380.0	258.6	121.35	3.131		
10,100.0	7,081.2	10,269.4	7,284.9	74.5	73.9	122.42	-611.6	-2,741.8	380.0	254.5	125.45	3.029		
10,200.0	7,079.5	10,369.4	7,283.2	76.9	76.3	122.42	-611.6	-2,841.8	380.0	250.4	129.55	2.933		

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 1H-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5039.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5039.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 1H-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 1G-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	7,077.7	10,469.4	7,281.4	79.3	78.8	122.42	-611.6	-2,941.8	380.0	246.3	133.66	2.843		
10,400.0	7,076.0	10,569.4	7,279.7	81.8	81.2	122.43	-611.6	-3,041.8	379.9	242.2	137.78	2.758		
10,500.0	7,074.2	10,669.4	7,277.9	84.2	83.6	122.43	-611.6	-3,141.8	379.9	238.0	141.89	2.678		
10,600.0	7,072.5	10,769.4	7,276.2	86.6	86.1	122.43	-611.6	-3,241.8	379.9	233.9	146.01	2.602		
10,700.0	7,070.7	10,869.4	7,274.4	89.0	88.5	122.43	-611.6	-3,341.8	379.9	229.8	150.14	2.530		
10,800.0	7,069.0	10,969.4	7,272.7	91.5	90.9	122.43	-611.6	-3,441.7	379.9	225.6	154.26	2.463		
10,900.0	7,067.2	11,069.4	7,270.9	93.9	93.4	122.43	-611.6	-3,541.7	379.9	221.5	158.39	2.398		
11,000.0	7,065.5	11,169.4	7,269.2	96.3	95.8	122.43	-611.6	-3,641.7	379.9	217.4	162.53	2.337		
11,100.0	7,063.8	11,269.4	7,267.4	98.7	98.3	122.43	-611.6	-3,741.7	379.9	213.2	166.66	2.279		
11,200.0	7,062.0	11,369.4	7,265.7	101.2	100.7	122.43	-611.6	-3,841.7	379.9	209.1	170.80	2.224		
11,300.0	7,060.3	11,469.4	7,264.0	103.6	103.1	122.43	-611.6	-3,941.7	379.9	204.9	174.94	2.171		
11,400.0	7,058.5	11,569.4	7,262.2	106.1	105.6	122.43	-611.6	-4,041.6	379.9	200.8	179.08	2.121		
11,500.0	7,056.8	11,669.4	7,260.5	108.5	108.0	122.43	-611.6	-4,141.6	379.8	196.6	183.22	2.073		
11,600.0	7,055.0	11,769.4	7,258.7	110.9	110.5	122.44	-611.6	-4,241.6	379.8	192.5	187.36	2.027		
11,676.3	7,053.7	11,845.7	7,257.4	112.8	112.4	122.44	-611.6	-4,317.9	379.8	189.3	190.53	1.994 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 1H-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5039.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5039.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 1H-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 @ 5039.0ft (Original Well Elev)

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: State 1H-16H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.32°

