



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Peppler Farms 1B-4H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5067.0ft (Ensign)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5067.0ft (Ensign)
Site:	S4-T3N-R68W (Peppler Farms)	North Reference:	True
Well:	Peppler Farms 1B-4H	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		S4-T3N-R68W (Peppler Farms)			
Site Position:		Northing:	1,337,296.89 ft	Latitude:	40.258190
From:	Lat/Long	Easting:	3,139,658.06 ft	Longitude:	-104.999620
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.32 °

Well	Peppler Farms 1B-4H					
Well Position	+N/-S	0.0 ft	Northing:	1,337,285.96 ft	Latitude:	40.258160
	+E/-W	0.0 ft	Easting:	3,139,658.12 ft	Longitude:	-104.999620
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,054.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/23/2013	8.76	66.84	52,860

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	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	12.00	12.20	1,491.2	122.4	26.5	1.00	1.00	0.00	12.20	
5,300.0	12.00	12.20	5,208.2	894.6	193.4	0.00	0.00	0.00	0.00	
6,500.0	0.00	0.00	6,399.5	1,017.0	219.9	1.00	-1.00	0.00	180.00	
6,782.3	0.00	0.00	6,681.8	1,017.0	219.9	0.00	0.00	0.00	0.00	
7,907.3	90.00	270.00	7,398.0	1,016.9	-496.3	8.00	8.00	0.00	270.00	
11,996.4	90.00	270.00	7,398.0	1,016.8	-4,585.3	0.00	0.00	0.00	0.00	Peppler Farms 1B-4H

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Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Peppler Farms 1B-4H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5067.0ft (Ensign)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5067.0ft (Ensign)
Site:	S4-T3N-R68W (Peppler Farms)	North Reference:	True
Well:	Peppler Farms 1B-4H	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	
68.0	0.00	0.00	68.0	0.0	0.0	0.0	0.00	0.00	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	KOP @ 300'
400.0	1.00	12.20	400.0	0.9	0.2	-0.2	1.00	1.00	
500.0	2.00	12.20	500.0	3.4	0.7	-0.7	1.00	1.00	
600.0	3.00	12.20	599.9	7.7	1.7	-1.7	1.00	1.00	
700.0	4.00	12.20	699.7	13.6	2.9	-2.9	1.00	1.00	
800.0	5.00	12.20	799.4	21.3	4.6	-4.6	1.00	1.00	
900.0	6.00	12.20	898.9	30.7	6.6	-6.6	1.00	1.00	
1,000.0	7.00	12.20	998.3	41.7	9.0	-9.0	1.00	1.00	
1,100.0	8.00	12.20	1,097.4	54.5	11.8	-11.8	1.00	1.00	
1,200.0	9.00	12.20	1,196.3	68.9	14.9	-14.9	1.00	1.00	
1,300.0	10.00	12.20	1,294.9	85.1	18.4	-18.4	1.00	1.00	
1,400.0	11.00	12.20	1,393.3	102.9	22.2	-22.2	1.00	1.00	
1,500.0	12.00	12.20	1,491.2	122.4	26.5	-26.5	1.00	1.00	EOB; Inc=12°
1,600.0	12.00	12.20	1,589.1	142.7	30.9	-30.9	0.00	0.00	
1,700.0	12.00	12.20	1,686.9	163.0	35.2	-35.2	0.00	0.00	
1,800.0	12.00	12.20	1,784.7	183.3	39.6	-39.6	0.00	0.00	
1,900.0	12.00	12.20	1,882.5	203.7	44.0	-44.0	0.00	0.00	
2,000.0	12.00	12.20	1,980.3	224.0	48.4	-48.4	0.00	0.00	
2,100.0	12.00	12.20	2,078.1	244.3	52.8	-52.8	0.00	0.00	
2,200.0	12.00	12.20	2,175.9	264.6	57.2	-57.2	0.00	0.00	
2,300.0	12.00	12.20	2,273.8	285.0	61.6	-61.6	0.00	0.00	
2,400.0	12.00	12.20	2,371.6	305.3	66.0	-66.0	0.00	0.00	
2,500.0	12.00	12.20	2,469.4	325.6	70.4	-70.4	0.00	0.00	
2,600.0	12.00	12.20	2,567.2	345.9	74.8	-74.8	0.00	0.00	
2,700.0	12.00	12.20	2,665.0	366.2	79.2	-79.2	0.00	0.00	
2,800.0	12.00	12.20	2,762.8	386.6	83.6	-83.6	0.00	0.00	
2,900.0	12.00	12.20	2,860.7	406.9	88.0	-88.0	0.00	0.00	
3,000.0	12.00	12.20	2,958.5	427.2	92.4	-92.4	0.00	0.00	
3,100.0	12.00	12.20	3,056.3	447.5	96.8	-96.8	0.00	0.00	
3,200.0	12.00	12.20	3,154.1	467.8	101.2	-101.2	0.00	0.00	
3,300.0	12.00	12.20	3,251.9	488.2	105.5	-105.5	0.00	0.00	
3,400.0	12.00	12.20	3,349.7	508.5	109.9	-109.9	0.00	0.00	
3,500.0	12.00	12.20	3,447.5	528.8	114.3	-114.3	0.00	0.00	
3,600.0	12.00	12.20	3,545.4	549.1	118.7	-118.7	0.00	0.00	
3,700.0	12.00	12.20	3,643.2	569.5	123.1	-123.1	0.00	0.00	
3,800.0	12.00	12.20	3,741.0	589.8	127.5	-127.5	0.00	0.00	
3,900.0	12.00	12.20	3,838.8	610.1	131.9	-131.9	0.00	0.00	
4,000.0	12.00	12.20	3,936.6	630.4	136.3	-136.3	0.00	0.00	
4,100.0	12.00	12.20	4,034.4	650.7	140.7	-140.7	0.00	0.00	
4,131.3	12.00	12.20	4,065.0	657.1	142.1	-142.1	0.00	0.00	Sussex
4,200.0	12.00	12.20	4,132.2	671.1	145.1	-145.1	0.00	0.00	
4,300.0	12.00	12.20	4,230.1	691.4	149.5	-149.5	0.00	0.00	
4,400.0	12.00	12.20	4,327.9	711.7	153.9	-153.9	0.00	0.00	
4,432.8	12.00	12.20	4,360.0	718.4	155.3	-155.3	0.00	0.00	Sussex Marker
4,500.0	12.00	12.20	4,425.7	732.0	158.3	-158.3	0.00	0.00	
4,600.0	12.00	12.20	4,523.5	752.3	162.7	-162.7	0.00	0.00	
4,700.0	12.00	12.20	4,621.3	772.7	167.1	-167.1	0.00	0.00	
4,714.0	12.00	12.20	4,635.0	775.5	167.7	-167.7	0.00	0.00	Shannon

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Project:	DJ Wattenberg	MD Reference:	WELL @ 5067.0ft (Ensign)
Site:	S4-T3N-R68W (Peppler Farms)	North Reference:	True
Well:	Peppler Farms 1B-4H	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
4,800.0	12.00	12.20	4,719.1	793.0	171.5	-171.5	0.00	0.00	
4,900.0	12.00	12.20	4,816.9	813.3	175.8	-175.8	0.00	0.00	
5,000.0	12.00	12.20	4,914.8	833.6	180.2	-180.2	0.00	0.00	
5,100.0	12.00	12.20	5,012.6	854.0	184.6	-184.6	0.00	0.00	
5,200.0	12.00	12.20	5,110.4	874.3	189.0	-189.0	0.00	0.00	
5,300.0	12.00	12.20	5,208.2	894.6	193.4	-193.4	0.00	0.00	Start Drop -1.00
5,400.0	11.00	12.20	5,306.2	914.1	197.6	-197.6	1.00	-1.00	
5,500.0	10.00	12.20	5,404.5	931.9	201.5	-201.5	1.00	-1.00	
5,600.0	9.00	12.20	5,503.1	948.0	205.0	-205.0	1.00	-1.00	
5,700.0	8.00	12.20	5,602.1	962.5	208.1	-208.1	1.00	-1.00	
5,800.0	7.00	12.20	5,701.2	975.2	210.9	-210.9	1.00	-1.00	
5,900.0	6.00	12.20	5,800.5	986.3	213.2	-213.2	1.00	-1.00	
6,000.0	5.00	12.20	5,900.1	995.7	215.3	-215.3	1.00	-1.00	
6,100.0	4.00	12.20	5,999.8	1,003.3	216.9	-216.9	1.00	-1.00	
6,200.0	3.00	12.20	6,099.6	1,009.3	218.2	-218.2	1.00	-1.00	
6,283.5	2.17	12.20	6,183.0	1,013.0	219.0	-219.0	1.00	-1.00	Teepee Buttes
6,300.0	2.00	12.20	6,199.5	1,013.6	219.1	-219.1	1.00	-1.00	
6,400.0	1.00	12.20	6,299.5	1,016.1	219.7	-219.7	1.00	-1.00	
6,500.0	0.00	0.00	6,399.5	1,017.0	219.9	-219.9	1.00	-1.00	EOD; Inc=0°
6,600.0	0.00	0.00	6,499.5	1,017.0	219.9	-219.9	0.00	0.00	
6,700.0	0.00	0.00	6,599.5	1,017.0	219.9	-219.9	0.00	0.00	
6,782.3	0.00	0.00	6,681.8	1,017.0	219.9	-219.9	0.00	0.00	Start 8° build @ 6782' MD
6,800.0	1.41	270.00	6,699.5	1,017.0	219.7	-219.7	8.00	8.00	
6,900.0	9.41	270.00	6,798.9	1,017.0	210.2	-210.2	8.00	8.00	
7,000.0	17.41	270.00	6,896.1	1,017.0	187.1	-187.1	8.00	8.00	
7,100.0	25.41	270.00	6,989.1	1,017.0	150.6	-150.6	8.00	8.00	
7,159.8	30.19	270.00	7,042.0	1,017.0	122.7	-122.7	8.00	8.00	Sharon Springs
7,200.0	33.41	270.00	7,076.2	1,017.0	101.5	-101.5	8.00	8.00	
7,237.6	36.42	270.00	7,107.0	1,017.0	80.0	-80.0	8.00	8.00	Niobrara
7,300.0	41.41	270.00	7,155.5	1,017.0	40.8	-40.8	8.00	8.00	
7,326.4	43.52	270.00	7,175.0	1,017.0	23.0	-23.0	8.00	8.00	B Chalk
7,400.0	49.41	270.00	7,225.7	1,017.0	-30.4	30.4	8.00	8.00	
7,500.0	57.41	270.00	7,285.2	1,017.0	-110.6	110.6	8.00	8.00	
7,600.0	65.41	270.00	7,333.1	1,017.0	-198.3	198.3	8.00	8.00	
7,700.0	73.41	270.00	7,368.2	1,017.0	-291.9	291.9	8.00	8.00	
7,706.4	73.93	270.00	7,370.0	1,017.0	-298.0	298.0	8.00	8.00	Ft. Hayes
7,787.5	80.41	270.00	7,388.0	1,017.0	-377.1	377.1	8.00	8.00	Codell
7,800.0	81.41	270.00	7,390.0	1,017.0	-389.4	389.4	8.00	8.00	
7,900.0	89.41	270.00	7,398.0	1,016.9	-489.0	489.0	8.00	8.00	
7,907.3	90.00	270.00	7,398.0	1,016.9	-496.3	496.3	8.00	8.00	LP @ 7398' TVD; 90°
8,000.0	90.00	270.00	7,398.0	1,016.9	-589.0	589.0	0.00	0.00	
8,100.0	90.00	270.00	7,398.0	1,016.9	-689.0	689.0	0.00	0.00	
8,200.0	90.00	270.00	7,398.0	1,016.9	-789.0	789.0	0.00	0.00	
8,300.0	90.00	270.00	7,398.0	1,016.9	-889.0	889.0	0.00	0.00	
8,400.0	90.00	270.00	7,398.0	1,016.9	-989.0	989.0	0.00	0.00	
8,500.0	90.00	270.00	7,398.0	1,016.9	-1,089.0	1,089.0	0.00	0.00	
8,600.0	90.00	270.00	7,398.0	1,016.9	-1,189.0	1,189.0	0.00	0.00	
8,700.0	90.00	270.00	7,398.0	1,016.9	-1,289.0	1,289.0	0.00	0.00	
8,800.0	90.00	270.00	7,398.0	1,016.9	-1,389.0	1,389.0	0.00	0.00	
8,900.0	90.00	270.00	7,398.0	1,016.9	-1,489.0	1,489.0	0.00	0.00	
9,000.0	90.00	270.00	7,398.0	1,016.9	-1,589.0	1,589.0	0.00	0.00	
9,100.0	90.00	270.00	7,398.0	1,016.9	-1,689.0	1,689.0	0.00	0.00	

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Project:	DJ Wattenberg	MD Reference:	WELL @ 5067.0ft (Ensign)
Site:	S4-T3N-R68W (Peppler Farms)	North Reference:	True
Well:	Peppler Farms 1B-4H	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	270.00	7,398.0	1,016.9	-1,789.0	1,789.0	0.00	0.00	
9,300.0	90.00	270.00	7,398.0	1,016.9	-1,889.0	1,889.0	0.00	0.00	
9,400.0	90.00	270.00	7,398.0	1,016.9	-1,989.0	1,989.0	0.00	0.00	
9,500.0	90.00	270.00	7,398.0	1,016.9	-2,089.0	2,089.0	0.00	0.00	
9,600.0	90.00	270.00	7,398.0	1,016.9	-2,189.0	2,189.0	0.00	0.00	
9,700.0	90.00	270.00	7,398.0	1,016.9	-2,289.0	2,289.0	0.00	0.00	
9,800.0	90.00	270.00	7,398.0	1,016.9	-2,389.0	2,389.0	0.00	0.00	
9,900.0	90.00	270.00	7,398.0	1,016.9	-2,489.0	2,489.0	0.00	0.00	
10,000.0	90.00	270.00	7,398.0	1,016.9	-2,589.0	2,589.0	0.00	0.00	
10,100.0	90.00	270.00	7,398.0	1,016.9	-2,689.0	2,689.0	0.00	0.00	
10,200.0	90.00	270.00	7,398.0	1,016.9	-2,789.0	2,789.0	0.00	0.00	
10,300.0	90.00	270.00	7,398.0	1,016.9	-2,889.0	2,889.0	0.00	0.00	
10,400.0	90.00	270.00	7,398.0	1,016.9	-2,989.0	2,989.0	0.00	0.00	
10,500.0	90.00	270.00	7,398.0	1,016.9	-3,089.0	3,089.0	0.00	0.00	
10,600.0	90.00	270.00	7,398.0	1,016.8	-3,189.0	3,189.0	0.00	0.00	
10,700.0	90.00	270.00	7,398.0	1,016.8	-3,289.0	3,289.0	0.00	0.00	
10,800.0	90.00	270.00	7,398.0	1,016.8	-3,389.0	3,389.0	0.00	0.00	
10,900.0	90.00	270.00	7,398.0	1,016.8	-3,489.0	3,489.0	0.00	0.00	
11,000.0	90.00	270.00	7,398.0	1,016.8	-3,589.0	3,589.0	0.00	0.00	
11,100.0	90.00	270.00	7,398.0	1,016.8	-3,689.0	3,689.0	0.00	0.00	
11,200.0	90.00	270.00	7,398.0	1,016.8	-3,789.0	3,789.0	0.00	0.00	
11,300.0	90.00	270.00	7,398.0	1,016.8	-3,889.0	3,889.0	0.00	0.00	
11,400.0	90.00	270.00	7,398.0	1,016.8	-3,989.0	3,989.0	0.00	0.00	
11,500.0	90.00	270.00	7,398.0	1,016.8	-4,089.0	4,089.0	0.00	0.00	
11,600.0	90.00	270.00	7,398.0	1,016.8	-4,189.0	4,189.0	0.00	0.00	
11,700.0	90.00	270.00	7,398.0	1,016.8	-4,289.0	4,289.0	0.00	0.00	
11,800.0	90.00	270.00	7,398.0	1,016.8	-4,389.0	4,389.0	0.00	0.00	
11,900.0	90.00	270.00	7,398.0	1,016.8	-4,489.0	4,489.0	0.00	0.00	
11,996.4	90.00	270.00	7,398.0	1,016.8	-4,585.3	4,585.3	0.00	0.00	TD at 11996.4 - Peppler Farms 1B-4H PBHL

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Peppler Farms 1B-4H PI	0.00	0.00	7,398.0	1,016.8	-4,585.3	1,338,276.86	3,135,067.14	40.260950	-105.016050
- plan hits target center									
- Point									

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Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5067.0ft (Ensign)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5067.0ft (Ensign)
Site:	S4-T3N-R68W (Peppler Farms)	North Reference:	True
Well:	Peppler Farms 1B-4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
68.0	68.0	Fox Hills				
4,131.3	4,065.0	Sussex				
4,432.8	4,360.0	Sussex Marker				
4,714.0	4,635.0	Shannon				
6,283.5	6,183.0	Teepee Buttes				
7,159.8	7,042.0	Sharon Springs				
7,237.6	7,107.0	Niobrara				
7,326.4	7,175.0	B Chalk				
7,706.4	7,370.0	Ft. Hayes				
7,787.5	7,388.0	Codell				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
300.0	300.0	0.0	0.0	KOP @ 300'	
1,500.0	1,491.2	122.4	26.5	EOB; Inc=12°	
5,300.0	5,208.2	894.6	193.4	Start Drop -1.00	
6,500.0	6,399.5	1,017.0	219.9	EOD; Inc=0°	
6,782.3	6,681.8	1,017.0	219.9	Start 8° build @ 6782' MD	
7,907.3	7,398.0	1,016.9	-496.3	LP @ 7398' TVD; 90°	
11,996.4	7,398.0	1,016.8	-4,585.3	TD at 11996.4	

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S4-T3N-R68W (Peppler Farms)

Peppler Farms 1B-4H

Hz

Plan #1

Anticollision Report

24 January, 2013

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Peppler Farms 1B-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5067.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5067.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1B-4H	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	1/24/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	11,996.4	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						
S4-T3N-R68W (Peppler Farms)						
Peppler Farms 1A-4H - Hz - Plan #1	166.3	167.3	10.9	10.4	20.360	CC
Peppler Farms 1A-4H - Hz - Plan #1	200.0	201.0	10.9	10.3	16.704	ES
Peppler Farms 1A-4H - Hz - Plan #1	11,996.4	11,811.5	474.0	284.8	2.505	SF
Peppler Farms 1C-4H - Hz - Plan #1	300.0	300.0	10.9	9.9	10.909	CC, ES
Peppler Farms 1C-4H - Hz - Plan #1	11,996.4	11,677.6	458.9	272.9	2.468	SF
Peppler Farms 1D-4H - Hz - Plan #1	300.0	300.0	21.9	20.9	21.818	CC, ES
Peppler Farms 1D-4H - Hz - Plan #1	3,100.0	3,101.1	199.1	184.1	13.221	SF
Peppler Farms 1E-4H - Hz - Plan #1	300.0	299.0	29.1	28.1	29.141	CC, ES
Peppler Farms 1E-4H - Hz - Plan #1	700.0	698.7	42.9	40.5	17.916	SF
Peppler Farms 1F-4H - Hz - Plan #1	300.0	299.0	40.1	39.1	40.069	CC, ES
Peppler Farms 1F-4H - Hz - Plan #1	700.0	697.9	54.5	52.1	22.760	SF
Peppler Farms 1G-4H - Hz - Plan #1	300.0	299.0	51.0	50.0	50.996	CC, ES
Peppler Farms 1G-4H - Hz - Plan #1	700.0	695.3	71.9	69.5	30.075	SF
Peppler Farms 1H-4H - Hz - Plan #1	200.0	199.0	61.9	61.3	95.128	CC, ES
Peppler Farms 1H-4H - Hz - Plan #1	700.0	691.3	96.2	93.8	40.308	SF
PEPPLER FARMS 4-2-4 (EXISTING) - Existing - Existing						Out of range
PEPPLER FARMS 6-4-4 (EXISTING) - Existing - Existing						Out of range

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Peppler Farms 1B-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5067.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5067.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1B-4H	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 S4-T3N-R68W (Peppler Farms) - Peppler Farms 1A-4H - 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	1.0	1.0	0.0	0.0	0.00	10.9	0.0	10.9					
100.0	100.0	101.0	101.0	0.2	0.2	0.00	10.9	0.0	10.9	10.6	0.31	35.794		
166.3	166.3	167.3	167.3	0.3	0.3	0.00	10.9	0.0	10.9	10.4	0.54	20.360	CC	
200.0	200.0	201.0	201.0	0.3	0.3	0.00	10.9	0.0	10.9	10.3	0.65	16.704	ES	
300.0	300.0	300.6	300.6	0.5	0.5	1.25	12.7	0.3	12.7	11.7	1.00	12.646		
400.0	400.0	400.0	399.8	0.7	0.7	-9.13	17.8	1.1	17.0	15.7	1.35	12.608		
500.0	500.0	499.1	498.6	0.9	0.9	-7.93	26.3	2.4	23.1	21.4	1.70	13.607		
600.0	599.9	597.9	596.6	1.0	1.2	-7.18	38.2	4.3	30.9	28.9	2.05	15.107		
700.0	699.7	696.2	693.7	1.2	1.5	-6.72	53.3	6.7	40.4	38.0	2.39	16.885		
800.0	799.4	794.0	789.8	1.4	1.9	-6.43	71.5	9.6	51.6	48.8	2.74	18.829		
900.0	898.9	891.2	884.5	1.7	2.3	-6.25	92.9	13.0	64.4	61.3	3.08	20.877		
1,000.0	998.3	987.8	977.9	1.9	2.7	-6.13	117.2	16.8	78.9	75.4	3.43	22.991		
1,100.0	1,097.4	1,084.7	1,070.8	2.2	3.2	-6.05	144.6	21.2	94.7	90.9	3.78	25.081		
1,200.0	1,196.3	1,183.6	1,165.3	2.5	3.7	-6.08	173.1	25.7	109.5	105.4	4.13	26.546		
1,300.0	1,294.9	1,282.7	1,260.1	2.8	4.2	-6.18	201.8	30.2	122.6	118.2	4.48	27.390		
1,400.0	1,393.3	1,382.1	1,355.1	3.1	4.8	-6.34	230.5	34.8	134.0	129.2	4.83	27.746		
1,500.0	1,491.2	1,481.6	1,450.3	3.5	5.3	-6.56	259.2	39.3	143.7	138.5	5.19	27.710		
1,600.0	1,589.1	1,581.2	1,545.6	3.9	5.8	-6.79	288.0	43.9	152.5	146.9	5.55	27.492		
1,700.0	1,686.9	1,680.8	1,640.8	4.3	6.4	-7.00	316.7	48.4	161.3	155.4	5.91	27.296		
1,800.0	1,784.7	1,780.4	1,736.1	4.7	6.9	-7.19	345.5	53.0	170.1	163.8	6.27	27.119		
1,900.0	1,882.5	1,880.0	1,831.3	5.0	7.4	-7.37	374.3	57.5	178.9	172.3	6.64	26.958		
2,000.0	1,980.3	1,979.6	1,926.6	5.4	8.0	-7.52	403.0	62.1	187.7	180.7	7.00	26.812		
2,100.0	2,078.1	2,079.3	2,021.9	5.8	8.5	-7.66	431.8	66.7	196.5	189.2	7.37	26.677		
2,200.0	2,175.9	2,178.9	2,117.1	6.2	9.0	-7.79	460.6	71.2	205.3	197.6	7.73	26.554		
2,300.0	2,273.8	2,278.5	2,212.4	6.6	9.6	-7.91	489.3	75.8	214.1	206.0	8.10	26.439		
2,400.0	2,371.6	2,378.1	2,307.6	7.0	10.1	-8.02	518.1	80.3	223.0	214.5	8.47	26.333		
2,500.0	2,469.4	2,477.7	2,402.9	7.4	10.6	-8.12	546.8	84.9	231.8	222.9	8.83	26.235		
2,600.0	2,567.2	2,577.3	2,498.1	7.8	11.2	-8.21	575.6	89.4	240.6	231.4	9.20	26.143		
2,700.0	2,665.0	2,676.9	2,593.4	8.2	11.7	-8.30	604.4	94.0	249.4	239.8	9.57	26.057		
2,800.0	2,762.8	2,776.5	2,688.7	8.6	12.2	-8.38	633.1	98.5	258.2	248.3	9.94	25.977		
2,900.0	2,860.7	2,876.1	2,783.9	9.0	12.8	-8.45	661.9	103.1	267.0	256.7	10.31	25.901		
3,000.0	2,958.5	2,975.7	2,879.2	9.4	13.3	-8.52	690.7	107.7	275.9	265.2	10.68	25.831		
3,100.0	3,056.3	3,075.4	2,974.4	9.8	13.9	-8.59	719.4	112.2	284.7	273.6	11.05	25.764		
3,200.0	3,154.1	3,175.0	3,069.7	10.2	14.4	-8.65	748.2	116.8	293.5	282.1	11.42	25.701		
3,300.0	3,251.9	3,274.6	3,165.0	10.6	14.9	-8.71	777.0	121.3	302.3	290.5	11.79	25.641		
3,400.0	3,349.7	3,374.2	3,260.2	11.0	15.5	-8.77	805.7	125.9	311.1	299.0	12.16	25.584		
3,500.0	3,447.5	3,473.8	3,355.5	11.4	16.0	-8.82	834.5	130.4	319.9	307.4	12.53	25.531		
3,600.0	3,545.4	3,573.4	3,450.7	11.8	16.5	-8.87	863.3	135.0	328.8	315.9	12.90	25.480		
3,700.0	3,643.2	3,673.0	3,546.0	12.2	17.1	-8.91	892.0	139.6	337.6	324.3	13.27	25.431		
3,800.0	3,741.0	3,772.6	3,641.2	12.6	17.6	-8.96	920.8	144.1	346.4	332.8	13.65	25.385		
3,900.0	3,838.8	3,872.2	3,736.5	13.0	18.1	-9.00	949.6	148.7	355.2	341.2	14.02	25.341		
4,000.0	3,936.6	3,971.8	3,831.8	13.4	18.7	-9.04	978.3	153.2	364.0	349.7	14.39	25.299		
4,100.0	4,034.4	4,071.5	3,927.0	13.8	19.2	-9.08	1,007.1	157.8	372.9	358.1	14.76	25.259		
4,200.0	4,132.2	4,171.1	4,022.3	14.2	19.8	-9.12	1,035.8	162.3	381.7	366.5	15.13	25.221		
4,300.0	4,230.1	4,270.7	4,117.5	14.6	20.3	-9.15	1,064.6	166.9	390.5	375.0	15.51	25.184		
4,400.0	4,327.9	4,370.3	4,212.8	15.0	20.8	-9.18	1,093.4	171.4	399.3	383.4	15.88	25.149		
4,500.0	4,425.7	4,469.9	4,308.0	15.4	21.4	-9.22	1,122.1	176.0	408.1	391.9	16.25	25.115		
4,600.0	4,523.5	4,569.5	4,403.3	15.8	21.9	-9.25	1,150.9	180.6	417.0	400.3	16.62	25.083		
4,700.0	4,621.3	4,669.1	4,498.6	16.2	22.4	-9.28	1,179.7	185.1	425.8	408.8	17.00	25.052		
4,800.0	4,719.1	4,768.7	4,593.8	16.6	23.0	-9.30	1,208.4	189.7	434.6	417.2	17.37	25.022		
4,900.0	4,816.9	4,868.3	4,689.1	17.0	23.5	-9.33	1,237.2	194.2	443.4	425.7	17.74	24.993		
5,000.0	4,914.8	4,967.9	4,784.3	17.4	24.1	-9.36	1,266.0	198.8	452.2	434.1	18.11	24.966		

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 Peppler Farms 1B-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5067.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5067.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1B-4H	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 S4-T3N-R68W (Peppler Farms) - Peppler Farms 1A-4H - Hz - Plan #1														Offset Site Error:	0.0 ft
Survey Program: 0-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
5,100.0	5,012.6	5,080.0	4,891.8	17.8	24.6	-9.40	1,297.3	203.7	460.2	441.7	18.51	24.858			
5,200.0	5,110.4	5,199.0	5,007.1	18.2	25.1	-9.51	1,326.2	208.3	464.2	445.3	18.93	24.521			
5,300.0	5,208.2	5,318.2	5,123.8	18.6	25.6	-9.68	1,350.5	212.2	464.2	444.8	19.36	23.972			
5,400.0	5,306.2	5,437.2	5,241.2	19.0	25.9	-9.90	1,369.8	215.2	460.8	441.0	19.80	23.280			
5,500.0	5,404.5	5,555.9	5,358.9	19.3	26.2	-10.14	1,384.3	217.5	455.1	434.9	20.23	22.501			
5,600.0	5,503.1	5,674.0	5,476.6	19.7	26.4	-10.42	1,394.0	219.1	447.0	426.4	20.66	21.639			
5,700.0	5,602.1	5,791.4	5,593.9	20.0	26.5	-10.73	1,398.8	219.8	436.6	415.5	21.09	20.701			
5,800.0	5,701.2	5,899.7	5,702.2	20.2	26.6	-11.06	1,399.4	219.9	424.3	402.8	21.50	19.732			
5,900.0	5,800.5	5,999.1	5,801.5	20.5	26.7	-11.34	1,399.4	219.9	413.2	391.3	21.89	18.877			
6,000.0	5,900.1	6,098.6	5,901.1	20.7	26.8	-11.58	1,399.4	219.9	403.8	381.5	22.26	18.138			
6,100.0	5,999.8	6,198.3	6,000.8	20.9	26.8	-11.80	1,399.4	219.9	396.1	373.5	22.62	17.509			
6,200.0	6,099.6	6,298.1	6,100.6	21.1	26.9	-11.97	1,399.4	219.9	390.1	367.2	22.97	16.985			
6,300.0	6,199.5	6,398.0	6,200.5	21.2	27.0	-12.09	1,399.4	219.9	385.9	362.6	23.30	16.561			
6,400.0	6,299.5	6,498.0	6,300.5	21.3	27.0	-12.17	1,399.4	219.9	383.3	359.7	23.61	16.233			
6,500.0	6,399.5	6,598.0	6,400.5	21.4	27.1	0.01	1,399.4	219.9	382.5	334.6	47.91	7.984			
6,529.5	6,428.9	6,627.5	6,429.9	21.4	27.1	-0.07	1,399.4	219.4	382.5	334.5	47.95	7.977			
6,600.0	6,499.5	6,697.4	6,499.6	21.5	27.2	-0.98	1,399.4	213.4	382.5	334.6	47.96	7.976			
6,700.0	6,599.5	6,793.2	6,593.3	21.6	27.2	-3.86	1,399.4	194.1	383.4	335.6	47.74	8.030			
6,800.0	6,699.5	6,882.5	6,677.7	21.7	27.2	81.79	1,399.4	165.0	387.0	360.2	26.77	14.456			
6,900.0	6,798.9	6,967.1	6,753.7	21.7	27.2	76.95	1,399.4	128.0	393.9	365.6	28.30	13.919			
7,000.0	6,896.1	7,050.0	6,823.5	21.8	27.2	72.44	1,399.4	83.3	403.1	373.6	29.40	13.707			
7,100.0	6,989.1	7,128.3	6,884.3	21.8	27.3	68.48	1,399.4	34.0	413.6	383.9	29.77	13.895			
7,200.0	7,076.2	7,205.9	6,938.8	21.8	27.3	64.96	1,399.4	-21.2	424.8	395.2	29.68	14.315			
7,300.0	7,155.5	7,281.9	6,986.1	21.9	27.4	61.94	1,399.4	-80.7	436.0	407.0	28.97	15.051			
7,400.0	7,225.7	7,356.7	7,026.2	22.0	27.6	59.42	1,399.4	-143.7	446.4	418.5	27.98	15.954			
7,500.0	7,285.2	7,430.5	7,059.2	22.2	27.8	57.39	1,399.4	-209.7	455.7	428.5	27.16	16.780			
7,600.0	7,333.1	7,500.0	7,083.8	22.6	28.1	55.87	1,399.4	-274.7	463.4	436.4	26.94	17.200			
7,700.0	7,368.2	7,576.0	7,103.5	23.1	28.5	54.71	1,399.4	-348.1	469.1	441.2	27.85	16.842			
7,800.0	7,390.0	7,650.0	7,115.0	23.8	29.0	54.03	1,399.4	-421.1	472.7	442.6	30.06	15.727			
7,900.0	7,398.0	7,720.1	7,119.0	24.8	29.5	53.79	1,399.4	-491.0	474.0	440.5	33.45	14.169			
8,000.0	7,398.0	7,818.0	7,119.0	26.1	30.4	53.79	1,399.4	-589.0	474.0	437.5	36.50	12.985			
8,100.0	7,398.0	7,918.0	7,119.0	27.5	31.5	53.79	1,399.4	-689.0	474.0	434.4	39.65	11.955			
8,200.0	7,398.0	8,018.0	7,119.0	29.1	32.8	53.79	1,399.4	-789.0	474.0	431.1	42.94	11.040			
8,300.0	7,398.0	8,118.0	7,119.0	30.9	34.2	53.79	1,399.4	-889.0	474.0	427.7	46.34	10.230			
8,400.0	7,398.0	8,218.0	7,119.0	32.8	35.8	53.79	1,399.4	-989.0	474.0	424.2	49.83	9.513			
8,500.0	7,398.0	8,318.0	7,119.0	34.7	37.5	53.79	1,399.4	-1,089.0	474.0	420.6	53.39	8.879			
8,600.0	7,398.0	8,418.0	7,119.0	36.8	39.3	53.79	1,399.4	-1,189.0	474.0	417.0	57.01	8.315			
8,700.0	7,398.0	8,518.0	7,119.0	38.9	41.2	53.79	1,399.4	-1,289.0	474.0	413.3	60.67	7.813			
8,800.0	7,398.0	8,618.0	7,119.0	41.1	43.2	53.79	1,399.4	-1,389.0	474.0	409.6	64.38	7.363			
8,900.0	7,398.0	8,718.0	7,119.0	43.3	45.2	53.79	1,399.4	-1,489.0	474.0	405.9	68.12	6.959			
9,000.0	7,398.0	8,818.0	7,119.0	45.5	47.3	53.79	1,399.4	-1,589.0	474.0	402.1	71.89	6.594			
9,100.0	7,398.0	8,918.0	7,119.0	47.7	49.5	53.79	1,399.4	-1,689.0	474.0	398.3	75.68	6.263			
9,200.0	7,398.0	9,018.0	7,119.0	50.0	51.6	53.79	1,399.4	-1,789.0	474.0	394.5	79.49	5.963			
9,300.0	7,398.0	9,118.0	7,119.0	52.3	53.8	53.79	1,399.4	-1,889.0	474.0	390.7	83.32	5.689			
9,400.0	7,398.0	9,218.0	7,119.0	54.6	56.1	53.79	1,399.4	-1,989.0	474.0	386.8	87.17	5.438			
9,500.0	7,398.0	9,318.0	7,119.0	57.0	58.3	53.79	1,399.4	-2,089.0	474.0	383.0	91.02	5.208			
9,600.0	7,398.0	9,418.0	7,119.0	59.3	60.6	53.79	1,399.4	-2,189.0	474.0	379.1	94.90	4.995			
9,700.0	7,398.0	9,518.0	7,119.0	61.7	62.9	53.79	1,399.4	-2,289.0	474.0	375.2	98.78	4.799			
9,800.0	7,398.0	9,618.0	7,119.0	64.0	65.2	53.79	1,399.4	-2,389.0	474.0	371.4	102.67	4.617			
9,900.0	7,398.0	9,718.0	7,119.0	66.4	67.5	53.79	1,399.4	-2,489.0	474.0	367.5	106.56	4.448			
10,000.0	7,398.0	9,818.0	7,119.0	68.8	69.9	53.79	1,399.4	-2,589.0	474.0	363.5	110.47	4.291			
10,100.0	7,398.0	9,918.0	7,119.0	71.2	72.2	53.79	1,399.4	-2,689.0	474.0	359.6	114.38	4.144			

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 Peppler Farms 1B-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5067.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5067.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1B-4H	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 S4-T3N-R68W (Peppler Farms) - Peppler Farms 1A-4H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program:		0-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
10,200.0	7,398.0	10,018.0	7,119.0	73.6	74.6	53.79	1,399.3	-2,789.0	474.0	355.7	118.30	4.007		
10,300.0	7,398.0	10,118.0	7,119.0	76.0	76.9	53.79	1,399.3	-2,889.0	474.0	351.8	122.22	3.878		
10,400.0	7,398.0	10,218.0	7,119.0	78.4	79.3	53.79	1,399.3	-2,989.0	474.0	347.9	126.15	3.758		
10,500.0	7,398.0	10,318.0	7,119.0	80.8	81.7	53.79	1,399.3	-3,089.0	474.0	343.9	130.08	3.644		
10,600.0	7,398.0	10,418.0	7,119.0	83.2	84.0	53.79	1,399.3	-3,189.0	474.0	340.0	134.02	3.537		
10,700.0	7,398.0	10,518.0	7,119.0	85.6	86.4	53.79	1,399.3	-3,289.0	474.0	336.1	137.96	3.436		
10,800.0	7,398.0	10,618.0	7,119.0	88.0	88.8	53.79	1,399.3	-3,389.0	474.0	332.1	141.90	3.341		
10,900.0	7,398.0	10,718.0	7,119.0	90.4	91.2	53.79	1,399.3	-3,489.0	474.0	328.2	145.85	3.250		
11,000.0	7,398.0	10,818.0	7,119.0	92.9	93.6	53.79	1,399.3	-3,589.0	474.0	324.2	149.80	3.164		
11,100.0	7,398.0	10,918.0	7,119.0	95.3	96.0	53.79	1,399.3	-3,689.0	474.0	320.3	153.75	3.083		
11,200.0	7,398.0	11,018.0	7,119.0	97.7	98.4	53.79	1,399.3	-3,789.0	474.0	316.3	157.70	3.006		
11,300.0	7,398.0	11,118.0	7,119.0	100.1	100.8	53.79	1,399.3	-3,889.0	474.0	312.4	161.66	2.932		
11,400.0	7,398.0	11,218.0	7,119.0	102.6	103.3	53.79	1,399.3	-3,989.0	474.0	308.4	165.62	2.862		
11,500.0	7,398.0	11,318.0	7,119.0	105.0	105.7	53.79	1,399.3	-4,089.0	474.0	304.5	169.58	2.795		
11,600.0	7,398.0	11,418.0	7,119.0	107.4	108.1	53.79	1,399.3	-4,189.0	474.0	300.5	173.54	2.732		
11,700.0	7,398.0	11,518.0	7,119.0	109.9	110.5	53.79	1,399.3	-4,289.0	474.0	296.5	177.50	2.671		
11,800.0	7,398.0	11,618.0	7,119.0	112.3	112.9	53.79	1,399.3	-4,389.0	474.0	292.6	181.47	2.612		
11,900.0	7,398.0	11,718.0	7,119.0	114.8	115.4	53.79	1,399.3	-4,489.0	474.0	288.6	185.44	2.556		
11,957.6	7,398.0	11,775.7	7,119.0	116.2	116.8	53.79	1,399.3	-4,546.6	474.0	286.3	187.72	2.525		
11,996.4	7,398.0	11,811.5	7,119.0	117.1	117.6	53.79	1,399.3	-4,582.5	474.0	284.8	189.20	2.505 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Peppler Farms 1B-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5067.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5067.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1B-4H	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 S4-T3N-R68W (Peppler Farms) - Peppler Farms 1C-4H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program:		0-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	180.00	-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	400.0	400.0	0.7	0.7	168.70	-10.9	0.0	11.8	10.4	1.35	8.723		
500.0	500.0	500.2	500.2	0.9	0.9	169.74	-10.1	0.3	13.5	11.8	1.70	7.953		
600.0	599.9	600.4	600.4	1.0	1.0	169.81	-7.6	1.1	15.3	13.3	2.05	7.467		
700.0	699.7	700.7	700.5	1.2	1.2	169.22	-3.5	2.5	17.1	14.7	2.40	7.137		
800.0	799.4	801.0	800.6	1.4	1.4	168.16	2.4	4.5	19.0	16.2	2.75	6.904		
900.0	898.9	901.3	900.6	1.7	1.6	166.76	9.8	7.0	20.9	17.8	3.11	6.734		
1,000.0	998.3	1,001.6	1,000.5	1.9	1.8	165.13	19.0	10.1	22.9	19.4	3.47	6.604		
1,100.0	1,097.4	1,102.0	1,100.2	2.2	2.1	163.32	29.8	13.8	25.0	21.1	3.84	6.501		
1,200.0	1,196.3	1,202.4	1,199.7	2.5	2.4	161.39	42.2	18.0	27.1	22.9	4.23	6.414		
1,300.0	1,294.9	1,302.8	1,299.0	2.8	2.6	159.39	56.3	22.8	29.4	24.8	4.64	6.332		
1,400.0	1,393.3	1,403.2	1,398.1	3.1	3.0	157.35	72.0	28.1	31.8	26.7	5.08	6.249		
1,500.0	1,491.2	1,503.1	1,496.5	3.5	3.3	156.09	88.5	33.6	35.0	29.5	5.53	6.335		
1,600.0	1,589.1	1,603.1	1,594.9	3.9	3.6	155.59	104.9	39.2	39.1	33.1	5.98	6.540		
1,700.0	1,686.9	1,703.0	1,693.3	4.3	3.9	155.19	121.4	44.8	43.2	36.8	6.44	6.711		
1,800.0	1,784.7	1,802.9	1,791.7	4.7	4.3	154.86	137.8	50.3	47.3	40.4	6.90	6.855		
1,900.0	1,882.5	1,902.8	1,890.1	5.0	4.6	154.58	154.2	55.9	51.4	44.0	7.37	6.977		
2,000.0	1,980.3	2,002.7	1,988.5	5.4	4.9	154.34	170.7	61.5	55.5	47.7	7.84	7.082		
2,100.0	2,078.1	2,102.6	2,086.9	5.8	5.3	154.14	187.1	67.0	59.6	51.3	8.31	7.172		
2,200.0	2,175.9	2,202.5	2,185.3	6.2	5.6	153.96	203.5	72.6	63.7	54.9	8.78	7.251		
2,300.0	2,273.8	2,302.5	2,283.7	6.6	6.0	153.80	220.0	78.2	67.8	58.5	9.26	7.321		
2,400.0	2,371.6	2,402.4	2,382.1	7.0	6.3	153.66	236.4	83.7	71.9	62.2	9.74	7.382		
2,500.0	2,469.4	2,502.3	2,480.5	7.4	6.6	153.54	252.8	89.3	76.0	65.8	10.22	7.437		
2,600.0	2,567.2	2,602.2	2,578.9	7.8	7.0	153.43	269.3	94.8	80.1	69.4	10.70	7.486		
2,700.0	2,665.0	2,702.1	2,677.3	8.2	7.3	153.33	285.7	100.4	84.2	73.0	11.18	7.530		
2,800.0	2,762.8	2,802.0	2,775.7	8.6	7.7	153.23	302.1	106.0	88.3	76.6	11.66	7.569		
2,900.0	2,860.7	2,902.0	2,874.1	9.0	8.0	153.15	318.6	111.5	92.4	80.2	12.15	7.605		
3,000.0	2,958.5	3,001.9	2,972.5	9.4	8.4	153.07	335.0	117.1	96.5	83.8	12.63	7.638		
3,100.0	3,056.3	3,101.8	3,070.9	9.8	8.7	153.00	351.4	122.7	100.6	87.5	13.12	7.668		
3,200.0	3,154.1	3,201.7	3,169.3	10.2	9.1	152.94	367.9	128.2	104.7	91.1	13.60	7.696		
3,300.0	3,251.9	3,301.6	3,267.7	10.6	9.4	152.88	384.3	133.8	108.8	94.7	14.09	7.721		
3,400.0	3,349.7	3,401.5	3,366.1	11.0	9.7	152.83	400.7	139.3	112.9	98.3	14.57	7.745		
3,500.0	3,447.5	3,501.5	3,464.5	11.4	10.1	152.77	417.2	144.9	117.0	101.9	15.06	7.766		
3,600.0	3,545.4	3,601.4	3,562.9	11.8	10.4	152.73	433.6	150.5	121.1	105.5	15.55	7.787		
3,700.0	3,643.2	3,701.3	3,661.3	12.2	10.8	152.68	450.0	156.0	125.2	109.1	16.04	7.805		
3,800.0	3,741.0	3,801.2	3,759.7	12.6	11.1	152.64	466.5	161.6	129.3	112.8	16.53	7.823		
3,900.0	3,838.8	3,901.1	3,858.1	13.0	11.5	152.60	482.9	167.2	133.4	116.4	17.01	7.839		
4,000.0	3,936.6	4,001.0	3,956.4	13.4	11.8	152.56	499.3	172.7	137.5	120.0	17.50	7.855		
4,100.0	4,034.4	4,100.9	4,054.8	13.8	12.2	152.53	515.8	178.3	141.6	123.6	17.99	7.869		
4,200.0	4,132.2	4,200.9	4,153.2	14.2	12.5	152.49	532.2	183.8	145.7	127.2	18.48	7.882		
4,300.0	4,230.1	4,300.8	4,251.6	14.6	12.9	152.46	548.6	189.4	149.8	130.8	18.97	7.895		
4,400.0	4,327.9	4,400.7	4,350.0	15.0	13.2	152.43	565.1	195.0	153.9	134.4	19.46	7.907		
4,500.0	4,425.7	4,499.0	4,447.0	15.4	13.6	152.49	580.9	200.3	158.3	138.4	19.92	7.947		
4,600.0	4,523.5	4,596.6	4,543.3	15.8	13.9	152.85	595.0	205.1	164.1	143.8	20.30	8.086		
4,700.0	4,621.3	4,693.9	4,639.8	16.2	14.1	153.50	607.6	209.4	171.4	150.8	20.60	8.321		
4,800.0	4,719.1	4,791.0	4,736.1	16.6	14.4	154.37	618.6	213.1	180.1	159.2	20.82	8.648		
4,900.0	4,816.9	4,887.7	4,832.4	17.0	14.6	155.41	628.1	216.3	190.2	169.3	20.99	9.063		
5,000.0	4,914.8	4,984.1	4,928.4	17.4	14.8	156.59	635.9	218.9	201.9	180.8	21.11	9.564		
5,100.0	5,012.6	5,080.1	5,024.1	17.8	15.0	157.84	642.2	221.1	215.1	193.9	21.20	10.146		

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 Peppler Farms 1B-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5067.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5067.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1B-4H	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 S4-T3N-R68W (Peppler Farms) - Peppler Farms 1C-4H - 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)				
5,200.0	5,110.4	5,175.6	5,119.5	18.2	15.1	159.12	647.0	222.7	229.9	208.7	21.28	10.806		
5,300.0	5,208.2	5,270.5	5,214.4	18.6	15.3	160.42	650.2	223.8	246.3	225.0	21.34	11.540		
5,400.0	5,306.2	5,365.1	5,308.9	19.0	15.4	161.69	652.0	224.4	263.5	242.0	21.42	12.302		
5,500.0	5,404.5	5,460.7	5,404.5	19.3	15.5	162.85	652.3	224.5	280.5	259.0	21.51	13.038		
5,600.0	5,503.1	5,559.3	5,503.1	19.7	15.6	163.83	652.3	224.5	296.3	274.7	21.65	13.685		
5,700.0	5,602.1	5,658.2	5,602.1	20.0	15.7	164.63	652.3	224.5	310.6	288.7	21.83	14.226		
5,800.0	5,701.2	5,757.4	5,701.2	20.2	15.8	165.27	652.3	224.5	323.2	301.1	22.04	14.664		
5,900.0	5,800.5	5,856.7	5,800.5	20.5	15.9	165.79	652.3	224.5	334.1	311.9	22.27	15.006		
6,000.0	5,900.1	5,956.3	5,900.1	20.7	16.0	166.21	652.3	224.5	343.4	320.9	22.51	15.254		
6,100.0	5,999.8	6,055.9	5,999.8	20.9	16.2	166.53	652.3	224.5	351.1	328.3	22.78	15.414		
6,200.0	6,099.6	6,155.8	6,099.6	21.1	16.3	166.77	652.3	224.5	357.0	334.0	23.05	15.490		
6,300.0	6,199.5	6,255.7	6,199.5	21.2	16.4	166.94	652.3	224.5	361.3	337.9	23.33	15.486		
6,400.0	6,299.5	6,355.6	6,299.5	21.3	16.5	167.04	652.3	224.5	363.8	340.2	23.62	15.406		
6,500.0	6,399.5	6,455.6	6,399.5	21.4	16.6	179.27	652.3	224.5	364.7	327.5	37.14	9.819		
6,584.7	6,484.2	6,540.5	6,484.2	21.5	16.7	-180.00	652.4	219.9	364.6	327.2	37.40	9.750		
6,600.0	6,499.5	6,555.7	6,499.2	21.5	16.7	-179.70	652.4	218.0	364.6	327.2	37.46	9.733		
6,700.0	6,599.5	6,652.1	6,593.6	21.6	16.7	-176.66	652.4	198.6	365.3	327.4	37.93	9.630		
6,800.0	6,699.5	6,741.9	6,678.5	21.7	16.7	-82.06	652.4	169.3	368.7	345.0	23.63	15.599		
6,900.0	6,798.9	6,826.9	6,754.8	21.7	16.7	-76.97	652.4	132.0	375.5	351.7	23.78	15.790		
7,000.0	6,896.1	6,909.1	6,823.9	21.8	16.8	-72.28	652.4	87.7	384.8	360.4	24.34	15.808		
7,100.0	6,989.1	6,988.9	6,885.7	21.8	16.8	-68.07	652.4	37.2	395.6	370.4	25.17	15.719		
7,200.0	7,076.2	7,066.8	6,940.2	21.8	16.9	-64.38	652.4	-18.3	407.2	381.1	26.03	15.642		
7,300.0	7,155.5	7,143.0	6,987.5	21.9	17.1	-61.21	652.4	-78.1	418.7	391.9	26.85	15.595		
7,400.0	7,225.7	7,218.0	7,027.5	22.0	17.4	-58.57	652.4	-141.5	429.6	402.1	27.54	15.599		
7,500.0	7,285.2	7,292.0	7,060.3	22.2	17.8	-56.44	652.4	-207.7	439.3	411.2	28.12	15.622		
7,600.0	7,333.1	7,365.2	7,085.8	22.6	18.4	-54.79	652.4	-276.3	447.4	418.7	28.68	15.599		
7,700.0	7,368.2	7,437.8	7,104.1	23.1	19.1	-53.61	652.4	-346.5	453.5	424.2	29.32	15.467		
7,800.0	7,390.0	7,510.0	7,115.2	23.8	20.0	-52.88	652.4	-417.9	457.4	427.3	30.15	15.172		
7,900.0	7,398.0	7,584.0	7,119.0	24.8	21.1	-52.58	652.4	-491.7	459.1	427.8	31.29	14.671		
8,000.0	7,398.0	7,681.3	7,119.0	26.1	22.7	-52.57	652.4	-589.0	459.1	424.8	34.24	13.409		
8,100.0	7,398.0	7,781.3	7,119.0	27.5	24.5	-52.57	652.4	-689.0	459.1	421.6	37.47	12.251		
8,200.0	7,398.0	7,881.3	7,119.0	29.1	26.5	-52.57	652.4	-789.0	459.1	418.2	40.83	11.243		
8,300.0	7,398.0	7,981.3	7,119.0	30.9	28.5	-52.57	652.4	-889.0	459.1	414.8	44.29	10.366		
8,400.0	7,398.0	8,081.3	7,119.0	32.8	30.6	-52.57	652.4	-989.0	459.1	411.2	47.82	9.601		
8,500.0	7,398.0	8,181.3	7,119.0	34.7	32.8	-52.57	652.4	-1,089.0	459.0	407.6	51.40	8.930		
8,600.0	7,398.0	8,281.3	7,119.0	36.8	35.0	-52.57	652.4	-1,189.0	459.0	404.0	55.04	8.340		
8,700.0	7,398.0	8,381.3	7,119.0	38.9	37.3	-52.57	652.4	-1,289.0	459.0	400.3	58.71	7.818		
8,800.0	7,398.0	8,481.3	7,119.0	41.1	39.5	-52.57	652.4	-1,389.0	459.0	396.6	62.42	7.354		
8,900.0	7,398.0	8,581.3	7,119.0	43.3	41.8	-52.57	652.4	-1,489.0	459.0	392.9	66.15	6.939		
9,000.0	7,398.0	8,681.3	7,119.0	45.5	44.1	-52.57	652.4	-1,589.0	459.0	389.1	69.91	6.566		
9,100.0	7,398.0	8,781.3	7,119.0	47.7	46.5	-52.57	652.4	-1,689.0	459.0	385.3	73.68	6.230		
9,200.0	7,398.0	8,881.3	7,119.0	50.0	48.8	-52.57	652.4	-1,789.0	459.0	381.5	77.47	5.925		
9,300.0	7,398.0	8,981.3	7,119.0	52.3	51.2	-52.57	652.4	-1,889.0	459.0	377.7	81.28	5.647		
9,400.0	7,398.0	9,081.3	7,119.0	54.6	53.6	-52.57	652.4	-1,989.0	459.0	373.9	85.09	5.394		
9,500.0	7,398.0	9,181.3	7,119.0	57.0	55.9	-52.57	652.4	-2,089.0	459.0	370.1	88.92	5.162		
9,600.0	7,398.0	9,281.3	7,119.0	59.3	58.3	-52.57	652.4	-2,189.0	459.0	366.2	92.76	4.948		
9,700.0	7,398.0	9,381.3	7,119.0	61.7	60.7	-52.56	652.4	-2,289.0	459.0	362.4	96.60	4.751		
9,800.0	7,398.0	9,481.3	7,119.0	64.0	63.1	-52.56	652.4	-2,389.0	459.0	358.5	100.45	4.569		
9,900.0	7,398.0	9,581.3	7,119.0	66.4	65.5	-52.56	652.4	-2,489.0	459.0	354.7	104.31	4.400		
10,000.0	7,398.0	9,681.3	7,119.0	68.8	67.9	-52.56	652.4	-2,589.0	459.0	350.8	108.17	4.243		
10,100.0	7,398.0	9,781.3	7,119.0	71.2	70.4	-52.56	652.4	-2,689.0	459.0	346.9	112.04	4.096		
10,200.0	7,398.0	9,881.3	7,119.0	73.6	72.8	-52.56	652.4	-2,789.0	459.0	343.0	115.91	3.960		

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 Peppler Farms 1B-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5067.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5067.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1B-4H	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 S4-T3N-R68W (Peppler Farms) - Peppler Farms 1C-4H - 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	7,398.0	9,981.3	7,119.0	76.0	75.2	-52.56	652.5	-2,889.0	458.9	339.2	119.79	3.831		
10,400.0	7,398.0	10,081.3	7,119.0	78.4	77.6	-52.56	652.5	-2,989.0	458.9	335.3	123.67	3.711		
10,500.0	7,398.0	10,181.3	7,119.0	80.8	80.1	-52.56	652.5	-3,089.0	458.9	331.4	127.55	3.598		
10,600.0	7,398.0	10,281.3	7,119.0	83.2	82.5	-52.56	652.5	-3,189.0	458.9	327.5	131.44	3.492		
10,700.0	7,398.0	10,381.3	7,119.0	85.6	84.9	-52.56	652.5	-3,289.0	458.9	323.6	135.33	3.391		
10,800.0	7,398.0	10,481.3	7,119.0	88.0	87.4	-52.56	652.5	-3,389.0	458.9	319.7	139.22	3.296		
10,900.0	7,398.0	10,581.3	7,119.0	90.4	89.8	-52.56	652.5	-3,489.0	458.9	315.8	143.11	3.207		
11,000.0	7,398.0	10,681.3	7,119.0	92.9	92.2	-52.56	652.5	-3,589.0	458.9	311.9	147.01	3.122		
11,100.0	7,398.0	10,781.3	7,119.0	95.3	94.7	-52.56	652.5	-3,689.0	458.9	308.0	150.91	3.041		
11,200.0	7,398.0	10,881.3	7,119.0	97.7	97.1	-52.56	652.5	-3,789.0	458.9	304.1	154.81	2.964		
11,300.0	7,398.0	10,981.3	7,119.0	100.1	99.6	-52.56	652.5	-3,889.0	458.9	300.2	158.71	2.891		
11,400.0	7,398.0	11,081.3	7,119.0	102.6	102.0	-52.56	652.5	-3,989.0	458.9	296.3	162.61	2.822		
11,500.0	7,398.0	11,181.3	7,119.0	105.0	104.5	-52.55	652.5	-4,089.0	458.9	292.4	166.52	2.756		
11,600.0	7,398.0	11,281.3	7,119.0	107.4	106.9	-52.55	652.5	-4,189.0	458.9	288.5	170.43	2.693		
11,700.0	7,398.0	11,381.3	7,119.0	109.9	109.4	-52.55	652.5	-4,289.0	458.9	284.5	174.33	2.632		
11,800.0	7,398.0	11,481.3	7,119.0	112.3	111.8	-52.55	652.5	-4,389.0	458.9	280.6	178.24	2.574		
11,900.0	7,398.0	11,581.3	7,119.0	114.8	114.3	-52.55	652.5	-4,489.0	458.9	276.7	182.15	2.519		
11,996.4	7,398.0	11,677.6	7,119.0	117.1	116.6	-52.55	652.5	-4,585.3	458.9	272.9	185.92	2.468 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Peppler Farms 1B-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5067.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5067.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1B-4H	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 S4-T3N-R68W (Peppler Farms) - Peppler Farms 1D-4H - 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	180.00	-21.9	0.0	21.9					
100.0	100.0	100.0	100.0	0.2	0.2	180.00	-21.9	0.0	21.9	21.6	0.30	71.973		
200.0	200.0	200.0	200.0	0.3	0.3	180.00	-21.9	0.0	21.9	21.2	0.65	33.485		
300.0	300.0	300.0	300.0	0.5	0.5	180.00	-21.9	0.0	21.9	20.9	1.00	21.818 CC, ES		
400.0	400.0	400.0	400.0	0.7	0.7	168.26	-21.9	0.0	22.7	21.4	1.35	16.813		
500.0	500.0	500.0	500.0	0.9	0.8	169.47	-21.9	0.0	25.3	23.6	1.70	14.875		
600.0	599.9	599.9	599.9	1.0	1.0	171.00	-21.9	0.0	29.6	27.5	2.05	14.445		
700.0	699.7	700.2	700.2	1.2	1.2	171.87	-21.1	0.5	34.9	32.5	2.40	14.543		
800.0	799.4	800.6	800.6	1.4	1.4	171.65	-18.9	1.9	40.3	37.6	2.75	14.684		
900.0	898.9	901.1	901.0	1.7	1.6	170.75	-15.2	4.3	46.0	42.9	3.10	14.846		
1,000.0	998.3	1,001.7	1,001.4	1.9	1.8	169.40	-10.0	7.6	51.9	48.4	3.45	15.020		
1,100.0	1,097.4	1,102.3	1,101.7	2.2	2.0	167.74	-3.3	11.9	58.0	54.2	3.82	15.196		
1,200.0	1,196.3	1,203.0	1,201.9	2.5	2.2	165.88	4.8	17.1	64.4	60.2	4.19	15.366		
1,300.0	1,294.9	1,303.7	1,301.9	2.8	2.4	163.90	14.5	23.3	71.1	66.5	4.58	15.517		
1,400.0	1,393.3	1,404.5	1,401.8	3.1	2.7	161.85	25.6	30.4	78.1	73.1	5.00	15.638		
1,500.0	1,491.2	1,505.3	1,501.5	3.5	3.0	159.78	38.3	38.5	85.6	80.1	5.44	15.720		
1,600.0	1,589.1	1,606.1	1,600.9	3.9	3.3	157.53	52.4	47.5	92.6	86.7	5.94	15.599		
1,700.0	1,686.9	1,705.8	1,699.1	4.3	3.6	155.30	66.9	56.8	99.2	92.8	6.46	15.358		
1,800.0	1,784.7	1,805.5	1,797.3	4.7	3.9	153.36	81.5	66.1	105.9	98.9	7.01	15.124		
1,900.0	1,882.5	1,905.2	1,895.5	5.0	4.2	151.65	96.1	75.5	112.8	105.2	7.57	14.900		
2,000.0	1,980.3	2,004.9	1,993.7	5.4	4.5	150.13	110.7	84.8	119.7	111.6	8.15	14.690		
2,100.0	2,078.1	2,104.6	2,091.9	5.8	4.9	148.79	125.3	94.1	126.7	118.0	8.74	14.494		
2,200.0	2,175.9	2,204.3	2,190.1	6.2	5.2	147.58	139.9	103.4	133.8	124.4	9.35	14.313		
2,300.0	2,273.8	2,304.1	2,288.3	6.6	5.5	146.50	154.5	112.8	140.9	130.9	9.96	14.146		
2,400.0	2,371.6	2,403.8	2,386.5	7.0	5.9	145.52	169.1	122.1	148.1	137.5	10.58	13.992		
2,500.0	2,469.4	2,503.5	2,484.7	7.4	6.2	144.63	183.6	131.4	155.3	144.1	11.21	13.851		
2,600.0	2,567.2	2,603.2	2,582.9	7.8	6.5	143.82	198.2	140.8	162.5	150.7	11.84	13.721		
2,700.0	2,665.0	2,702.9	2,681.1	8.2	6.9	143.08	212.8	150.1	169.8	157.3	12.48	13.602		
2,800.0	2,762.8	2,802.6	2,779.3	8.6	7.2	142.40	227.4	159.4	177.1	163.9	13.12	13.492		
2,900.0	2,860.7	2,902.3	2,877.5	9.0	7.6	141.77	242.0	168.7	184.4	170.6	13.77	13.390		
3,000.0	2,958.5	3,002.0	2,975.7	9.4	7.9	141.19	256.6	178.1	191.7	177.3	14.42	13.297		
3,100.0	3,056.3	3,101.1	3,073.3	9.8	8.2	140.69	271.0	187.3	199.1	184.1	15.06	13.221 SF		
3,200.0	3,154.1	3,199.0	3,169.9	10.2	8.6	140.55	284.1	195.7	207.2	191.6	15.64	13.249		
3,300.0	3,251.9	3,296.8	3,266.7	10.6	8.8	140.80	295.8	203.1	216.2	200.1	16.15	13.384		
3,400.0	3,349.7	3,394.3	3,363.5	11.0	9.1	141.39	306.1	209.7	226.1	209.5	16.60	13.617		
3,500.0	3,447.5	3,491.6	3,460.2	11.4	9.3	142.28	315.0	215.4	236.9	219.9	16.98	13.946		
3,600.0	3,545.4	3,588.6	3,556.7	11.8	9.6	143.41	322.4	220.2	248.6	231.3	17.31	14.366		
3,700.0	3,643.2	3,685.2	3,653.0	12.2	9.7	144.73	328.5	224.1	261.4	243.8	17.57	14.880		
3,800.0	3,741.0	3,781.3	3,749.0	12.6	9.9	146.20	333.2	227.1	275.3	257.5	17.78	15.485		
3,900.0	3,838.8	3,877.0	3,844.6	13.0	10.1	147.78	336.5	229.2	290.4	272.5	17.95	16.183		
4,000.0	3,936.6	3,972.2	3,939.8	13.4	10.2	149.44	338.5	230.4	306.8	288.7	18.07	16.974		
4,100.0	4,034.4	4,066.8	4,034.4	13.8	10.3	151.13	339.1	230.9	324.4	306.2	18.17	17.852		
4,200.0	4,132.2	4,164.6	4,132.2	14.2	10.4	152.80	339.1	230.9	342.8	324.6	18.27	18.766		
4,300.0	4,230.1	4,262.5	4,230.1	14.6	10.6	154.30	339.1	230.9	361.5	343.1	18.39	19.660		
4,400.0	4,327.9	4,360.3	4,327.9	15.0	10.7	155.65	339.1	230.9	380.5	361.9	18.53	20.532		
4,500.0	4,425.7	4,458.1	4,425.7	15.4	10.8	156.88	339.1	230.9	399.6	380.9	18.69	21.380		
4,600.0	4,523.5	4,555.9	4,523.5	15.8	10.9	157.99	339.1	230.9	418.8	400.0	18.86	22.203		
4,700.0	4,621.3	4,653.7	4,621.3	16.2	11.0	159.01	339.1	230.9	438.2	419.2	19.05	23.000		
4,800.0	4,719.1	4,751.5	4,719.1	16.6	11.2	159.94	339.1	230.9	457.7	438.5	19.26	23.772		
4,900.0	4,816.9	4,849.3	4,816.9	17.0	11.3	160.79	339.1	230.9	477.4	457.9	19.47	24.518		
5,000.0	4,914.8	4,947.2	4,914.8	17.4	11.4	161.58	339.1	230.9	497.1	477.4	19.70	25.239		

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 Peppler Farms 1B-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5067.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5067.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1B-4H	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 S4-T3N-R68W (Peppler Farms) - Peppler Farms 1E-4H - 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	-180.00	-29.1	0.0	29.2					
100.0	100.0	99.0	99.0	0.2	0.2	-180.00	-29.1	0.0	29.1	28.8	0.30	96.446		
200.0	200.0	199.0	199.0	0.3	0.3	-180.00	-29.1	0.0	29.1	28.5	0.65	44.766		
300.0	300.0	299.0	299.0	0.5	0.5	-180.00	-29.1	0.0	29.1	28.1	1.00	29.141 CC, ES		
400.0	400.0	399.0	399.0	0.7	0.7	168.15	-29.1	0.0	30.0	28.6	1.35	22.235		
500.0	500.0	499.0	499.0	0.9	0.8	169.09	-29.1	0.0	32.6	30.9	1.70	19.180		
600.0	599.9	598.9	598.9	1.0	1.0	170.37	-29.1	0.0	36.9	34.8	2.05	18.013		
700.0	699.7	698.7	698.7	1.2	1.2	171.72	-29.1	0.0	42.9	40.5	2.39	17.916 SF		
800.0	799.4	798.4	798.4	1.4	1.4	172.99	-29.1	0.0	50.7	47.9	2.74	18.487		
900.0	898.9	898.2	898.2	1.7	1.5	173.34	-28.9	0.8	59.9	56.8	3.09	19.405		
1,000.0	998.3	998.1	998.0	1.9	1.7	172.40	-28.3	3.3	70.3	66.9	3.44	20.467		
1,100.0	1,097.4	1,097.7	1,097.6	2.2	1.9	170.71	-27.4	7.5	82.0	78.2	3.79	21.626		
1,200.0	1,196.3	1,197.3	1,196.9	2.5	2.1	168.61	-26.0	13.4	94.9	90.8	4.16	22.846		
1,300.0	1,294.9	1,296.5	1,295.9	2.8	2.3	166.32	-24.2	20.9	109.3	104.8	4.54	24.094		
1,400.0	1,393.3	1,395.6	1,394.5	3.1	2.5	163.98	-22.0	30.1	125.1	120.2	4.94	25.335		
1,500.0	1,491.2	1,494.2	1,492.5	3.5	2.7	161.68	-19.4	40.9	142.5	137.2	5.37	26.538		
1,600.0	1,589.1	1,592.7	1,590.2	3.9	3.0	159.43	-16.5	53.3	160.7	154.9	5.84	27.503		
1,700.0	1,686.9	1,690.8	1,687.3	4.3	3.2	157.33	-13.3	66.5	179.1	172.7	6.34	28.244		
1,800.0	1,784.7	1,788.9	1,784.5	4.7	3.5	155.61	-10.1	79.8	197.6	190.7	6.85	28.846		
1,900.0	1,882.5	1,887.0	1,881.7	5.0	3.7	154.20	-7.0	93.1	216.3	208.9	7.37	29.340		
2,000.0	1,980.3	1,985.2	1,978.8	5.4	4.0	153.00	-3.8	106.4	235.0	227.1	7.90	29.750		
2,100.0	2,078.1	2,083.3	2,076.0	5.8	4.3	151.99	-0.6	119.7	253.9	245.5	8.44	30.093		
2,200.0	2,175.9	2,181.4	2,173.1	6.2	4.5	151.11	2.5	133.0	272.8	263.8	8.98	30.384		
2,300.0	2,273.8	2,279.5	2,270.3	6.6	4.8	150.35	5.7	146.2	291.8	282.3	9.53	30.633		
2,400.0	2,371.6	2,377.6	2,367.4	7.0	5.1	149.68	8.9	159.5	310.8	300.8	10.08	30.847		
2,500.0	2,469.4	2,475.7	2,464.6	7.4	5.4	149.09	12.0	172.8	329.9	319.3	10.63	31.034		
2,600.0	2,567.2	2,574.2	2,562.2	7.8	5.7	148.64	15.1	185.7	348.9	337.8	11.17	31.240		
2,700.0	2,665.0	2,673.0	2,660.3	8.2	5.9	148.50	17.8	197.0	367.8	356.2	11.68	31.497		
2,800.0	2,762.8	2,771.8	2,758.6	8.6	6.1	148.62	20.1	206.7	386.6	374.4	12.16	31.804		
2,900.0	2,860.7	2,870.6	2,857.1	9.0	6.4	148.98	22.0	214.7	405.2	392.6	12.60	32.163		
3,000.0	2,958.5	2,969.4	2,955.6	9.4	6.6	149.54	23.5	221.1	423.7	410.7	13.01	32.573		
3,100.0	3,056.3	3,068.1	3,054.2	9.8	6.7	150.28	24.6	225.8	442.1	428.7	13.38	33.038		
3,200.0	3,154.1	3,166.5	3,152.6	10.2	6.9	151.17	25.4	228.8	460.5	446.8	13.72	33.561		
3,300.0	3,251.9	3,264.8	3,250.8	10.6	7.0	152.19	25.7	230.2	479.0	464.9	14.03	34.144		
3,400.0	3,349.7	3,362.7	3,348.7	11.0	7.2	153.29	25.7	230.3	497.5	483.2	14.32	34.755		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Peppler Farms 1B-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5067.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5067.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1B-4H	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 S4-T3N-R68W (Peppler Farms) - Peppler Farms 1F-4H - Hz - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	180.00	-40.1	0.0	40.1					
100.0	100.0	99.0	99.0	0.2	0.2	180.00	-40.1	0.0	40.1	39.8	0.30	132.613		
200.0	200.0	199.0	199.0	0.3	0.3	180.00	-40.1	0.0	40.1	39.4	0.65	61.553		
300.0	300.0	299.0	299.0	0.5	0.5	180.00	-40.1	0.0	40.1	39.1	1.00	40.069 CC, ES		
400.0	400.0	399.0	399.0	0.7	0.7	168.06	-40.1	0.0	40.9	39.6	1.35	30.336		
500.0	500.0	499.0	499.0	0.9	0.8	168.77	-40.1	0.0	43.5	41.8	1.70	25.616		
600.0	599.9	598.9	598.9	1.0	1.0	169.78	-40.1	0.0	47.8	45.7	2.05	23.349		
700.0	699.7	697.9	697.9	1.2	1.2	170.37	-40.8	0.5	54.5	52.1	2.39	22.760 SF		
800.0	799.4	796.7	796.6	1.4	1.4	170.13	-42.8	1.9	64.2	61.5	2.74	23.444		
900.0	898.9	894.9	894.7	1.7	1.5	169.40	-46.3	4.4	77.1	74.0	3.09	24.964		
1,000.0	998.3	992.4	992.1	1.9	1.7	168.45	-51.1	7.7	93.0	89.5	3.44	27.055		
1,100.0	1,097.4	1,089.2	1,088.6	2.2	1.9	167.46	-57.2	12.0	111.9	108.2	3.79	29.549		
1,200.0	1,196.3	1,185.0	1,184.0	2.5	2.1	166.51	-64.5	17.1	134.0	129.8	4.14	32.329		
1,300.0	1,294.9	1,279.8	1,278.2	2.8	2.4	165.64	-73.1	23.1	159.0	154.5	4.50	35.309		
1,400.0	1,393.3	1,373.4	1,371.0	3.1	2.6	164.85	-82.8	29.9	187.0	182.2	4.87	38.428		
1,500.0	1,491.2	1,465.7	1,462.4	3.5	2.8	164.14	-93.5	37.4	218.0	212.7	5.24	41.638		
1,600.0	1,589.1	1,556.8	1,552.4	3.9	3.1	163.54	-105.4	45.7	251.1	245.4	5.62	44.684		
1,700.0	1,686.9	1,649.1	1,643.3	4.3	3.4	162.94	-118.4	54.8	285.3	279.2	6.01	47.466		
1,800.0	1,784.7	1,742.9	1,735.7	4.7	3.7	162.44	-131.7	64.2	319.6	313.2	6.41	49.884		
1,900.0	1,882.5	1,836.8	1,828.2	5.0	4.0	162.04	-145.1	73.5	354.0	347.2	6.81	52.003		
2,000.0	1,980.3	1,930.7	1,920.6	5.4	4.3	161.71	-158.4	82.9	388.4	381.2	7.21	53.873		
2,100.0	2,078.1	2,024.6	2,013.1	5.8	4.6	161.43	-171.8	92.2	422.8	415.2	7.61	55.534		
2,200.0	2,175.9	2,118.4	2,105.5	6.2	4.9	161.19	-185.1	101.6	457.2	449.2	8.02	57.017		
2,300.0	2,273.8	2,212.3	2,198.0	6.6	5.2	160.99	-198.5	110.9	491.7	483.2	8.43	58.350		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Peppler Farms 1B-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5067.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5067.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1B-4H	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 S4-T3N-R68W (Peppler Farms) - Peppler Farms 1G-4H - Hz - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	180.00	-51.0	0.0	51.0					
100.0	100.0	99.0	99.0	0.2	0.2	180.00	-51.0	0.0	51.0	50.7	0.30	168.780		
200.0	200.0	199.0	199.0	0.3	0.3	180.00	-51.0	0.0	51.0	50.3	0.65	78.340		
300.0	300.0	299.0	299.0	0.5	0.5	180.00	-51.0	0.0	51.0	50.0	1.00	50.996 CC, ES		
400.0	400.0	399.0	399.0	0.7	0.7	168.00	-51.0	0.0	51.9	50.5	1.35	38.437		
500.0	500.0	498.1	498.1	0.9	0.8	168.25	-51.8	0.3	55.2	53.5	1.70	32.547		
600.0	599.9	596.9	596.9	1.0	1.0	168.23	-54.2	1.2	61.9	59.8	2.04	30.290		
700.0	699.7	695.3	695.2	1.2	1.2	168.01	-58.2	2.6	71.9	69.5	2.39	30.075 SF		
800.0	799.4	793.2	792.9	1.4	1.4	167.68	-63.7	4.6	85.2	82.4	2.74	31.121		
900.0	898.9	890.3	889.7	1.7	1.6	167.32	-70.7	7.2	101.7	98.6	3.08	32.992		
1,000.0	998.3	986.6	985.5	1.9	1.8	166.97	-79.2	10.3	121.5	118.1	3.43	35.431		
1,100.0	1,097.4	1,081.8	1,080.2	2.2	2.0	166.64	-89.1	13.9	144.5	140.7	3.78	38.271		
1,200.0	1,196.3	1,175.9	1,173.5	2.5	2.3	166.34	-100.3	17.9	170.7	166.5	4.12	41.400		
1,300.0	1,294.9	1,268.6	1,265.3	2.8	2.5	166.07	-112.8	22.5	199.9	195.5	4.47	44.742		
1,400.0	1,393.3	1,360.0	1,355.5	3.1	2.8	165.82	-126.4	27.4	232.3	227.5	4.82	48.238		
1,500.0	1,491.2	1,452.0	1,446.2	3.5	3.1	165.61	-141.3	32.9	267.4	262.2	5.16	51.777		
1,600.0	1,589.1	1,545.3	1,538.0	3.9	3.4	165.55	-156.5	38.4	303.5	297.9	5.53	54.896		
1,700.0	1,686.9	1,638.6	1,629.9	4.3	3.7	165.51	-171.7	43.9	339.5	333.6	5.89	57.617		
1,800.0	1,784.7	1,731.9	1,721.7	4.7	4.0	165.47	-186.9	49.5	375.6	369.3	6.26	60.009		
1,900.0	1,882.5	1,825.1	1,813.6	5.0	4.3	165.44	-202.2	55.0	411.6	405.0	6.63	62.129		
2,000.0	1,980.3	1,918.4	1,905.5	5.4	4.6	165.42	-217.4	60.6	447.7	440.7	6.99	64.018		
2,100.0	2,078.1	2,011.7	1,997.3	5.8	5.0	165.40	-232.6	66.1	483.7	476.4	7.36	65.713		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Peppler Farms 1B-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5067.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5067.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1B-4H	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 S4-T3N-R68W (Peppler Farms) - Peppler Farms 1H-4H - 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	-61.9	0.0	61.9					
100.0	100.0	99.0	99.0	0.2	0.2	180.00	-61.9	0.0	61.9	61.6	0.30	204.948		
200.0	200.0	199.0	199.0	0.3	0.3	180.00	-61.9	0.0	61.9	61.3	0.65	95.128 CC, ES		
300.0	300.0	298.0	298.0	0.5	0.5	179.79	-62.7	0.2	62.7	61.7	1.00	62.850		
400.0	400.0	396.8	396.8	0.7	0.7	167.14	-65.2	0.9	66.1	64.7	1.35	49.098		
500.0	500.0	495.5	495.3	0.9	0.9	166.69	-69.2	2.1	72.8	71.1	1.69	42.983		
600.0	599.9	593.7	593.4	1.0	1.1	166.29	-74.9	3.7	82.8	80.8	2.04	40.598		
700.0	699.7	691.3	690.7	1.2	1.3	165.96	-82.2	5.8	96.2	93.8	2.39	40.308 SF		
800.0	799.4	788.2	787.2	1.4	1.5	165.71	-90.9	8.4	112.8	110.1	2.73	41.308		
900.0	898.9	884.2	882.6	1.7	1.7	165.52	-101.1	11.3	132.8	129.7	3.08	43.153		
1,000.0	998.3	979.1	976.7	1.9	2.0	165.37	-112.7	14.7	156.0	152.5	3.42	45.577		
1,100.0	1,097.4	1,072.9	1,069.5	2.2	2.3	165.26	-125.7	18.4	182.3	178.5	3.77	48.413		
1,200.0	1,196.3	1,165.4	1,160.8	2.5	2.6	165.16	-139.9	22.5	211.8	207.7	4.11	51.548		
1,300.0	1,294.9	1,256.4	1,250.4	2.8	2.9	165.09	-155.2	26.9	244.4	239.9	4.45	54.903		
1,400.0	1,393.3	1,348.1	1,340.4	3.1	3.2	165.03	-171.9	31.7	279.8	275.0	4.80	58.344		
1,500.0	1,491.2	1,440.9	1,431.6	3.5	3.5	165.03	-188.9	36.6	316.9	311.8	5.14	61.627		
1,600.0	1,589.1	1,533.4	1,522.4	3.9	3.8	165.16	-205.9	41.5	354.9	349.4	5.50	64.499		
1,700.0	1,686.9	1,625.9	1,613.2	4.3	4.2	165.26	-222.8	46.4	392.8	386.9	5.86	67.009		
1,800.0	1,784.7	1,718.5	1,704.0	4.7	4.5	165.34	-239.8	51.3	430.7	424.5	6.22	69.220		
1,900.0	1,882.5	1,811.0	1,794.9	5.0	4.9	165.41	-256.7	56.2	468.7	462.1	6.58	71.182		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Peppler Farms 1B-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5067.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5067.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1B-4H	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 @ 5067.0ft (Ensign)

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Peppler Farms 1B-4H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.32°

