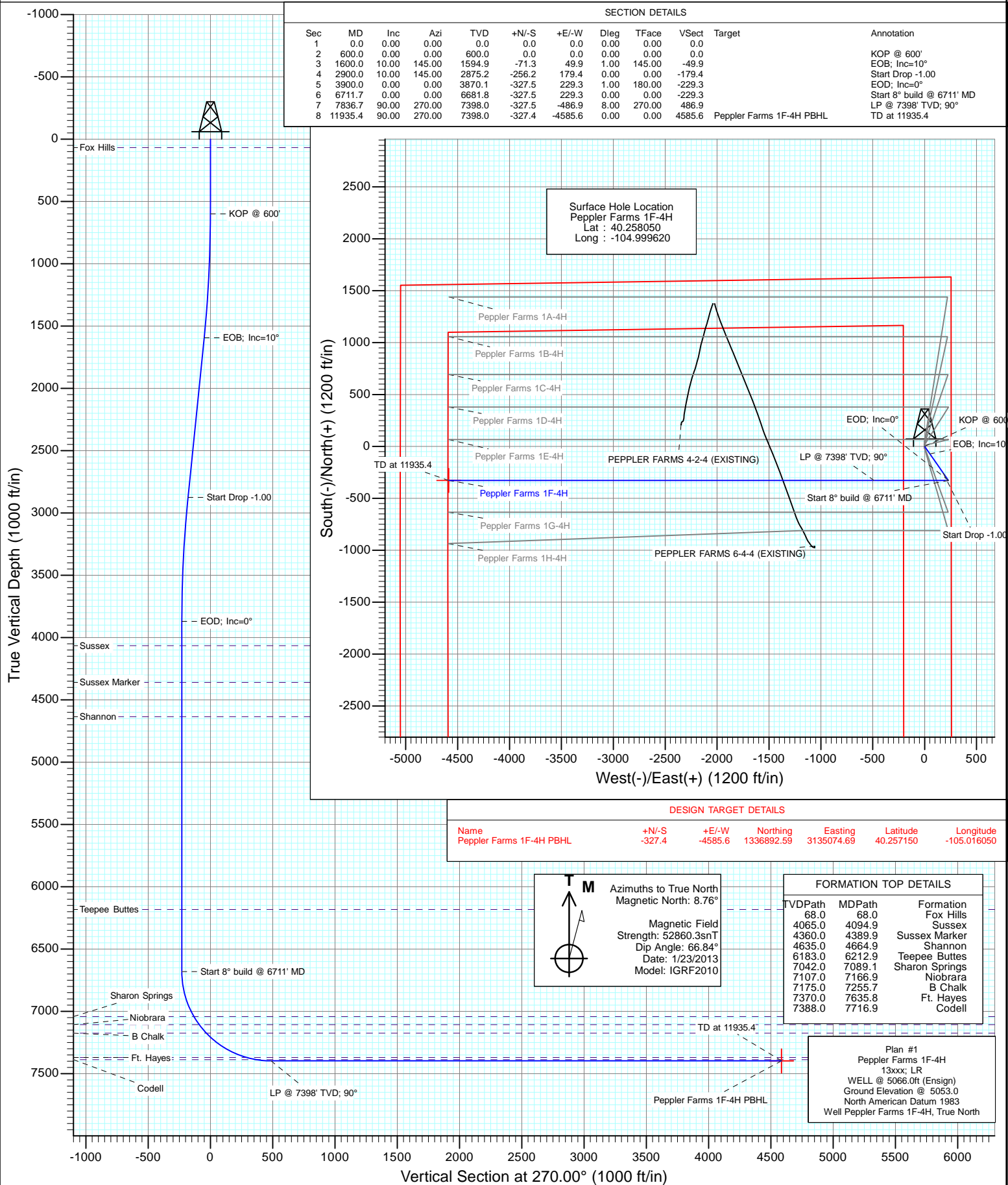




Project: DJ Wattenberg
Site: S4-T3N-R68W (Peppler Farms)
Well: Peppler Farms 1F-4H
Wellbore: Hz
Design: Plan #1



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Peppler Farms 1F-4H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5066.0ft (Ensign)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5066.0ft (Ensign)
Site:	S4-T3N-R68W (Peppler Farms)	North Reference:	True
Well:	Peppler Farms 1F-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 1F-4H					
Well Position	+N/-S	0.0 ft	Northing:	1,337,245.88 ft	Latitude:	40.258050
	+E/-W	0.0 ft	Easting:	3,139,658.35 ft	Longitude:	-104.999620
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,053.0 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	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,600.0	10.00	145.00	1,594.9	-71.3	49.9	1.00	1.00	0.00	145.00	
2,900.0	10.00	145.00	2,875.2	-256.2	179.4	0.00	0.00	0.00	0.00	
3,900.0	0.00	0.00	3,870.1	-327.5	229.3	1.00	-1.00	0.00	180.00	
6,711.7	0.00	0.00	6,681.8	-327.5	229.3	0.00	0.00	0.00	0.00	
7,836.7	90.00	270.00	7,398.0	-327.5	-486.9	8.00	8.00	0.00	270.00	
11,935.4	90.00	270.00	7,398.0	-327.4	-4,585.6	0.00	0.00	0.00	0.00	Peppler Farms 1F-4H

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Peppler Farms 1F-4H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5066.0ft (Ensign)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5066.0ft (Ensign)
Site:	S4-T3N-R68W (Peppler Farms)	North Reference:	True
Well:	Peppler Farms 1F-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	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	KOP @ 600'
700.0	1.00	145.00	700.0	-0.7	0.5	-0.5	1.00	1.00	
800.0	2.00	145.00	800.0	-2.9	2.0	-2.0	1.00	1.00	
900.0	3.00	145.00	899.9	-6.4	4.5	-4.5	1.00	1.00	
1,000.0	4.00	145.00	999.7	-11.4	8.0	-8.0	1.00	1.00	
1,100.0	5.00	145.00	1,099.4	-17.9	12.5	-12.5	1.00	1.00	
1,200.0	6.00	145.00	1,198.9	-25.7	18.0	-18.0	1.00	1.00	
1,300.0	7.00	145.00	1,298.3	-35.0	24.5	-24.5	1.00	1.00	
1,400.0	8.00	145.00	1,397.4	-45.7	32.0	-32.0	1.00	1.00	
1,500.0	9.00	145.00	1,496.3	-57.8	40.5	-40.5	1.00	1.00	
1,600.0	10.00	145.00	1,594.9	-71.3	49.9	-49.9	1.00	1.00	EOB; Inc=10°
1,700.0	10.00	145.00	1,693.4	-85.5	59.9	-59.9	0.00	0.00	
1,800.0	10.00	145.00	1,791.9	-99.8	69.8	-69.8	0.00	0.00	
1,900.0	10.00	145.00	1,890.4	-114.0	79.8	-79.8	0.00	0.00	
2,000.0	10.00	145.00	1,988.9	-128.2	89.8	-89.8	0.00	0.00	
2,100.0	10.00	145.00	2,087.3	-142.4	99.7	-99.7	0.00	0.00	
2,200.0	10.00	145.00	2,185.8	-156.6	109.7	-109.7	0.00	0.00	
2,300.0	10.00	145.00	2,284.3	-170.9	119.6	-119.6	0.00	0.00	
2,400.0	10.00	145.00	2,382.8	-185.1	129.6	-129.6	0.00	0.00	
2,500.0	10.00	145.00	2,481.3	-199.3	139.6	-139.6	0.00	0.00	
2,600.0	10.00	145.00	2,579.7	-213.5	149.5	-149.5	0.00	0.00	
2,700.0	10.00	145.00	2,678.2	-227.8	159.5	-159.5	0.00	0.00	
2,800.0	10.00	145.00	2,776.7	-242.0	169.4	-169.4	0.00	0.00	
2,900.0	10.00	145.00	2,875.2	-256.2	179.4	-179.4	0.00	0.00	Start Drop -1.00
3,000.0	9.00	145.00	2,973.8	-269.7	188.9	-188.9	1.00	-1.00	
3,100.0	8.00	145.00	3,072.7	-281.8	197.4	-197.4	1.00	-1.00	
3,200.0	7.00	145.00	3,171.9	-292.5	204.8	-204.8	1.00	-1.00	
3,300.0	6.00	145.00	3,271.2	-301.8	211.3	-211.3	1.00	-1.00	
3,400.0	5.00	145.00	3,370.7	-309.7	216.8	-216.8	1.00	-1.00	
3,500.0	4.00	145.00	3,470.4	-316.1	221.3	-221.3	1.00	-1.00	
3,600.0	3.00	145.00	3,570.2	-321.1	224.8	-224.8	1.00	-1.00	
3,700.0	2.00	145.00	3,670.2	-324.7	227.3	-227.3	1.00	-1.00	
3,800.0	1.00	145.00	3,770.1	-326.8	228.8	-228.8	1.00	-1.00	
3,900.0	0.00	0.00	3,870.1	-327.5	229.3	-229.3	1.00	-1.00	EOD; Inc=0°
4,000.0	0.00	0.00	3,970.1	-327.5	229.3	-229.3	0.00	0.00	
4,094.9	0.00	0.00	4,065.0	-327.5	229.3	-229.3	0.00	0.00	Sussex
4,100.0	0.00	0.00	4,070.1	-327.5	229.3	-229.3	0.00	0.00	
4,200.0	0.00	0.00	4,170.1	-327.5	229.3	-229.3	0.00	0.00	
4,300.0	0.00	0.00	4,270.1	-327.5	229.3	-229.3	0.00	0.00	
4,389.9	0.00	0.00	4,360.0	-327.5	229.3	-229.3	0.00	0.00	Sussex Marker
4,400.0	0.00	0.00	4,370.1	-327.5	229.3	-229.3	0.00	0.00	
4,500.0	0.00	0.00	4,470.1	-327.5	229.3	-229.3	0.00	0.00	
4,600.0	0.00	0.00	4,570.1	-327.5	229.3	-229.3	0.00	0.00	
4,664.9	0.00	0.00	4,635.0	-327.5	229.3	-229.3	0.00	0.00	Shannon
4,700.0	0.00	0.00	4,670.1	-327.5	229.3	-229.3	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Peppler Farms 1F-4H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5066.0ft (Ensign)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5066.0ft (Ensign)
Site:	S4-T3N-R68W (Peppler Farms)	North Reference:	True
Well:	Peppler Farms 1F-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	0.00	0.00	4,770.1	-327.5	229.3	-229.3	0.00	0.00	
4,900.0	0.00	0.00	4,870.1	-327.5	229.3	-229.3	0.00	0.00	
5,000.0	0.00	0.00	4,970.1	-327.5	229.3	-229.3	0.00	0.00	
5,100.0	0.00	0.00	5,070.1	-327.5	229.3	-229.3	0.00	0.00	
5,200.0	0.00	0.00	5,170.1	-327.5	229.3	-229.3	0.00	0.00	
5,300.0	0.00	0.00	5,270.1	-327.5	229.3	-229.3	0.00	0.00	
5,400.0	0.00	0.00	5,370.1	-327.5	229.3	-229.3	0.00	0.00	
5,500.0	0.00	0.00	5,470.1	-327.5	229.3	-229.3	0.00	0.00	
5,600.0	0.00	0.00	5,570.1	-327.5	229.3	-229.3	0.00	0.00	
5,700.0	0.00	0.00	5,670.1	-327.5	229.3	-229.3	0.00	0.00	
5,800.0	0.00	0.00	5,770.1	-327.5	229.3	-229.3	0.00	0.00	
5,900.0	0.00	0.00	5,870.1	-327.5	229.3	-229.3	0.00	0.00	
6,000.0	0.00	0.00	5,970.1	-327.5	229.3	-229.3	0.00	0.00	
6,100.0	0.00	0.00	6,070.1	-327.5	229.3	-229.3	0.00	0.00	
6,200.0	0.00	0.00	6,170.1	-327.5	229.3	-229.3	0.00	0.00	
6,212.9	0.00	0.00	6,183.0	-327.5	229.3	-229.3	0.00	0.00	Teepee Buttes
6,300.0	0.00	0.00	6,270.1	-327.5	229.3	-229.3	0.00	0.00	
6,400.0	0.00	0.00	6,370.1	-327.5	229.3	-229.3	0.00	0.00	
6,500.0	0.00	0.00	6,470.1	-327.5	229.3	-229.3	0.00	0.00	
6,600.0	0.00	0.00	6,570.1	-327.5	229.3	-229.3	0.00	0.00	
6,700.0	0.00	0.00	6,670.1	-327.5	229.3	-229.3	0.00	0.00	
6,711.7	0.00	0.00	6,681.8	-327.5	229.3	-229.3	0.00	0.00	Start 8° build @ 6711' MD
6,800.0	7.06	270.00	6,769.9	-327.5	223.9	-223.9	8.00	8.00	
6,900.0	15.06	270.00	6,867.9	-327.5	204.7	-204.7	8.00	8.00	
7,000.0	23.06	270.00	6,962.4	-327.5	172.1	-172.1	8.00	8.00	
7,089.1	30.19	270.00	7,042.0	-327.5	132.2	-132.2	8.00	8.00	Sharon Springs
7,100.0	31.06	270.00	7,051.4	-327.5	126.6	-126.6	8.00	8.00	
7,166.9	36.42	270.00	7,107.0	-327.5	89.5	-89.5	8.00	8.00	Niobrara
7,200.0	39.06	270.00	7,133.1	-327.5	69.2	-69.2	8.00	8.00	
7,255.7	43.52	270.00	7,175.0	-327.5	32.5	-32.5	8.00	8.00	B Chalk
7,300.0	47.06	270.00	7,206.1	-327.5	1.0	-1.0	8.00	8.00	
7,400.0	55.06	270.00	7,268.9	-327.5	-76.7	76.7	8.00	8.00	
7,500.0	63.06	270.00	7,320.3	-327.5	-162.4	162.4	8.00	8.00	
7,600.0	71.06	270.00	7,359.2	-327.5	-254.5	254.5	8.00	8.00	
7,635.8	73.93	270.00	7,370.0	-327.5	-288.6	288.6	8.00	8.00	Ft. Hayes
7,700.0	79.06	270.00	7,385.0	-327.5	-351.0	351.0	8.00	8.00	
7,716.9	80.41	270.00	7,388.0	-327.5	-367.6	367.6	8.00	8.00	Codell
7,800.0	87.06	270.00	7,397.1	-327.5	-450.2	450.2	8.00	8.00	
7,836.7	90.00	270.00	7,398.0	-327.5	-486.9	486.9	8.00	8.00	LP @ 7398' TVD; 90°
7,900.0	90.00	270.00	7,398.0	-327.5	-550.2	550.2	0.00	0.00	
8,000.0	90.00	270.00	7,398.0	-327.5	-650.2	650.2	0.00	0.00	
8,100.0	90.00	270.00	7,398.0	-327.5	-750.2	750.2	0.00	0.00	
8,200.0	90.00	270.00	7,398.0	-327.5	-850.2	850.2	0.00	0.00	
8,300.0	90.00	270.00	7,398.0	-327.5	-950.2	950.2	0.00	0.00	
8,400.0	90.00	270.00	7,398.0	-327.5	-1,050.2	1,050.2	0.00	0.00	
8,500.0	90.00	270.00	7,398.0	-327.5	-1,150.2	1,150.2	0.00	0.00	
8,600.0	90.00	270.00	7,398.0	-327.5	-1,250.2	1,250.2	0.00	0.00	
8,700.0	90.00	270.00	7,398.0	-327.5	-1,350.2	1,350.2	0.00	0.00	
8,800.0	90.00	270.00	7,398.0	-327.5	-1,450.2	1,450.2	0.00	0.00	
8,900.0	90.00	270.00	7,398.0	-327.5	-1,550.2	1,550.2	0.00	0.00	
9,000.0	90.00	270.00	7,398.0	-327.5	-1,650.2	1,650.2	0.00	0.00	
9,100.0	90.00	270.00	7,398.0	-327.5	-1,750.2	1,750.2	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Peppler Farms 1F-4H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5066.0ft (Ensign)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5066.0ft (Ensign)
Site:	S4-T3N-R68W (Peppler Farms)	North Reference:	True
Well:	Peppler Farms 1F-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	-327.5	-1,850.2	1,850.2	0.00	0.00	
9,300.0	90.00	270.00	7,398.0	-327.5	-1,950.2	1,950.2	0.00	0.00	
9,400.0	90.00	270.00	7,398.0	-327.5	-2,050.2	2,050.2	0.00	0.00	
9,500.0	90.00	270.00	7,398.0	-327.5	-2,150.2	2,150.2	0.00	0.00	
9,600.0	90.00	270.00	7,398.0	-327.5	-2,250.2	2,250.2	0.00	0.00	
9,700.0	90.00	270.00	7,398.0	-327.5	-2,350.2	2,350.2	0.00	0.00	
9,800.0	90.00	270.00	7,398.0	-327.5	-2,450.2	2,450.2	0.00	0.00	
9,900.0	90.00	270.00	7,398.0	-327.5	-2,550.2	2,550.2	0.00	0.00	
10,000.0	90.00	270.00	7,398.0	-327.5	-2,650.2	2,650.2	0.00	0.00	
10,100.0	90.00	270.00	7,398.0	-327.5	-2,750.2	2,750.2	0.00	0.00	
10,200.0	90.00	270.00	7,398.0	-327.5	-2,850.2	2,850.2	0.00	0.00	
10,300.0	90.00	270.00	7,398.0	-327.5	-2,950.2	2,950.2	0.00	0.00	
10,400.0	90.00	270.00	7,398.0	-327.5	-3,050.2	3,050.2	0.00	0.00	
10,500.0	90.00	270.00	7,398.0	-327.5	-3,150.2	3,150.2	0.00	0.00	
10,600.0	90.00	270.00	7,398.0	-327.5	-3,250.2	3,250.2	0.00	0.00	
10,700.0	90.00	270.00	7,398.0	-327.5	-3,350.2	3,350.2	0.00	0.00	
10,800.0	90.00	270.00	7,398.0	-327.4	-3,450.2	3,450.2	0.00	0.00	
10,900.0	90.00	270.00	7,398.0	-327.4	-3,550.2	3,550.2	0.00	0.00	
11,000.0	90.00	270.00	7,398.0	-327.4	-3,650.2	3,650.2	0.00	0.00	
11,100.0	90.00	270.00	7,398.0	-327.4	-3,750.2	3,750.2	0.00	0.00	
11,200.0	90.00	270.00	7,398.0	-327.4	-3,850.2	3,850.2	0.00	0.00	
11,300.0	90.00	270.00	7,398.0	-327.4	-3,950.2	3,950.2	0.00	0.00	
11,400.0	90.00	270.00	7,398.0	-327.4	-4,050.2	4,050.2	0.00	0.00	
11,500.0	90.00	270.00	7,398.0	-327.4	-4,150.2	4,150.2	0.00	0.00	
11,600.0	90.00	270.00	7,398.0	-327.4	-4,250.2	4,250.2	0.00	0.00	
11,700.0	90.00	270.00	7,398.0	-327.4	-4,350.2	4,350.2	0.00	0.00	
11,800.0	90.00	270.00	7,398.0	-327.4	-4,450.2	4,450.2	0.00	0.00	
11,900.0	90.00	270.00	7,398.0	-327.4	-4,550.2	4,550.2	0.00	0.00	
11,935.4	90.00	270.00	7,398.0	-327.4	-4,585.6	4,585.6	0.00	0.00	TD at 11935.4 - Peppler Farms 1F-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 1F-4H PI	0.00	0.00	7,398.0	-327.4	-4,585.6	1,336,892.59	3,135,074.69	40.257150	-105.016050
- plan hits target center									
- Point									

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Peppler Farms 1F-4H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5066.0ft (Ensign)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5066.0ft (Ensign)
Site:	S4-T3N-R68W (Peppler Farms)	North Reference:	True
Well:	Peppler Farms 1F-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				
4,094.9	4,065.0	Sussex				
4,389.9	4,360.0	Sussex Marker				
4,664.9	4,635.0	Shannon				
6,212.9	6,183.0	Teepee Buttes				
7,089.1	7,042.0	Sharon Springs				
7,166.9	7,107.0	Niobrara				
7,255.7	7,175.0	B Chalk				
7,635.8	7,370.0	Ft. Hayes				
7,716.9	7,388.0	Codell				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
600.0	600.0	0.0	0.0	KOP @ 600'	
1,600.0	1,594.9	-71.3	49.9	EOB; Inc=10°	
2,900.0	2,875.2	-256.2	179.4	Start Drop -1.00	
3,900.0	3,870.1	-327.5	229.3	EOD; Inc=0°	
6,711.7	6,681.8	-327.5	229.3	Start 8° build @ 6711' MD	
7,836.7	7,398.0	-327.5	-486.9	LP @ 7398' TVD; 90°	
11,935.4	7,398.0	-327.4	-4,585.6	TD at 11935.4	

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S4-T3N-R68W (Peppler Farms)

Peppler Farms 1F-4H

Hz

Plan #1

Anticollision Report

24 January, 2013

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Peppler Farms 1F-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5066.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5066.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1F-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	11,935.4	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	166.0	168.0	51.0	50.5	94.889	CC
Peppler Farms 1A-4H - Hz - Plan #1	200.0	202.0	51.0	50.3	77.727	ES
Peppler Farms 1A-4H - Hz - Plan #1	600.0	592.6	78.4	76.3	37.748	SF
Peppler Farms 1B-4H - Hz - Plan #1	266.3	267.3	40.1	39.2	45.226	CC
Peppler Farms 1B-4H - Hz - Plan #1	300.0	301.0	40.1	39.1	39.930	ES
Peppler Farms 1B-4H - Hz - Plan #1	700.0	697.6	54.4	52.1	22.736	SF
Peppler Farms 1C-4H - Hz - Plan #1	366.3	367.3	29.1	27.9	23.596	CC
Peppler Farms 1C-4H - Hz - Plan #1	400.0	401.0	29.1	27.8	21.546	ES
Peppler Farms 1C-4H - Hz - Plan #1	700.0	699.3	37.4	35.0	15.582	SF
Peppler Farms 1D-4H - Hz - Plan #1	566.3	567.3	18.2	16.3	9.422	CC
Peppler Farms 1D-4H - Hz - Plan #1	600.0	601.0	18.2	16.2	8.882	ES
Peppler Farms 1D-4H - Hz - Plan #1	700.0	700.7	19.7	17.3	8.201	SF
Peppler Farms 1E-4H - Hz - Plan #1	600.0	600.0	10.9	8.9	5.334	CC, ES
Peppler Farms 1E-4H - Hz - Plan #1	11,935.4	11,641.4	482.3	291.5	2.527	SF
Peppler Farms 1G-4H - Hz - Plan #1	400.0	400.0	10.9	9.6	8.090	CC, ES
Peppler Farms 1G-4H - Hz - Plan #1	11,935.4	11,676.4	414.1	240.3	2.383	SF
Peppler Farms 1H-4H - Hz - Plan #1	200.0	200.0	21.9	21.2	33.485	CC, ES
Peppler Farms 1H-4H - Hz - Plan #1	9,000.0	9,022.6	499.8	410.4	5.590	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 1F-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5066.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5066.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1F-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	2.0	2.0	0.0	0.0	0.00	51.0	0.0	51.0					
100.0	100.0	102.0	102.0	0.2	0.2	0.00	51.0	0.0	51.0	50.7	0.31	166.042		
166.0	166.0	168.0	168.0	0.3	0.3	0.00	51.0	0.0	51.0	50.5	0.54	94.889 CC		
200.0	200.0	202.0	202.0	0.3	0.3	0.00	51.0	0.0	51.0	50.3	0.66	77.727 ES		
300.0	300.0	300.0	300.0	0.5	0.5	0.30	52.7	0.3	52.8	51.8	1.00	52.633		
400.0	400.0	398.2	398.0	0.7	0.7	1.06	57.8	1.1	57.9	56.6	1.35	42.815		
500.0	500.0	495.7	495.2	0.8	0.9	2.07	66.1	2.4	66.5	64.7	1.71	38.882		
600.0	600.0	592.6	591.3	1.0	1.2	3.10	77.5	4.2	78.4	76.3	2.08	37.748 SF		
700.0	700.0	688.4	686.1	1.2	1.5	-141.19	92.0	6.5	94.3	91.9	2.38	39.625		
800.0	800.0	782.9	778.9	1.4	1.8	-141.03	109.4	9.2	114.8	112.1	2.72	42.217		
900.0	899.9	875.6	869.3	1.6	2.2	-141.18	129.3	12.4	139.8	136.8	3.06	45.719		
1,000.0	999.7	966.3	957.2	1.7	2.6	-141.47	151.6	15.9	169.2	165.8	3.40	49.820		
1,100.0	1,099.4	1,055.1	1,042.4	2.0	3.1	-141.80	176.1	19.8	202.9	199.1	3.74	54.310		
1,200.0	1,198.9	1,148.3	1,131.5	2.2	3.5	-142.21	203.0	24.1	239.1	235.0	4.09	58.499		
1,300.0	1,298.3	1,240.9	1,220.1	2.4	4.0	-142.68	229.8	28.3	276.6	272.2	4.44	62.239		
1,400.0	1,397.4	1,333.0	1,308.2	2.7	4.5	-143.18	256.4	32.5	315.5	310.7	4.81	65.607		
1,500.0	1,496.3	1,424.4	1,395.6	2.9	5.0	-143.69	282.8	36.7	355.7	350.5	5.18	68.663		
1,600.0	1,594.9	1,515.3	1,482.5	3.2	5.5	-144.19	309.0	40.9	397.2	391.7	5.56	71.455		
1,700.0	1,693.4	1,605.8	1,569.1	3.5	6.0	-144.89	335.1	45.0	439.5	433.5	5.96	73.790		
1,800.0	1,791.9	1,696.3	1,655.7	3.9	6.4	-145.46	361.3	49.1	481.8	475.4	6.36	75.799		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Peppler Farms 1F-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5066.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5066.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1F-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 1B-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	40.1	0.0	40.1					
100.0	100.0	101.0	101.0	0.2	0.2	0.00	40.1	0.0	40.1	39.8	0.31	131.196		
200.0	200.0	201.0	201.0	0.3	0.3	0.00	40.1	0.0	40.1	39.4	0.65	61.225		
266.3	266.3	267.3	267.3	0.4	0.4	0.00	40.1	0.0	40.1	39.2	0.89	45.226 CC		
300.0	300.0	301.0	301.0	0.5	0.5	0.00	40.1	0.0	40.1	39.1	1.00	39.930 ES		
400.0	400.0	400.0	400.0	0.7	0.7	0.26	40.9	0.2	40.9	39.6	1.35	30.302		
500.0	500.0	499.6	499.5	0.8	0.9	0.97	43.5	0.7	43.5	41.8	1.70	25.588		
600.0	600.0	598.7	598.6	1.0	1.0	1.98	47.7	1.6	47.8	45.7	2.05	23.308		
700.0	700.0	697.6	697.3	1.2	1.2	-142.41	53.5	2.9	54.4	52.1	2.39	22.736 SF		
800.0	800.0	796.1	795.5	1.4	1.4	-142.61	61.1	4.5	64.2	61.5	2.74	23.409		
900.0	899.9	894.1	893.0	1.6	1.7	-143.28	70.1	6.5	77.0	73.9	3.09	24.915		
1,000.0	999.7	991.4	989.7	1.7	1.9	-144.16	80.8	8.8	92.9	89.4	3.44	26.990		
1,100.0	1,099.4	1,087.9	1,085.4	2.0	2.2	-145.07	92.9	11.4	111.8	108.0	3.79	29.464		
1,200.0	1,198.9	1,183.4	1,179.9	2.2	2.4	-145.92	106.5	14.4	133.8	129.6	4.15	32.222		
1,300.0	1,298.3	1,277.9	1,273.2	2.4	2.7	-146.69	121.4	17.6	158.7	154.2	4.51	35.178		
1,400.0	1,397.4	1,371.2	1,364.9	2.7	3.0	-147.36	137.7	21.1	186.7	181.8	4.88	38.270		
1,500.0	1,496.3	1,463.1	1,455.2	2.9	3.4	-147.93	155.1	24.9	217.5	212.3	5.25	41.449		
1,600.0	1,594.9	1,555.9	1,545.9	3.2	3.7	-148.45	173.8	28.9	251.0	245.4	5.63	44.608		
1,700.0	1,693.4	1,649.8	1,637.8	3.5	4.1	-149.08	192.9	33.0	285.4	279.4	6.02	47.391		
1,800.0	1,791.9	1,743.7	1,729.6	3.9	4.4	-149.58	212.0	37.2	319.8	313.3	6.42	49.810		
1,900.0	1,890.4	1,837.6	1,821.4	4.2	4.8	-149.98	231.0	41.3	354.1	347.3	6.82	51.931		
2,000.0	1,988.9	1,931.4	1,913.2	4.5	5.2	-150.32	250.1	45.4	388.5	381.3	7.22	53.803		
2,100.0	2,087.3	2,025.3	2,005.1	4.8	5.5	-150.59	269.2	49.5	422.9	415.3	7.63	55.465		
2,200.0	2,185.8	2,119.2	2,096.9	5.2	5.9	-150.83	288.3	53.7	457.4	449.3	8.03	56.951		
2,300.0	2,284.3	2,213.1	2,188.7	5.5	6.3	-151.03	307.4	57.8	491.8	483.4	8.44	58.286		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Peppler Farms 1F-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5066.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5066.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1F-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		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	1.0	1.0	0.0	0.0	0.00	29.1	0.0	29.1					
100.0	100.0	101.0	101.0	0.2	0.2	0.00	29.1	0.0	29.1	28.8	0.31	95.415		
200.0	200.0	201.0	201.0	0.3	0.3	0.00	29.1	0.0	29.1	28.5	0.65	44.527		
300.0	300.0	301.0	301.0	0.5	0.5	0.00	29.1	0.0	29.1	28.1	1.00	29.039		
366.3	366.3	367.3	367.3	0.6	0.6	0.00	29.1	0.0	29.1	27.9	1.24	23.596 CC		
400.0	400.0	401.0	401.0	0.7	0.7	0.00	29.1	0.0	29.1	27.8	1.35	21.546 ES		
500.0	500.0	500.5	500.5	0.8	0.9	0.54	30.0	0.3	30.0	28.3	1.70	17.628		
600.0	600.0	600.0	600.0	1.0	1.0	1.98	32.4	1.1	32.5	30.4	2.05	15.851		
700.0	700.0	699.3	699.1	1.2	1.2	-141.89	36.5	2.5	37.4	35.0	2.40	15.582 SF		
800.0	800.0	798.3	797.9	1.4	1.4	-141.81	42.2	4.4	45.3	42.5	2.75	16.484		
900.0	899.9	896.8	896.2	1.6	1.6	-142.36	49.5	6.9	56.2	53.1	3.10	18.149		
1,000.0	999.7	994.8	993.7	1.7	1.8	-143.15	58.4	9.9	70.2	66.7	3.45	20.334		
1,100.0	1,099.4	1,092.1	1,090.4	2.0	2.1	-143.98	68.7	13.4	87.1	83.3	3.81	22.880		
1,200.0	1,198.9	1,188.5	1,186.0	2.2	2.3	-144.74	80.5	17.4	107.1	102.9	4.17	25.677		
1,300.0	1,298.3	1,284.0	1,280.5	2.4	2.6	-145.41	93.6	21.8	130.0	125.4	4.54	28.644		
1,400.0	1,397.4	1,378.3	1,373.6	2.7	2.9	-145.98	108.1	26.7	155.8	150.9	4.91	31.722		
1,500.0	1,496.3	1,473.7	1,467.5	2.9	3.2	-146.53	123.7	32.0	184.1	178.8	5.30	34.767		
1,600.0	1,594.9	1,569.1	1,561.5	3.2	3.5	-147.14	139.4	37.3	213.9	208.2	5.69	37.605		
1,700.0	1,693.4	1,664.3	1,655.2	3.5	3.8	-147.85	155.1	42.6	244.4	238.3	6.09	40.117		
1,800.0	1,791.9	1,759.5	1,749.0	3.9	4.1	-148.40	170.7	47.9	274.9	268.4	6.50	42.300		
1,900.0	1,890.4	1,854.7	1,842.7	4.2	4.4	-148.84	186.4	53.2	305.4	298.5	6.91	44.212		
2,000.0	1,988.9	1,949.9	1,936.5	4.5	4.8	-149.20	202.0	58.5	336.0	328.7	7.32	45.897		
2,100.0	2,087.3	2,045.1	2,030.2	4.8	5.1	-149.50	217.7	63.8	366.5	358.8	7.73	47.394		
2,200.0	2,185.8	2,140.3	2,124.0	5.2	5.4	-149.75	233.4	69.1	397.1	389.0	8.15	48.730		
2,300.0	2,284.3	2,235.5	2,217.7	5.5	5.7	-149.97	249.0	74.4	427.7	419.1	8.57	49.930		
2,400.0	2,382.8	2,330.7	2,311.5	5.9	6.0	-150.16	264.7	79.7	458.3	449.3	8.98	51.013		
2,500.0	2,481.3	2,425.9	2,405.2	6.2	6.4	-150.32	280.3	85.0	488.9	479.5	9.40	51.995		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Peppler Farms 1F-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5066.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5066.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1F-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		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	1.0	1.0	0.0	0.0	0.00	18.2	0.0	18.2					
100.0	100.0	101.0	101.0	0.2	0.2	0.00	18.2	0.0	18.2	17.9	0.31	59.635		
200.0	200.0	201.0	201.0	0.3	0.3	0.00	18.2	0.0	18.2	17.6	0.65	27.829		
300.0	300.0	301.0	301.0	0.5	0.5	0.00	18.2	0.0	18.2	17.2	1.00	18.150		
400.0	400.0	401.0	401.0	0.7	0.7	0.00	18.2	0.0	18.2	16.9	1.35	13.466		
500.0	500.0	501.0	501.0	0.8	0.9	0.00	18.2	0.0	18.2	16.5	1.70	10.704		
566.3	566.3	567.3	567.3	1.0	1.0	0.00	18.2	0.0	18.2	16.3	1.93	9.422 CC		
600.0	600.0	601.0	601.0	1.0	1.0	0.00	18.2	0.0	18.2	16.2	2.05	8.882 ES		
700.0	700.0	700.7	700.7	1.2	1.2	-145.06	19.0	0.5	19.7	17.3	2.40	8.201 SF		
800.0	800.0	800.3	800.3	1.4	1.4	-145.23	21.2	1.9	24.0	21.3	2.75	8.743		
900.0	899.9	899.6	899.5	1.6	1.6	-145.41	24.8	4.2	31.3	28.2	3.10	10.088		
1,000.0	999.7	998.6	998.3	1.7	1.7	-145.55	29.9	7.5	41.4	37.9	3.46	11.980		
1,100.0	1,099.4	1,097.1	1,096.4	2.0	1.9	-145.64	36.4	11.6	54.4	50.6	3.82	14.249		
1,200.0	1,198.9	1,194.9	1,193.8	2.2	2.2	-145.69	44.2	16.6	70.2	66.0	4.18	16.779		
1,300.0	1,298.3	1,292.0	1,290.4	2.4	2.4	-145.70	53.4	22.5	88.8	84.3	4.56	19.482		
1,400.0	1,397.4	1,388.3	1,385.8	2.7	2.6	-145.69	63.8	29.2	110.3	105.3	4.95	22.292		
1,500.0	1,496.3	1,483.7	1,480.2	2.9	2.9	-145.66	75.5	36.6	134.4	129.1	5.34	25.159		
1,600.0	1,594.9	1,578.0	1,573.2	3.2	3.2	-145.61	88.4	44.9	161.3	155.6	5.75	28.041		
1,700.0	1,693.4	1,673.3	1,667.1	3.5	3.5	-145.64	102.3	53.8	189.9	183.7	6.18	30.718		
1,800.0	1,791.9	1,769.1	1,761.5	3.9	3.8	-145.66	116.3	62.7	218.4	211.8	6.62	33.020		
1,900.0	1,890.4	1,865.0	1,855.9	4.2	4.1	-145.68	130.3	71.7	247.0	239.9	7.05	35.014		
2,000.0	1,988.9	1,960.8	1,950.2	4.5	4.4	-145.69	144.3	80.7	275.5	268.0	7.50	36.756		
2,100.0	2,087.3	2,056.6	2,044.6	4.8	4.7	-145.70	158.3	89.6	304.1	296.2	7.94	38.287		
2,200.0	2,185.8	2,152.5	2,139.0	5.2	5.0	-145.71	172.4	98.6	332.7	324.3	8.39	39.643		
2,300.0	2,284.3	2,248.3	2,233.4	5.5	5.3	-145.71	186.4	107.5	361.2	352.4	8.84	40.850		
2,400.0	2,382.8	2,344.1	2,327.8	5.9	5.7	-145.72	200.4	116.5	389.8	380.5	9.30	41.931		
2,500.0	2,481.3	2,440.0	2,422.1	6.2	6.0	-145.73	214.4	125.5	418.3	408.6	9.75	42.904		
2,600.0	2,579.7	2,535.8	2,516.5	6.5	6.3	-145.73	228.4	134.4	446.9	436.7	10.21	43.784		
2,700.0	2,678.2	2,631.6	2,610.9	6.9	6.6	-145.73	242.5	143.4	475.4	464.8	10.66	44.583		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Peppler Farms 1F-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5066.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5066.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1F-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			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	0.00	10.9	0.0	10.9					
100.0	100.0	100.0	100.0	0.2	0.2	0.00	10.9	0.0	10.9	10.6	0.30	35.986		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	10.9	0.0	10.9	10.3	0.65	16.742		
300.0	300.0	300.0	300.0	0.5	0.5	0.00	10.9	0.0	10.9	9.9	1.00	10.909		
400.0	400.0	400.0	400.0	0.7	0.7	0.00	10.9	0.0	10.9	9.6	1.35	8.090		
500.0	500.0	500.0	500.0	0.8	0.8	0.00	10.9	0.0	10.9	9.2	1.70	6.429		
600.0	600.0	600.0	600.0	1.0	1.0	0.00	10.9	0.0	10.9	8.9	2.05	5.334 CC, ES		
700.0	700.0	700.0	700.0	1.2	1.2	-147.46	10.9	0.0	11.7	9.3	2.40	4.860		
800.0	800.0	800.0	800.0	1.4	1.4	-153.25	10.9	0.0	13.9	11.2	2.75	5.072		
900.0	899.9	899.9	899.9	1.6	1.5	-156.73	11.1	0.8	17.9	14.8	3.10	5.795		
1,000.0	999.7	999.7	999.6	1.7	1.7	-156.23	11.7	3.4	23.6	20.2	3.45	6.852		
1,100.0	1,099.4	1,099.4	1,099.2	2.0	1.9	-154.00	12.7	7.6	31.0	27.2	3.81	8.142		
1,200.0	1,198.9	1,198.9	1,198.6	2.2	2.1	-151.29	14.1	13.5	40.1	35.9	4.18	9.604		
1,300.0	1,298.3	1,298.2	1,297.5	2.4	2.3	-148.63	15.9	21.1	51.0	46.5	4.56	11.185		
1,400.0	1,397.4	1,397.1	1,396.0	2.7	2.5	-146.21	18.1	30.2	63.8	58.9	4.97	12.839		
1,500.0	1,496.3	1,495.7	1,494.0	2.9	2.7	-144.09	20.7	41.0	78.5	73.1	5.41	14.520		
1,600.0	1,594.9	1,593.9	1,591.4	3.2	3.0	-142.24	23.7	53.4	95.1	89.2	5.87	16.191		
1,700.0	1,693.4	1,692.3	1,688.8	3.5	3.2	-140.82	26.8	66.7	112.7	106.3	6.36	17.715		
1,800.0	1,791.9	1,790.7	1,786.3	3.9	3.5	-139.79	30.0	80.1	130.3	123.4	6.86	18.999		
1,900.0	1,890.4	1,889.1	1,883.7	4.2	3.7	-139.00	33.2	93.4	147.9	140.6	7.36	20.091		
2,000.0	1,988.9	1,987.5	1,981.2	4.5	4.0	-138.38	36.4	106.7	165.6	157.7	7.88	21.026		
2,100.0	2,087.3	2,086.0	2,078.6	4.8	4.3	-137.88	39.5	120.0	183.3	174.9	8.39	21.834		
2,200.0	2,185.8	2,184.4	2,176.1	5.2	4.6	-137.46	42.7	133.4	201.0	192.1	8.92	22.537		
2,300.0	2,284.3	2,282.8	2,273.5	5.5	4.8	-137.12	45.9	146.7	218.7	209.2	9.45	23.154		
2,400.0	2,382.8	2,381.2	2,371.0	5.9	5.1	-136.82	49.0	160.0	236.4	226.4	9.98	23.698		
2,500.0	2,481.3	2,479.6	2,468.4	6.2	5.4	-136.57	52.2	173.3	254.1	243.6	10.51	24.182		
2,600.0	2,579.7	2,579.4	2,567.3	6.5	5.7	-136.46	55.3	186.3	271.6	260.6	11.03	24.622		
2,700.0	2,678.2	2,679.7	2,667.0	6.9	5.9	-136.68	58.0	197.7	288.6	277.0	11.53	25.016		
2,800.0	2,776.7	2,780.2	2,767.0	7.2	6.2	-137.19	60.3	207.4	304.9	292.9	12.01	25.378		
2,900.0	2,875.2	2,880.8	2,867.2	7.6	6.4	-137.95	62.2	215.4	320.6	308.1	12.47	25.719		
3,000.0	2,973.8	2,981.5	2,967.7	7.9	6.6	-138.92	63.8	221.7	335.2	322.3	12.89	26.002		
3,100.0	3,072.7	3,082.5	3,068.6	8.2	6.8	-139.89	64.8	226.3	347.9	334.6	13.28	26.198		
3,200.0	3,171.9	3,183.6	3,169.7	8.5	6.9	-140.87	65.5	229.2	358.9	345.3	13.64	26.317		
3,300.0	3,271.2	3,284.9	3,270.9	8.7	7.1	-141.89	65.8	230.3	368.1	354.1	13.96	26.366		
3,400.0	3,370.7	3,384.7	3,370.7	8.9	7.2	-142.84	65.8	230.3	375.7	361.4	14.27	26.331		
3,500.0	3,470.4	3,484.4	3,470.4	9.1	7.3	-143.58	65.8	230.3	382.0	367.4	14.57	26.215		
3,600.0	3,570.2	3,584.2	3,570.2	9.3	7.5	-144.15	65.8	230.3	386.9	372.1	14.87	26.018		
3,700.0	3,670.2	3,684.1	3,670.2	9.5	7.6	-144.54	65.8	230.3	390.5	375.3	15.17	25.742		
3,800.0	3,770.1	3,784.1	3,770.1	9.6	7.8	-144.78	65.8	230.3	392.6	377.1	15.46	25.389		
3,900.0	3,870.1	3,884.1	3,870.1	9.8	7.9	0.14	65.8	230.3	393.3	377.6	15.70	25.060		
4,000.0	3,970.1	3,984.1	3,970.1	9.9	8.1	0.14	65.8	230.3	393.3	377.3	16.00	24.579		
4,100.0	4,070.1	4,084.1	4,070.1	10.0	8.2	0.14	65.8	230.3	393.3	377.0	16.31	24.114		
4,200.0	4,170.1	4,184.1	4,170.1	10.1	8.4	0.14	65.8	230.3	393.3	376.7	16.62	23.665		
4,300.0	4,270.1	4,284.1	4,270.1	10.2	8.5	0.14	65.8	230.3	393.3	376.4	16.93	23.230		
4,400.0	4,370.1	4,384.1	4,370.1	10.4	8.7	0.14	65.8	230.3	393.3	376.1	17.24	22.809		
4,500.0	4,470.1	4,484.1	4,470.1	10.5	8.8	0.14	65.8	230.3	393.3	375.8	17.56	22.401		
4,600.0	4,570.1	4,584.1	4,570.1	10.6	9.0	0.14	65.8	230.3	393.3	375.5	17.87	22.007		
4,700.0	4,670.1	4,684.1	4,670.1	10.8	9.2	0.14	65.8	230.3	393.3	375.1	18.19	21.625		
4,800.0	4,770.1	4,784.1	4,770.1	10.9	9.3	0.14	65.8	230.3	393.3	374.8	18.51	21.254		
4,900.0	4,870.1	4,884.1	4,870.1	11.0	9.5	0.14	65.8	230.3	393.3	374.5	18.82	20.895		
5,000.0	4,970.1	4,984.1	4,970.1	11.2	9.6	0.14	65.8	230.3	393.3	374.2	19.14	20.547		
5,100.0	5,070.1	5,084.1	5,070.1	11.3	9.8	0.14	65.8	230.3	393.3	373.9	19.46	20.210		

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 1F-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5066.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5066.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1F-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)				Between Centres (ft)	Between Ellipses (ft)	
5,200.0	5,170.1	5,184.1	5,170.1	11.4	9.9	0.14	65.8	230.3	393.3	373.5	19.78	19.882		
5,300.0	5,270.1	5,284.1	5,270.1	11.6	10.1	0.14	65.8	230.3	393.3	373.2	20.10	19.564		
5,400.0	5,370.1	5,384.1	5,370.1	11.7	10.3	0.14	65.8	230.3	393.3	372.9	20.43	19.255		
5,500.0	5,470.1	5,484.1	5,470.1	11.9	10.4	0.14	65.8	230.3	393.3	372.6	20.75	18.955		
5,600.0	5,570.1	5,584.1	5,570.1	12.0	10.6	0.14	65.8	230.3	393.3	372.3	21.07	18.664		
5,700.0	5,670.1	5,684.1	5,670.1	12.1	10.7	0.14	65.8	230.3	393.3	371.9	21.40	18.381		
5,800.0	5,770.1	5,784.1	5,770.1	12.3	10.9	0.14	65.8	230.3	393.3	371.6	21.72	18.106		
5,900.0	5,870.1	5,884.1	5,870.1	12.4	11.1	0.14	65.8	230.3	393.3	371.3	22.05	17.838		
6,000.0	5,970.1	5,984.1	5,970.1	12.6	11.2	0.14	65.8	230.3	393.3	370.9	22.38	17.578		
6,100.0	6,070.1	6,084.1	6,070.1	12.7	11.4	0.14	65.8	230.3	393.3	370.6	22.70	17.324		
6,200.0	6,170.1	6,184.1	6,170.1	12.9	11.5	0.14	65.8	230.3	393.3	370.3	23.03	17.078		
6,300.0	6,270.1	6,284.1	6,270.1	13.0	11.7	0.14	65.8	230.3	393.3	370.0	23.36	16.838		
6,400.0	6,370.1	6,384.1	6,370.1	13.2	11.9	0.14	65.8	230.3	393.3	369.6	23.69	16.604		
6,464.0	6,434.2	6,448.1	6,434.2	13.3	12.0	0.04	65.8	229.6	393.3	369.4	23.90	16.455		
6,500.0	6,470.1	6,484.0	6,469.9	13.3	12.0	-0.31	65.8	227.2	393.3	369.3	24.03	16.368		
6,600.0	6,570.1	6,581.3	6,565.9	13.5	12.1	-2.60	65.8	211.5	393.8	369.3	24.41	16.128		
6,700.0	6,670.1	6,672.9	6,653.5	13.6	12.1	-6.43	65.8	185.0	396.2	371.3	24.83	15.956		
6,800.0	6,769.9	6,758.6	6,731.8	13.7	12.1	78.82	65.8	150.3	402.0	377.8	24.18	16.625		
6,900.0	6,867.9	6,841.3	6,802.9	13.8	12.1	74.35	65.8	108.2	410.2	386.0	24.16	16.982		
7,000.0	6,962.4	6,921.5	6,866.8	13.8	12.1	70.30	65.8	59.7	420.1	395.9	24.17	17.380		
7,100.0	7,051.4	7,000.0	6,923.7	13.8	12.3	66.69	65.8	5.7	430.9	406.6	24.26	17.762		
7,200.0	7,133.1	7,076.3	6,973.0	13.8	12.7	63.58	65.8	-52.5	441.8	417.3	24.48	18.050		
7,300.0	7,206.1	7,150.0	7,014.5	14.0	13.2	60.98	65.8	-113.4	452.2	427.4	24.84	18.204		
7,400.0	7,268.9	7,225.7	7,050.4	14.3	13.9	58.79	65.8	-180.0	461.7	436.2	25.48	18.120		
7,500.0	7,320.3	7,300.0	7,078.6	14.9	14.7	57.09	65.8	-248.7	469.7	443.3	26.40	17.791		
7,600.0	7,359.2	7,371.7	7,098.9	15.9	15.8	55.86	65.8	-317.4	475.9	448.2	27.67	17.197		
7,700.0	7,385.0	7,450.0	7,113.1	17.3	17.0	55.03	65.8	-394.4	480.1	450.7	29.39	16.334		
7,800.0	7,397.1	7,516.1	7,118.5	18.9	18.2	54.68	65.8	-460.2	482.1	450.7	31.36	15.373		
7,900.0	7,398.0	7,606.0	7,119.0	20.7	19.9	54.65	65.8	-550.2	482.2	448.1	34.14	14.124		
8,000.0	7,398.0	7,706.0	7,119.0	22.7	21.9	54.65	65.8	-650.2	482.2	444.9	37.36	12.907		
8,100.0	7,398.0	7,806.0	7,119.0	24.7	24.0	54.65	65.8	-750.2	482.2	441.5	40.73	11.840		
8,200.0	7,398.0	7,906.0	7,119.0	26.8	26.2	54.65	65.8	-850.2	482.2	438.0	44.21	10.908		
8,300.0	7,398.0	8,006.0	7,119.0	29.0	28.4	54.65	65.9	-950.2	482.3	434.5	47.78	10.093		
8,400.0	7,398.0	8,106.0	7,119.0	31.2	30.6	54.65	65.9	-1,050.2	482.3	430.8	51.42	9.378		
8,500.0	7,398.0	8,206.0	7,119.0	33.5	32.9	54.65	65.9	-1,150.2	482.3	427.1	55.12	8.750		
8,600.0	7,398.0	8,306.0	7,119.0	35.8	35.2	54.65	65.9	-1,250.2	482.3	423.4	58.86	8.193		
8,700.0	7,398.0	8,406.0	7,119.0	38.1	37.5	54.65	65.9	-1,350.2	482.3	419.6	62.64	7.699		
8,800.0	7,398.0	8,506.0	7,119.0	40.4	39.9	54.65	65.9	-1,450.2	482.3	415.8	66.45	7.258		
8,900.0	7,398.0	8,606.0	7,119.0	42.7	42.3	54.65	65.9	-1,550.2	482.3	412.0	70.28	6.862		
9,000.0	7,398.0	8,706.0	7,119.0	45.1	44.6	54.65	65.9	-1,650.2	482.3	408.1	74.14	6.504		
9,100.0	7,398.0	8,806.0	7,119.0	47.4	47.0	54.65	65.9	-1,750.2	482.3	404.2	78.02	6.181		
9,200.0	7,398.0	8,906.0	7,119.0	49.8	49.4	54.65	65.9	-1,850.2	482.3	400.4	81.91	5.888		
9,300.0	7,398.0	9,006.0	7,119.0	52.2	51.8	54.65	65.9	-1,950.2	482.3	396.4	85.82	5.620		
9,400.0	7,398.0	9,106.0	7,119.0	54.6	54.2	54.65	65.9	-2,050.2	482.3	392.5	89.74	5.374		
9,500.0	7,398.0	9,206.0	7,119.0	57.0	56.6	54.65	65.9	-2,150.2	482.3	388.6	93.67	5.149		
9,600.0	7,398.0	9,306.0	7,119.0	59.4	59.0	54.65	65.9	-2,250.2	482.3	384.7	97.61	4.941		
9,700.0	7,398.0	9,406.0	7,119.0	61.8	61.5	54.65	65.9	-2,350.2	482.3	380.7	101.55	4.749		
9,800.0	7,398.0	9,506.0	7,119.0	64.2	63.9	54.65	65.9	-2,450.2	482.3	376.8	105.51	4.571		
9,900.0	7,398.0	9,606.0	7,119.0	66.7	66.3	54.65	65.9	-2,550.2	482.3	372.8	109.47	4.406		
10,000.0	7,398.0	9,706.0	7,119.0	69.1	68.8	54.65	65.9	-2,650.2	482.3	368.8	113.44	4.252		
10,100.0	7,398.0	9,806.0	7,119.0	71.5	71.2	54.65	65.9	-2,750.2	482.3	364.9	117.41	4.108		
10,200.0	7,398.0	9,906.0	7,119.0	74.0	73.6	54.66	65.9	-2,850.2	482.3	360.9	121.39	3.973		

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 1F-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5066.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5066.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1F-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			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	10,006.0	7,119.0	76.4	76.1	54.66	65.9	-2,950.2	482.3	356.9	125.37	3.847		
10,400.0	7,398.0	10,106.0	7,119.0	78.8	78.5	54.66	65.9	-3,050.2	482.3	352.9	129.35	3.729		
10,500.0	7,398.0	10,206.0	7,119.0	81.3	81.0	54.66	65.9	-3,150.2	482.3	349.0	133.34	3.617		
10,600.0	7,398.0	10,306.0	7,119.0	83.7	83.4	54.66	65.9	-3,250.2	482.3	345.0	137.33	3.512		
10,700.0	7,398.0	10,406.0	7,119.0	86.2	85.9	54.66	66.0	-3,350.2	482.3	341.0	141.33	3.413		
10,800.0	7,398.0	10,506.0	7,119.0	88.6	88.3	54.66	66.0	-3,450.2	482.3	337.0	145.32	3.319		
10,900.0	7,398.0	10,606.0	7,119.0	91.0	90.8	54.66	66.0	-3,550.2	482.3	333.0	149.32	3.230		
11,000.0	7,398.0	10,706.0	7,119.0	93.5	93.2	54.66	66.0	-3,650.2	482.3	329.0	153.32	3.146		
11,100.0	7,398.0	10,806.0	7,119.0	95.9	95.7	54.66	66.0	-3,750.2	482.3	325.0	157.33	3.066		
11,200.0	7,398.0	10,906.0	7,119.0	98.4	98.1	54.66	66.0	-3,850.2	482.3	321.0	161.34	2.989		
11,300.0	7,398.0	11,006.0	7,119.0	100.8	100.6	54.66	66.0	-3,950.2	482.3	317.0	165.34	2.917		
11,400.0	7,398.0	11,106.0	7,119.0	103.3	103.0	54.66	66.0	-4,050.2	482.3	313.0	169.35	2.848		
11,500.0	7,398.0	11,206.0	7,119.0	105.8	105.5	54.66	66.0	-4,150.2	482.3	308.9	173.36	2.782		
11,600.0	7,398.0	11,306.0	7,119.0	108.2	108.0	54.66	66.0	-4,250.2	482.3	304.9	177.38	2.719		
11,700.0	7,398.0	11,406.0	7,119.0	110.7	110.4	54.66	66.0	-4,350.2	482.3	300.9	181.39	2.659		
11,800.0	7,398.0	11,506.0	7,119.0	113.1	112.9	54.66	66.0	-4,450.2	482.3	296.9	185.41	2.601		
11,900.0	7,398.0	11,606.0	7,119.0	115.6	115.3	54.66	66.0	-4,550.2	482.3	292.9	189.42	2.546		
11,914.9	7,398.0	11,620.9	7,119.0	115.9	115.7	54.66	66.0	-4,565.1	482.3	292.3	190.02	2.538		
11,935.4	7,398.0	11,641.4	7,119.0	116.4	116.2	54.66	66.0	-4,585.5	482.3	291.5	190.84	2.527 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Peppler Farms 1F-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5066.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5066.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1F-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	-10.9	0.0	10.9					
100.0	100.0	100.0	100.0	0.2	0.2	-180.00	-10.9	0.0	10.9	10.6	0.30	35.986		
200.0	200.0	200.0	200.0	0.3	0.3	-180.00	-10.9	0.0	10.9	10.3	0.65	16.742		
300.0	300.0	300.0	300.0	0.5	0.5	-180.00	-10.9	0.0	10.9	9.9	1.00	10.909		
400.0	400.0	400.0	400.0	0.7	0.7	-180.00	-10.9	0.0	10.9	9.6	1.35	8.090 CC, ES		
500.0	500.0	499.8	499.8	0.8	0.9	178.55	-11.7	0.3	11.8	10.1	1.70	6.912		
600.0	600.0	599.6	599.5	1.0	1.0	175.21	-14.2	1.2	14.3	12.2	2.05	6.950		
700.0	700.0	699.2	699.1	1.2	1.2	27.93	-18.3	2.7	17.7	15.3	2.40	7.388		
800.0	800.0	798.8	798.5	1.4	1.4	27.55	-24.0	4.7	21.3	18.6	2.75	7.767		
900.0	899.9	898.4	897.7	1.6	1.6	28.25	-31.3	7.4	25.1	22.0	3.10	8.104		
1,000.0	999.7	997.8	996.7	1.7	1.8	29.59	-40.2	10.7	29.0	25.6	3.45	8.410		
1,100.0	1,099.4	1,097.2	1,095.5	2.0	2.1	31.34	-50.7	14.5	33.2	29.4	3.82	8.690		
1,200.0	1,198.9	1,196.5	1,194.0	2.2	2.3	33.31	-62.9	18.9	37.5	33.3	4.19	8.947		
1,300.0	1,298.3	1,295.8	1,292.1	2.4	2.6	35.42	-76.6	23.9	42.1	37.5	4.58	9.176		
1,400.0	1,397.4	1,394.9	1,389.9	2.7	2.9	37.59	-91.9	29.5	46.9	41.9	5.00	9.376		
1,500.0	1,496.3	1,494.8	1,488.3	2.9	3.2	40.16	-108.2	35.4	51.3	45.8	5.45	9.406		
1,600.0	1,594.9	1,594.7	1,586.6	3.2	3.6	43.55	-124.5	41.3	54.5	48.5	5.96	9.146		
1,700.0	1,693.4	1,694.6	1,685.0	3.5	3.9	47.21	-140.8	47.3	57.3	50.8	6.52	8.790		
1,800.0	1,791.9	1,794.5	1,783.4	3.9	4.2	50.52	-157.1	53.2	60.3	53.2	7.11	8.481		
1,900.0	1,890.4	1,894.4	1,881.8	4.2	4.6	53.50	-173.4	59.1	63.5	55.8	7.73	8.214		
2,000.0	1,988.9	1,994.3	1,980.2	4.5	4.9	56.20	-189.7	65.1	66.8	58.5	8.37	7.985		
2,100.0	2,087.3	2,094.1	2,078.5	4.8	5.2	58.63	-206.0	71.0	70.3	61.3	9.03	7.788		
2,200.0	2,185.8	2,194.0	2,176.9	5.2	5.6	60.83	-222.3	76.9	73.9	64.2	9.70	7.619		
2,300.0	2,284.3	2,293.9	2,275.3	5.5	5.9	62.82	-238.6	82.9	77.6	67.2	10.38	7.475		
2,400.0	2,382.8	2,393.8	2,373.7	5.9	6.3	64.63	-254.9	88.8	81.4	70.3	11.07	7.351		
2,500.0	2,481.3	2,493.7	2,472.1	6.2	6.6	66.28	-271.2	94.7	85.2	73.4	11.76	7.244		
2,600.0	2,579.7	2,593.6	2,570.4	6.5	7.0	67.79	-287.5	100.7	89.1	76.7	12.46	7.152		
2,700.0	2,678.2	2,693.5	2,668.8	6.9	7.3	69.16	-303.8	106.6	93.1	79.9	13.16	7.072		
2,800.0	2,776.7	2,793.4	2,767.2	7.2	7.6	70.43	-320.1	112.5	97.1	83.2	13.87	7.003		
2,900.0	2,875.2	2,893.3	2,865.6	7.6	8.0	71.59	-336.4	118.5	101.2	86.6	14.57	6.943		
3,000.0	2,973.8	2,993.2	2,964.0	7.9	8.3	72.25	-352.7	124.4	105.5	90.3	15.23	6.930		
3,100.0	3,072.7	3,093.1	3,062.3	8.2	8.7	72.01	-369.0	130.3	110.4	94.6	15.80	6.988		
3,200.0	3,171.9	3,192.9	3,160.6	8.5	9.0	70.97	-385.3	136.3	115.9	99.6	16.30	7.112		
3,300.0	3,271.2	3,292.7	3,258.9	8.7	9.4	69.26	-401.6	142.2	122.0	105.3	16.70	7.304		
3,400.0	3,370.7	3,392.3	3,357.0	8.9	9.7	67.02	-417.8	148.1	128.9	111.9	17.02	7.572		
3,500.0	3,470.4	3,491.8	3,455.0	9.1	10.1	64.36	-434.1	154.0	136.7	119.5	17.25	7.924		
3,600.0	3,570.2	3,591.1	3,552.8	9.3	10.4	61.40	-450.3	159.9	145.6	128.2	17.40	8.370		
3,700.0	3,670.2	3,690.2	3,650.4	9.5	10.8	58.26	-466.4	165.8	155.8	138.3	17.47	8.917		
3,800.0	3,770.1	3,789.1	3,747.8	9.6	11.1	55.05	-482.6	171.7	167.4	149.9	17.49	9.574		
3,900.0	3,870.1	3,887.7	3,844.9	9.8	11.4	-163.16	-498.7	177.5	180.6	162.5	18.04	10.008		
4,000.0	3,970.1	3,986.2	3,941.9	9.9	11.8	-166.21	-514.7	183.4	194.8	176.0	18.86	10.330		
4,100.0	4,070.1	4,084.7	4,038.8	10.0	12.1	-168.84	-530.8	189.2	209.5	189.9	19.62	10.679		
4,200.0	4,170.1	4,183.2	4,135.8	10.1	12.5	-171.12	-546.9	195.1	224.6	204.3	20.34	11.044		
4,300.0	4,270.1	4,284.5	4,235.6	10.2	12.8	-173.12	-562.9	200.9	239.6	218.6	21.02	11.401		
4,400.0	4,370.1	4,387.3	4,337.3	10.4	13.1	-174.73	-577.6	206.3	253.3	231.7	21.63	11.710		
4,500.0	4,470.1	4,490.6	4,439.7	10.5	13.4	-176.02	-590.7	211.0	265.5	243.3	22.19	11.969		
4,600.0	4,570.1	4,594.5	4,542.8	10.6	13.7	-177.04	-602.0	215.1	276.2	253.5	22.69	12.174		
4,700.0	4,670.1	4,698.7	4,646.6	10.8	13.9	-177.84	-611.6	218.6	285.3	262.1	23.14	12.326		
4,800.0	4,770.1	4,803.3	4,750.8	10.9	14.1	-178.46	-619.5	221.5	292.7	269.1	23.56	12.425		
4,900.0	4,870.1	4,908.1	4,855.4	11.0	14.3	-178.92	-625.6	223.7	298.5	274.5	23.93	12.471		
5,000.0	4,970.1	5,013.2	4,960.4	11.2	14.5	-179.23	-629.9	225.3	302.5	278.3	24.27	12.466		
5,100.0	5,070.1	5,118.4	5,065.5	11.3	14.6	-179.41	-632.4	226.2	304.9	280.3	24.57	12.409		

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 1F-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5066.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5066.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1F-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	
5,200.0	5,170.1	5,222.9	5,170.1	11.4	14.7	-179.46	-633.0	226.4	305.5	280.7	24.84	12.302	
5,300.0	5,270.1	5,322.9	5,270.1	11.6	14.8	-179.46	-633.0	226.4	305.5	280.4	25.10	12.174	
5,400.0	5,370.1	5,422.9	5,370.1	11.7	14.9	-179.46	-633.0	226.4	305.5	280.2	25.36	12.047	
5,500.0	5,470.1	5,522.9	5,470.1	11.9	15.0	-179.46	-633.0	226.4	305.5	279.9	25.63	11.923	
5,600.0	5,570.1	5,622.9	5,570.1	12.0	15.2	-179.46	-633.0	226.4	305.5	279.6	25.89	11.800	
5,700.0	5,670.1	5,722.9	5,670.1	12.1	15.3	-179.46	-633.0	226.4	305.5	279.4	26.16	11.679	
5,800.0	5,770.1	5,822.9	5,770.1	12.3	15.4	-179.46	-633.0	226.4	305.5	279.1	26.43	11.559	
5,900.0	5,870.1	5,922.9	5,870.1	12.4	15.5	-179.46	-633.0	226.4	305.5	278.8	26.70	11.441	
6,000.0	5,970.1	6,022.9	5,970.1	12.6	15.6	-179.46	-633.0	226.4	305.5	278.6	26.98	11.325	
6,100.0	6,070.1	6,122.9	6,070.1	12.7	15.7	-179.46	-633.0	226.4	305.5	278.3	27.25	11.211	
6,200.0	6,170.1	6,222.9	6,170.1	12.9	15.9	-179.46	-633.0	226.4	305.5	278.0	27.53	11.098	
6,300.0	6,270.1	6,322.9	6,270.1	13.0	16.0	-179.46	-633.0	226.4	305.5	277.7	27.81	10.987	
6,400.0	6,370.1	6,422.9	6,370.1	13.2	16.1	-179.46	-633.0	226.4	305.5	277.4	28.09	10.877	
6,428.3	6,398.5	6,451.3	6,398.5	13.2	16.1	-179.46	-633.0	226.4	305.5	277.4	28.17	10.847	
6,500.0	6,470.1	6,522.5	6,469.5	13.3	16.2	-178.87	-633.0	223.3	305.6	277.3	28.32	10.789	
6,600.0	6,570.1	6,619.3	6,565.1	13.5	16.2	-175.97	-633.0	207.8	306.3	277.9	28.37	10.796	
6,700.0	6,670.1	6,710.5	6,652.3	13.6	16.2	-171.11	-633.0	181.6	309.7	281.5	28.27	10.955	
6,800.0	6,769.9	6,795.9	6,730.4	13.7	16.2	-75.14	-633.1	147.1	317.5	291.7	25.81	12.300	
6,900.0	6,867.9	6,878.3	6,801.3	13.8	16.3	-69.65	-633.1	105.3	328.1	302.0	26.14	12.555	
7,000.0	6,962.4	6,958.3	6,865.2	13.8	16.3	-64.79	-633.1	57.2	340.6	314.5	26.12	13.037	
7,100.0	7,051.4	7,036.3	6,921.9	13.8	16.4	-60.60	-633.1	3.6	353.9	328.0	25.89	13.667	
7,200.0	7,133.1	7,112.8	6,971.5	13.8	16.6	-57.07	-633.1	-54.5	367.1	341.7	25.37	14.469	
7,300.0	7,206.1	7,187.9	7,014.0	14.0	16.8	-54.17	-633.1	-116.4	379.6	354.7	24.90	15.246	
7,400.0	7,268.9	7,261.9	7,049.3	14.3	17.2	-51.84	-633.1	-181.5	390.6	366.0	24.64	15.854	
7,500.0	7,320.3	7,335.2	7,077.4	14.9	17.7	-50.06	-633.1	-249.1	399.9	375.0	24.85	16.095	
7,600.0	7,359.2	7,407.8	7,098.3	15.9	18.4	-48.78	-633.1	-318.6	407.0	381.2	25.70	15.833	
7,700.0	7,385.0	7,480.1	7,112.0	17.3	19.3	-47.97	-633.1	-389.6	411.6	384.3	27.33	15.062	
7,800.0	7,397.1	7,550.0	7,118.3	18.9	20.3	-47.62	-633.1	-459.1	413.7	384.0	29.67	13.944	
7,900.0	7,398.0	7,641.0	7,119.0	20.7	21.8	-47.61	-633.1	-550.1	413.8	381.4	32.45	12.752	
8,000.0	7,398.0	7,741.0	7,119.0	22.7	23.6	-47.61	-633.1	-650.1	413.8	378.5	35.30	11.722	
8,100.0	7,398.0	7,841.0	7,119.0	24.7	25.5	-47.61	-633.1	-750.1	413.8	375.5	38.29	10.807	
8,200.0	7,398.0	7,941.0	7,119.0	26.8	27.6	-47.61	-633.1	-850.1	413.8	372.4	41.39	9.998	
8,300.0	7,398.0	8,041.0	7,119.0	29.0	29.7	-47.61	-633.1	-950.1	413.8	369.3	44.58	9.284	
8,400.0	7,398.0	8,141.0	7,119.0	31.2	31.8	-47.61	-633.1	-1,050.1	413.8	366.0	47.83	8.652	
8,500.0	7,398.0	8,241.0	7,119.0	33.5	34.0	-47.61	-633.2	-1,150.1	413.8	362.7	51.14	8.092	
8,600.0	7,398.0	8,341.0	7,119.0	35.8	36.3	-47.61	-633.2	-1,250.1	413.9	359.4	54.50	7.594	
8,700.0	7,398.0	8,441.0	7,119.0	38.1	38.5	-47.61	-633.2	-1,350.1	413.9	356.0	57.89	7.149	
8,800.0	7,398.0	8,541.0	7,119.0	40.4	40.8	-47.61	-633.2	-1,450.1	413.9	352.6	61.31	6.750	
8,900.0	7,398.0	8,641.0	7,119.0	42.7	43.2	-47.61	-633.2	-1,550.1	413.9	349.1	64.76	6.390	
9,000.0	7,398.0	8,741.0	7,119.0	45.1	45.5	-47.62	-633.2	-1,650.1	413.9	345.6	68.24	6.065	
9,100.0	7,398.0	8,841.0	7,119.0	47.4	47.8	-47.62	-633.2	-1,750.1	413.9	342.2	71.73	5.770	
9,200.0	7,398.0	8,941.0	7,119.0	49.8	50.2	-47.62	-633.2	-1,850.1	413.9	338.7	75.24	5.501	
9,300.0	7,398.0	9,041.0	7,119.0	52.2	52.6	-47.62	-633.2	-1,950.1	413.9	335.1	78.76	5.255	
9,400.0	7,398.0	9,141.0	7,119.0	54.6	55.0	-47.62	-633.2	-2,050.1	413.9	331.6	82.30	5.029	
9,500.0	7,398.0	9,241.0	7,119.0	57.0	57.3	-47.62	-633.2	-2,150.1	413.9	328.1	85.85	4.822	
9,600.0	7,398.0	9,341.0	7,119.0	59.4	59.7	-47.62	-633.2	-2,250.1	413.9	324.5	89.41	4.630	
9,700.0	7,398.0	9,441.0	7,119.0	61.8	62.1	-47.62	-633.2	-2,350.1	413.9	321.0	92.97	4.452	
9,800.0	7,398.0	9,541.0	7,119.0	64.2	64.5	-47.62	-633.3	-2,450.1	413.9	317.4	96.54	4.288	
9,900.0	7,398.0	9,641.0	7,119.0	66.7	67.0	-47.62	-633.3	-2,550.1	413.9	313.8	100.12	4.134	
10,000.0	7,398.0	9,741.0	7,119.0	69.1	69.4	-47.62	-633.3	-2,650.1	414.0	310.2	103.71	3.991	
10,100.0	7,398.0	9,841.0	7,119.0	71.5	71.8	-47.63	-633.3	-2,750.1	414.0	306.7	107.30	3.858	
10,200.0	7,398.0	9,941.0	7,119.0	74.0	74.2	-47.63	-633.3	-2,850.1	414.0	303.1	110.90	3.733	

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 1F-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5066.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5066.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1F-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		
10,300.0	7,398.0	10,041.0	7,119.0	76.4	76.6	-47.63	-633.3	-2,950.1	414.0	299.5	114.50	3.615		
10,400.0	7,398.0	10,141.0	7,119.0	78.8	79.1	-47.63	-633.3	-3,050.1	414.0	295.9	118.11	3.505		
10,500.0	7,398.0	10,241.0	7,119.0	81.3	81.5	-47.63	-633.3	-3,150.1	414.0	292.3	121.72	3.401		
10,600.0	7,398.0	10,341.0	7,119.0	83.7	83.9	-47.63	-633.3	-3,250.1	414.0	288.7	125.33	3.303		
10,700.0	7,398.0	10,441.0	7,119.0	86.2	86.4	-47.63	-633.3	-3,350.1	414.0	285.1	128.94	3.211		
10,800.0	7,398.0	10,541.0	7,119.0	88.6	88.8	-47.63	-633.3	-3,450.1	414.0	281.5	132.56	3.123		
10,900.0	7,398.0	10,641.0	7,119.0	91.0	91.3	-47.63	-633.3	-3,550.1	414.0	277.8	136.19	3.040		
11,000.0	7,398.0	10,741.0	7,119.0	93.5	93.7	-47.63	-633.4	-3,650.1	414.0	274.2	139.81	2.961		
11,100.0	7,398.0	10,841.0	7,119.0	95.9	96.1	-47.63	-633.4	-3,750.1	414.0	270.6	143.44	2.887		
11,200.0	7,398.0	10,941.0	7,119.0	98.4	98.6	-47.64	-633.4	-3,850.1	414.0	267.0	147.06	2.815		
11,300.0	7,398.0	11,041.0	7,119.0	100.8	101.0	-47.64	-633.4	-3,950.1	414.1	263.4	150.70	2.748		
11,400.0	7,398.0	11,141.0	7,119.0	103.3	103.5	-47.64	-633.4	-4,050.1	414.1	259.7	154.33	2.683		
11,500.0	7,398.0	11,241.0	7,119.0	105.8	105.9	-47.64	-633.4	-4,150.1	414.1	256.1	157.96	2.621		
11,600.0	7,398.0	11,341.0	7,119.0	108.2	108.4	-47.64	-633.4	-4,250.1	414.1	252.5	161.60	2.562		
11,700.0	7,398.0	11,441.0	7,119.0	110.7	110.8	-47.64	-633.4	-4,350.1	414.1	248.8	165.24	2.506		
11,800.0	7,398.0	11,541.0	7,119.0	113.1	113.3	-47.64	-633.4	-4,450.1	414.1	245.2	168.87	2.452		
11,900.0	7,398.0	11,641.0	7,119.0	115.6	115.7	-47.64	-633.4	-4,550.1	414.1	241.6	172.51	2.400		
11,935.4	7,398.0	11,676.4	7,119.0	116.4	116.6	-47.64	-633.4	-4,585.6	414.1	240.3	173.80	2.383 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Peppler Farms 1F-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5066.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5066.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1F-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		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-180.00	-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 CC, ES		
300.0	300.0	299.6	299.6	0.5	0.5	179.39	-22.7	0.2	22.7	21.7	1.00	22.655		
400.0	400.0	399.2	399.1	0.7	0.7	177.82	-25.2	1.0	25.2	23.9	1.35	18.638		
500.0	500.0	498.6	498.5	0.8	0.9	175.79	-29.3	2.2	29.5	27.7	1.71	17.244		
600.0	600.0	597.9	597.6	1.0	1.1	173.78	-35.1	3.8	35.4	33.4	2.07	17.132		
700.0	700.0	697.0	696.4	1.2	1.3	27.51	-42.6	6.0	42.4	40.0	2.39	17.684		
800.0	800.0	796.0	794.9	1.4	1.5	27.23	-51.6	8.6	49.5	46.7	2.74	18.024		
900.0	899.9	894.8	893.1	1.6	1.8	27.56	-62.3	11.7	56.7	53.6	3.09	18.328		
1,000.0	999.7	993.5	990.9	1.7	2.0	28.29	-74.6	15.2	64.1	60.7	3.45	18.599		
1,100.0	1,099.4	1,092.0	1,088.4	2.0	2.3	29.28	-88.4	19.2	71.7	67.9	3.81	18.837		
1,200.0	1,198.9	1,190.4	1,185.5	2.2	2.6	30.46	-103.9	23.7	79.5	75.4	4.18	19.041		
1,300.0	1,298.3	1,288.7	1,282.2	2.4	3.0	31.77	-120.9	28.6	87.5	83.0	4.56	19.206		
1,400.0	1,397.4	1,388.2	1,379.8	2.7	3.3	33.28	-139.2	33.9	95.1	90.2	4.96	19.185		
1,500.0	1,496.3	1,488.0	1,477.8	2.9	3.7	35.13	-157.5	39.1	101.4	96.0	5.39	18.819		
1,600.0	1,594.9	1,587.8	1,575.7	3.2	4.0	37.33	-175.7	44.4	106.3	100.5	5.85	18.172		
1,700.0	1,693.4	1,687.6	1,673.7	3.5	4.4	39.64	-194.0	49.7	110.8	104.4	6.35	17.438		
1,800.0	1,791.9	1,787.4	1,771.7	3.9	4.8	41.77	-212.3	55.0	115.4	108.5	6.88	16.774		
1,900.0	1,890.4	1,887.2	1,869.6	4.2	5.1	43.73	-230.6	60.3	120.1	112.7	7.42	16.175		
2,000.0	1,988.9	1,987.0	1,967.6	4.5	5.5	45.55	-248.9	65.5	125.0	117.0	7.99	15.636		
2,100.0	2,087.3	2,086.8	2,065.6	4.8	5.9	47.23	-267.2	70.8	129.9	121.4	8.58	15.151		
2,200.0	2,185.8	2,186.6	2,163.6	5.2	6.2	48.78	-285.5	76.1	135.0	125.9	9.18	14.714		
2,300.0	2,284.3	2,286.4	2,261.5	5.5	6.6	50.22	-303.8	81.4	140.2	130.4	9.79	14.321		
2,400.0	2,382.8	2,386.2	2,359.5	5.9	7.0	51.55	-322.1	86.7	145.5	135.1	10.42	13.967		
2,500.0	2,481.3	2,486.0	2,457.5	6.2	7.4	52.79	-340.4	91.9	150.8	139.8	11.05	13.648		
2,600.0	2,579.7	2,585.8	2,555.4	6.5	7.7	53.95	-358.7	97.2	156.2	144.5	11.69	13.360		
2,700.0	2,678.2	2,685.6	2,653.4	6.9	8.1	55.03	-377.0	102.5	161.7	149.3	12.34	13.098		
2,800.0	2,776.7	2,785.4	2,751.4	7.2	8.5	56.04	-395.3	107.8	167.2	154.2	13.00	12.861		
2,900.0	2,875.2	2,885.2	2,849.4	7.6	8.8	56.98	-413.6	113.1	172.7	159.1	13.66	12.645		
3,000.0	2,973.8	2,985.0	2,947.3	7.9	9.2	57.68	-431.9	118.4	178.8	164.5	14.29	12.516		
3,100.0	3,072.7	3,084.8	3,045.2	8.2	9.6	57.89	-450.2	123.6	185.8	171.0	14.85	12.517		
3,200.0	3,171.9	3,184.5	3,143.1	8.5	10.0	57.65	-468.5	128.9	193.8	178.4	15.34	12.634		
3,300.0	3,271.2	3,284.0	3,240.8	8.7	10.3	57.03	-486.7	134.2	202.6	186.9	15.76	12.860		
3,400.0	3,370.7	3,383.5	3,338.4	8.9	10.7	56.08	-504.9	139.4	212.5	196.4	16.11	13.189		
3,500.0	3,470.4	3,482.7	3,435.9	9.1	11.1	54.86	-523.1	144.7	223.5	207.1	16.41	13.620		
3,600.0	3,570.2	3,581.8	3,533.2	9.3	11.5	53.44	-541.3	149.9	235.5	218.9	16.64	14.153		
3,700.0	3,670.2	3,680.7	3,630.2	9.5	11.8	51.85	-559.4	155.2	248.8	232.0	16.83	14.788		
3,800.0	3,770.1	3,779.3	3,727.0	9.6	12.2	50.15	-577.5	160.4	263.4	246.5	16.97	15.526		
3,900.0	3,870.1	3,877.6	3,823.5	9.8	12.6	-166.62	-595.5	165.6	279.4	259.8	19.64	14.223		
4,000.0	3,970.1	3,975.8	3,919.9	9.9	12.9	-168.43	-613.5	170.8	296.2	275.9	20.35	14.559		
4,100.0	4,070.1	4,073.9	4,016.2	10.0	13.3	-170.04	-631.5	176.0	313.3	292.3	21.02	14.903		
4,200.0	4,170.1	4,172.1	4,112.6	10.1	13.7	-171.49	-649.5	181.2	330.6	308.9	21.68	15.250		
4,300.0	4,270.1	4,270.2	4,208.9	10.2	14.0	-172.80	-667.5	186.4	348.1	325.8	22.32	15.597		
4,400.0	4,370.1	4,368.4	4,305.3	10.4	14.4	-173.98	-685.5	191.6	365.8	342.8	22.94	15.941		
4,500.0	4,470.1	4,466.6	4,401.7	10.5	14.8	-175.05	-703.5	196.7	383.6	360.0	23.56	16.283		
4,600.0	4,570.1	4,569.3	4,502.6	10.6	15.1	-176.05	-721.9	202.1	401.1	376.9	24.16	16.602		
4,700.0	4,670.1	4,675.0	4,606.7	10.8	15.5	-176.90	-739.2	207.0	417.1	392.4	24.73	16.866		
4,800.0	4,770.1	4,781.3	4,711.8	10.9	15.8	-177.61	-754.7	211.5	431.5	406.2	25.26	17.079		
4,900.0	4,870.1	4,888.2	4,817.7	11.0	16.1	-178.20	-768.3	215.5	444.1	418.4	25.76	17.244		
5,000.0	4,970.1	4,995.5	4,924.4	11.2	16.4	-178.68	-780.2	218.9	455.1	428.9	26.21	17.360		
5,100.0	5,070.1	5,103.3	5,031.7	11.3	16.6	-179.06	-790.1	221.7	464.2	437.6	26.63	17.431		

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 1F-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5066.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5066.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1F-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		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	5,170.1	5,211.5	5,139.5	11.4	16.8	-179.36	-798.1	224.1	471.6	444.6	27.02	17.457		
5,300.0	5,270.1	5,319.9	5,247.8	11.6	17.0	-179.58	-804.2	225.8	477.2	449.9	27.37	17.439		
5,400.0	5,370.1	5,428.6	5,356.3	11.7	17.2	-179.72	-808.3	227.0	481.0	453.3	27.68	17.377		
5,500.0	5,470.1	5,537.3	5,465.0	11.9	17.3	-179.80	-810.4	227.6	483.0	455.0	27.96	17.272		
5,600.0	5,570.1	5,642.4	5,570.1	12.0	17.4	-179.81	-810.8	227.7	483.3	455.0	28.22	17.125		
5,700.0	5,670.1	5,742.4	5,670.1	12.1	17.5	-179.81	-810.8	227.7	483.3	454.8	28.47	16.973		
5,800.0	5,770.1	5,842.4	5,770.1	12.3	17.6	-179.81	-810.8	227.7	483.3	454.5	28.73	16.822		
5,900.0	5,870.1	5,942.4	5,870.1	12.4	17.7	-179.81	-810.8	227.7	483.3	454.3	28.98	16.674		
6,000.0	5,970.1	6,042.4	5,970.1	12.6	17.8	-179.81	-810.8	227.7	483.3	454.0	29.24	16.526		
6,100.0	6,070.1	6,142.4	6,070.1	12.7	17.9	-179.81	-810.8	227.7	483.3	453.8	29.50	16.381		
6,200.0	6,170.1	6,242.4	6,170.1	12.9	18.0	-179.81	-810.8	227.7	483.3	453.5	29.76	16.237		
6,300.0	6,270.1	6,342.4	6,270.1	13.0	18.1	-179.81	-810.8	227.7	483.3	453.2	30.03	16.094		
6,400.0	6,370.1	6,442.4	6,370.1	13.2	18.2	-179.81	-810.8	227.7	483.3	453.0	30.29	15.954		
6,500.0	6,470.1	6,542.4	6,470.1	13.3	18.3	-179.81	-810.8	227.7	483.3	452.7	30.56	15.815		
6,600.0	6,570.1	6,642.4	6,570.1	13.5	18.4	-179.81	-810.8	227.7	483.3	452.4	30.83	15.677		
6,700.0	6,670.1	6,742.4	6,670.1	13.6	18.5	-179.81	-810.8	227.7	483.3	452.2	31.09	15.542		
6,800.0	6,769.9	6,842.2	6,769.7	13.7	18.6	-89.81	-810.8	222.3	483.3	458.3	24.96	19.358		
6,900.0	6,867.9	6,942.0	6,867.5	13.8	18.7	-89.82	-810.8	203.2	483.3	458.2	25.06	19.281		
7,000.0	6,962.4	7,041.8	6,961.8	13.8	18.7	-89.82	-810.8	170.7	483.3	458.2	25.08	19.266		
7,100.0	7,051.4	7,141.6	7,050.6	13.8	18.7	-89.84	-810.8	125.4	483.3	458.1	25.12	19.241		
7,200.0	7,133.1	7,241.4	7,132.4	13.8	18.7	-89.85	-810.8	68.2	483.3	458.0	25.30	19.104		
7,300.0	7,206.1	7,341.2	7,205.3	14.0	18.8	-89.87	-810.8	0.2	483.3	457.5	25.79	18.738		
7,400.0	7,268.9	7,441.1	7,268.2	14.3	19.0	-89.89	-810.8	-77.3	483.3	456.5	26.77	18.051		
7,500.0	7,320.3	7,540.9	7,319.6	14.9	19.4	-89.91	-810.8	-162.8	483.3	454.9	28.37	17.032		
7,600.0	7,359.2	7,640.9	7,358.7	15.9	20.0	-89.94	-810.8	-254.6	483.3	452.6	30.64	15.770		
7,700.0	7,385.0	7,740.8	7,384.7	17.3	20.8	-89.96	-810.8	-351.1	483.3	449.7	33.54	14.409		
7,800.0	7,397.1	7,840.8	7,397.0	18.9	21.9	-89.99	-810.8	-450.2	483.3	446.3	36.93	13.086		
7,900.0	7,398.0	7,940.8	7,398.0	20.7	23.4	-90.00	-810.8	-550.2	483.3	442.6	40.67	11.882		
8,000.0	7,398.0	8,040.8	7,398.0	22.7	25.0	-90.00	-810.8	-650.2	483.3	438.6	44.64	10.826		
8,100.0	7,398.0	8,140.8	7,398.0	24.7	26.8	-90.00	-810.8	-750.2	483.3	434.5	48.78	9.906		
8,200.0	7,398.0	8,240.8	7,398.0	26.8	28.7	-90.00	-810.8	-850.2	483.3	430.2	53.07	9.107		
8,300.0	7,398.0	8,340.8	7,398.0	29.0	30.7	-90.00	-810.8	-950.2	483.3	425.8	57.46	8.411		
8,400.0	7,398.0	8,440.8	7,398.0	31.2	32.8	-90.00	-810.8	-1,050.2	483.3	421.3	61.93	7.803		
8,405.9	7,398.0	8,446.7	7,398.0	31.4	32.9	-90.00	-810.8	-1,056.1	483.3	421.1	62.20	7.770		
8,500.0	7,398.0	8,536.0	7,398.0	33.5	34.8	-90.00	-811.1	-1,145.4	483.6	417.2	66.37	7.287		
8,600.0	7,398.0	8,628.2	7,398.0	35.8	36.8	-90.00	-812.7	-1,237.5	485.4	414.6	70.78	6.858		
8,700.0	7,398.0	8,722.9	7,398.0	38.1	39.0	-90.00	-815.9	-1,332.2	488.7	413.4	75.29	6.491		
8,800.0	7,398.0	8,822.8	7,398.0	40.4	41.2	-90.00	-819.5	-1,432.1	492.4	412.4	79.96	6.158		
8,900.0	7,398.0	8,922.7	7,398.0	42.7	43.5	-90.00	-823.2	-1,531.9	496.1	411.4	84.67	5.859		
9,000.0	7,398.0	9,022.6	7,398.0	45.1	45.8	-90.00	-826.9	-1,631.8	499.8	410.4	89.39	5.590 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Peppler Farms 1F-4H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5066.0ft (Ensign)
Reference Site:	S4-T3N-R68W (Peppler Farms)	MD Reference:	WELL @ 5066.0ft (Ensign)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Peppler Farms 1F-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 @ 5066.0ft (Ensign)

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

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

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.32°

