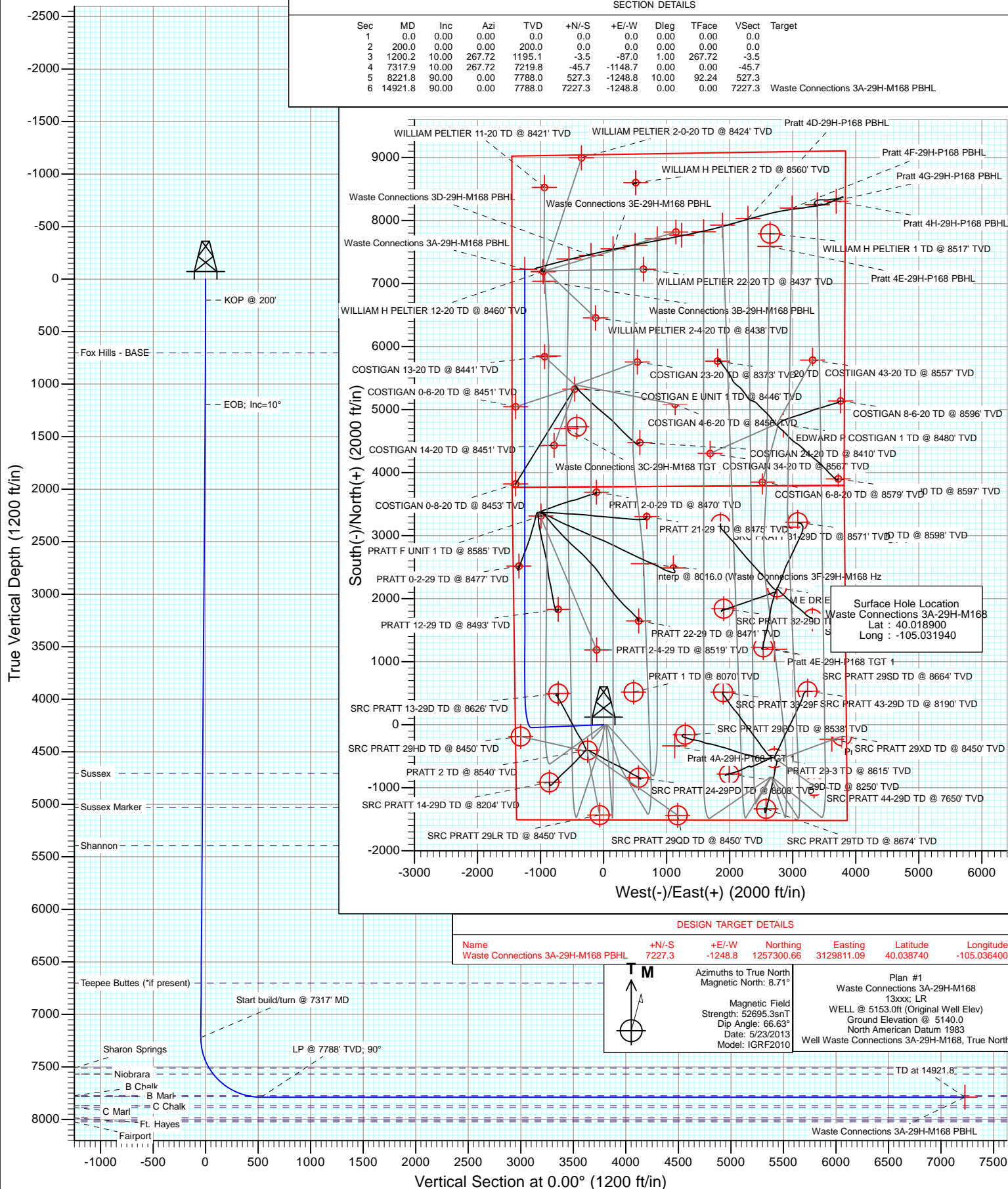




Project: DJ Wattenberg
Site: S29-T1N-R68W (Pratt/Waste Connections)
Well: Waste Connections 3A-29H-M168
Borehole: Hz
Design: Plan #1



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site:	S29-T1N-R68W (Pratt/Waste Connections)	North Reference:	True
Well:	Waste Connections 3A-29H-M168	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	S29-T1N-R68W (Pratt/Waste Connections)				
Site Position:		Northing:	1,249,256.24 ft	Latitude:	40.016600
From:	Lat/Long	Easting:	3,133,726.79 ft	Longitude:	-105.022570
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.31 °

Well	Waste Connections 3A-29H-M168					
Well Position	+N/-S	0.0 ft	Northing:	1,250,080.08 ft	Latitude:	40.018900
	+E/-W	0.0 ft	Easting:	3,131,098.00 ft	Longitude:	-105.031940
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,140.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/23/2013	8.71	66.63	52,695

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	0.00

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,200.2	10.00	267.72	1,195.1	-3.5	-87.0	1.00	1.00	0.00	267.72	
7,317.9	10.00	267.72	7,219.8	-45.7	-1,148.7	0.00	0.00	0.00	0.00	
8,221.8	90.00	0.00	7,788.0	527.3	-1,248.8	10.00	8.85	10.21	92.24	
14,921.8	90.00	0.00	7,788.0	7,227.3	-1,248.8	0.00	0.00	0.00	0.00	Waste Connections 3,

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site:	S29-T1N-R68W (Pratt/Waste Connections)	North Reference:	True
Well:	Waste Connections 3A-29H-M168	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	KOP @ 200'
300.0	1.00	267.72	300.0	0.0	-0.9	0.0	1.00	1.00	
400.0	2.00	267.72	400.0	-0.1	-3.5	-0.1	1.00	1.00	
500.0	3.00	267.72	499.9	-0.3	-7.8	-0.3	1.00	1.00	
600.0	4.00	267.72	599.7	-0.6	-13.9	-0.6	1.00	1.00	
700.0	5.00	267.72	699.4	-0.9	-21.8	-0.9	1.00	1.00	
703.6	5.04	267.72	703.0	-0.9	-22.1	-0.9	1.00	1.00	Fox Hills - BASE
800.0	6.00	267.72	798.9	-1.2	-31.4	-1.2	1.00	1.00	
900.0	7.00	267.72	898.3	-1.7	-42.7	-1.7	1.00	1.00	
1,000.0	8.00	267.72	997.4	-2.2	-55.7	-2.2	1.00	1.00	
1,100.0	9.00	267.72	1,096.3	-2.8	-70.5	-2.8	1.00	1.00	
1,200.0	10.00	267.72	1,194.9	-3.5	-87.0	-3.5	1.00	1.00	
1,200.2	10.00	267.72	1,195.1	-3.5	-87.0	-3.5	1.00	1.00	EOB; Inc=10°
1,300.0	10.00	267.72	1,293.4	-4.1	-104.3	-4.1	0.00	0.00	
1,400.0	10.00	267.72	1,391.9	-4.8	-121.7	-4.8	0.00	0.00	
1,500.0	10.00	267.72	1,490.4	-5.5	-139.0	-5.5	0.00	0.00	
1,600.0	10.00	267.72	1,588.9	-6.2	-156.4	-6.2	0.00	0.00	
1,700.0	10.00	267.72	1,687.3	-6.9	-173.7	-6.9	0.00	0.00	
1,800.0	10.00	267.72	1,785.8	-7.6	-191.1	-7.6	0.00	0.00	
1,900.0	10.00	267.72	1,884.3	-8.3	-208.5	-8.3	0.00	0.00	
2,000.0	10.00	267.72	1,982.8	-9.0	-225.8	-9.0	0.00	0.00	
2,100.0	10.00	267.72	2,081.3	-9.7	-243.2	-9.7	0.00	0.00	
2,200.0	10.00	267.72	2,179.7	-10.4	-260.5	-10.4	0.00	0.00	
2,300.0	10.00	267.72	2,278.2	-11.0	-277.9	-11.0	0.00	0.00	
2,400.0	10.00	267.72	2,376.7	-11.7	-295.2	-11.7	0.00	0.00	
2,500.0	10.00	267.72	2,475.2	-12.4	-312.6	-12.4	0.00	0.00	
2,600.0	10.00	267.72	2,573.7	-13.1	-329.9	-13.1	0.00	0.00	
2,700.0	10.00	267.72	2,672.1	-13.8	-347.3	-13.8	0.00	0.00	
2,800.0	10.00	267.72	2,770.6	-14.5	-364.6	-14.5	0.00	0.00	
2,900.0	10.00	267.72	2,869.1	-15.2	-382.0	-15.2	0.00	0.00	
3,000.0	10.00	267.72	2,967.6	-15.9	-399.3	-15.9	0.00	0.00	
3,100.0	10.00	267.72	3,066.1	-16.6	-416.7	-16.6	0.00	0.00	
3,200.0	10.00	267.72	3,164.5	-17.3	-434.1	-17.3	0.00	0.00	
3,300.0	10.00	267.72	3,263.0	-17.9	-451.4	-17.9	0.00	0.00	
3,400.0	10.00	267.72	3,361.5	-18.6	-468.8	-18.6	0.00	0.00	
3,500.0	10.00	267.72	3,460.0	-19.3	-486.1	-19.3	0.00	0.00	
3,600.0	10.00	267.72	3,558.5	-20.0	-503.5	-20.0	0.00	0.00	
3,700.0	10.00	267.72	3,656.9	-20.7	-520.8	-20.7	0.00	0.00	
3,800.0	10.00	267.72	3,755.4	-21.4	-538.2	-21.4	0.00	0.00	
3,900.0	10.00	267.72	3,853.9	-22.1	-555.5	-22.1	0.00	0.00	
4,000.0	10.00	267.72	3,952.4	-22.8	-572.9	-22.8	0.00	0.00	
4,100.0	10.00	267.72	4,050.9	-23.5	-590.2	-23.5	0.00	0.00	
4,200.0	10.00	267.72	4,149.3	-24.2	-607.6	-24.2	0.00	0.00	
4,300.0	10.00	267.72	4,247.8	-24.9	-624.9	-24.9	0.00	0.00	
4,400.0	10.00	267.72	4,346.3	-25.5	-642.3	-25.5	0.00	0.00	
4,500.0	10.00	267.72	4,444.8	-26.2	-659.7	-26.2	0.00	0.00	
4,600.0	10.00	267.72	4,543.3	-26.9	-677.0	-26.9	0.00	0.00	
4,700.0	10.00	267.72	4,641.7	-27.6	-694.4	-27.6	0.00	0.00	
4,765.3	10.00	267.72	4,706.0	-28.1	-705.7	-28.1	0.00	0.00	Sussex
4,800.0	10.00	267.72	4,740.2	-28.3	-711.7	-28.3	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site:	S29-T1N-R68W (Pratt/Waste Connections)	North Reference:	True
Well:	Waste Connections 3A-29H-M168	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
4,900.0	10.00	267.72	4,838.7	-29.0	-729.1	-29.0	0.00	0.00	
5,000.0	10.00	267.72	4,937.2	-29.7	-746.4	-29.7	0.00	0.00	
5,092.2	10.00	267.72	5,028.0	-30.3	-762.4	-30.3	0.00	0.00	Sussex Marker
5,100.0	10.00	267.72	5,035.7	-30.4	-763.8	-30.4	0.00	0.00	
5,200.0	10.00	267.72	5,134.1	-31.1	-781.1	-31.1	0.00	0.00	
5,300.0	10.00	267.72	5,232.6	-31.8	-798.5	-31.8	0.00	0.00	
5,400.0	10.00	267.72	5,331.1	-32.4	-815.8	-32.4	0.00	0.00	
5,460.8	10.00	267.72	5,391.0	-32.9	-826.4	-32.9	0.00	0.00	Shannon
5,500.0	10.00	267.72	5,429.6	-33.1	-833.2	-33.1	0.00	0.00	
5,600.0	10.00	267.72	5,528.1	-33.8	-850.5	-33.8	0.00	0.00	
5,700.0	10.00	267.72	5,626.5	-34.5	-867.9	-34.5	0.00	0.00	
5,800.0	10.00	267.72	5,725.0	-35.2	-885.2	-35.2	0.00	0.00	
5,900.0	10.00	267.72	5,823.5	-35.9	-902.6	-35.9	0.00	0.00	
6,000.0	10.00	267.72	5,922.0	-36.6	-920.0	-36.6	0.00	0.00	
6,100.0	10.00	267.72	6,020.5	-37.3	-937.3	-37.3	0.00	0.00	
6,200.0	10.00	267.72	6,118.9	-38.0	-954.7	-38.0	0.00	0.00	
6,300.0	10.00	267.72	6,217.4	-38.7	-972.0	-38.7	0.00	0.00	
6,400.0	10.00	267.72	6,315.9	-39.3	-989.4	-39.3	0.00	0.00	
6,500.0	10.00	267.72	6,414.4	-40.0	-1,006.7	-40.0	0.00	0.00	
6,600.0	10.00	267.72	6,512.9	-40.7	-1,024.1	-40.7	0.00	0.00	
6,700.0	10.00	267.72	6,611.3	-41.4	-1,041.4	-41.4	0.00	0.00	
6,790.0	10.00	267.72	6,700.0	-42.0	-1,057.1	-42.0	0.00	0.00	Teepee Buttes (*if present)
6,800.0	10.00	267.72	6,709.8	-42.1	-1,058.8	-42.1	0.00	0.00	
6,900.0	10.00	267.72	6,808.3	-42.8	-1,076.1	-42.8	0.00	0.00	
7,000.0	10.00	267.72	6,906.8	-43.5	-1,093.5	-43.5	0.00	0.00	
7,100.0	10.00	267.72	7,005.3	-44.2	-1,110.8	-44.2	0.00	0.00	
7,200.0	10.00	267.72	7,103.7	-44.9	-1,128.2	-44.9	0.00	0.00	
7,300.0	10.00	267.72	7,202.2	-45.6	-1,145.6	-45.6	0.00	0.00	
7,317.9	10.00	267.72	7,219.8	-45.7	-1,148.7	-45.7	0.00	0.00	Start build/turn @ 7317' MD
7,400.0	12.66	308.34	7,300.5	-40.4	-1,162.9	-40.4	10.00	3.24	
7,500.0	20.35	331.63	7,396.4	-18.2	-1,179.8	-18.2	10.00	7.69	
7,600.0	29.42	341.79	7,487.0	20.5	-1,195.7	20.5	10.00	9.07	
7,626.7	31.93	343.58	7,510.0	33.5	-1,199.8	33.5	10.00	9.40	Sharon Springs
7,697.8	38.71	347.30	7,568.0	73.3	-1,210.0	73.3	10.00	9.53	Niobrara
7,700.0	38.92	347.40	7,569.7	74.6	-1,210.3	74.6	10.00	9.61	
7,800.0	48.60	351.06	7,641.9	142.5	-1,223.0	142.5	10.00	9.68	
7,900.0	58.36	353.77	7,701.3	222.1	-1,233.5	222.1	10.00	9.76	
8,000.0	68.17	355.95	7,746.2	310.9	-1,241.4	310.9	10.00	9.81	
8,089.4	76.96	357.66	7,773.0	396.0	-1,246.1	396.0	10.00	9.83	B Chalk
8,100.0	78.00	357.85	7,775.3	406.3	-1,246.5	406.3	10.00	9.84	
8,153.6	83.28	358.81	7,784.0	459.2	-1,248.1	459.2	10.00	9.84	B Marl
8,200.0	87.85	359.62	7,787.6	505.4	-1,248.7	505.4	10.00	9.85	
8,221.8	90.00	0.00	7,788.0	527.3	-1,248.8	527.3	10.00	9.85	LP @ 7788' TVD; 90°
8,300.0	90.00	0.00	7,788.0	605.4	-1,248.8	605.4	0.00	0.00	
8,400.0	90.00	0.00	7,788.0	705.4	-1,248.8	705.4	0.00	0.00	
8,500.0	90.00	0.00	7,788.0	805.4	-1,248.8	805.4	0.00	0.00	
8,600.0	90.00	0.00	7,788.0	905.4	-1,248.8	905.4	0.00	0.00	
8,700.0	90.00	0.00	7,788.0	1,005.4	-1,248.8	1,005.4	0.00	0.00	
8,800.0	90.00	0.00	7,788.0	1,105.4	-1,248.8	1,105.4	0.00	0.00	
8,900.0	90.00	0.00	7,788.0	1,205.4	-1,248.8	1,205.4	0.00	0.00	
9,000.0	90.00	0.00	7,788.0	1,305.4	-1,248.8	1,305.4	0.00	0.00	
9,100.0	90.00	0.00	7,788.0	1,405.4	-1,248.8	1,405.4	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site:	S29-T1N-R68W (Pratt/Waste Connections)	North Reference:	True
Well:	Waste Connections 3A-29H-M168	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	0.00	7,788.0	1,505.4	-1,248.8	1,505.4	0.00	0.00	
9,300.0	90.00	0.00	7,788.0	1,605.4	-1,248.8	1,605.4	0.00	0.00	
9,400.0	90.00	0.00	7,788.0	1,705.4	-1,248.8	1,705.4	0.00	0.00	
9,500.0	90.00	0.00	7,788.0	1,805.4	-1,248.8	1,805.4	0.00	0.00	
9,600.0	90.00	0.00	7,788.0	1,905.4	-1,248.8	1,905.4	0.00	0.00	
9,700.0	90.00	0.00	7,788.0	2,005.4	-1,248.8	2,005.4	0.00	0.00	
9,800.0	90.00	0.00	7,788.0	2,105.4	-1,248.8	2,105.4	0.00	0.00	
9,900.0	90.00	0.00	7,788.0	2,205.4	-1,248.8	2,205.4	0.00	0.00	
10,000.0	90.00	0.00	7,788.0	2,305.4	-1,248.8	2,305.4	0.00	0.00	
10,100.0	90.00	0.00	7,788.0	2,405.4	-1,248.8	2,405.4	0.00	0.00	
10,200.0	90.00	0.00	7,788.0	2,505.4	-1,248.8	2,505.4	0.00	0.00	
10,300.0	90.00	0.00	7,788.0	2,605.4	-1,248.8	2,605.4	0.00	0.00	
10,400.0	90.00	0.00	7,788.0	2,705.4	-1,248.8	2,705.4	0.00	0.00	
10,500.0	90.00	0.00	7,788.0	2,805.4	-1,248.8	2,805.4	0.00	0.00	
10,600.0	90.00	0.00	7,788.0	2,905.4	-1,248.8	2,905.4	0.00	0.00	
10,700.0	90.00	0.00	7,788.0	3,005.4	-1,248.8	3,005.4	0.00	0.00	
10,800.0	90.00	0.00	7,788.0	3,105.4	-1,248.8	3,105.4	0.00	0.00	
10,900.0	90.00	0.00	7,788.0	3,205.4	-1,248.8	3,205.4	0.00	0.00	
11,000.0	90.00	0.00	7,788.0	3,305.4	-1,248.8	3,305.4	0.00	0.00	
11,100.0	90.00	0.00	7,788.0	3,405.4	-1,248.8	3,405.4	0.00	0.00	
11,200.0	90.00	0.00	7,788.0	3,505.4	-1,248.8	3,505.4	0.00	0.00	
11,300.0	90.00	0.00	7,788.0	3,605.4	-1,248.8	3,605.4	0.00	0.00	
11,400.0	90.00	0.00	7,788.0	3,705.4	-1,248.8	3,705.4	0.00	0.00	
11,500.0	90.00	0.00	7,788.0	3,805.4	-1,248.8	3,805.4	0.00	0.00	
11,600.0	90.00	0.00	7,788.0	3,905.4	-1,248.8	3,905.4	0.00	0.00	
11,700.0	90.00	0.00	7,788.0	4,005.4	-1,248.8	4,005.4	0.00	0.00	
11,800.0	90.00	0.00	7,788.0	4,105.4	-1,248.8	4,105.4	0.00	0.00	
11,900.0	90.00	0.00	7,788.0	4,205.4	-1,248.8	4,205.4	0.00	0.00	
12,000.0	90.00	0.00	7,788.0	4,305.4	-1,248.8	4,305.4	0.00	0.00	
12,100.0	90.00	0.00	7,788.0	4,405.4	-1,248.8	4,405.4	0.00	0.00	
12,200.0	90.00	0.00	7,788.0	4,505.4	-1,248.8	4,505.4	0.00	0.00	
12,300.0	90.00	0.00	7,788.0	4,605.4	-1,248.8	4,605.4	0.00	0.00	
12,400.0	90.00	0.00	7,788.0	4,705.4	-1,248.8	4,705.4	0.00	0.00	
12,500.0	90.00	0.00	7,788.0	4,805.4	-1,248.8	4,805.4	0.00	0.00	
12,600.0	90.00	0.00	7,788.0	4,905.4	-1,248.8	4,905.4	0.00	0.00	
12,700.0	90.00	0.00	7,788.0	5,005.4	-1,248.8	5,005.4	0.00	0.00	
12,800.0	90.00	0.00	7,788.0	5,105.4	-1,248.8	5,105.4	0.00	0.00	
12,900.0	90.00	0.00	7,788.0	5,205.4	-1,248.8	5,205.4	0.00	0.00	
13,000.0	90.00	0.00	7,788.0	5,305.4	-1,248.8	5,305.4	0.00	0.00	
13,100.0	90.00	0.00	7,788.0	5,405.4	-1,248.8	5,405.4	0.00	0.00	
13,200.0	90.00	0.00	7,788.0	5,505.4	-1,248.8	5,505.4	0.00	0.00	
13,300.0	90.00	0.00	7,788.0	5,605.4	-1,248.8	5,605.4	0.00	0.00	
13,400.0	90.00	0.00	7,788.0	5,705.4	-1,248.8	5,705.4	0.00	0.00	
13,500.0	90.00	0.00	7,788.0	5,805.4	-1,248.8	5,805.4	0.00	0.00	
13,600.0	90.00	0.00	7,788.0	5,905.4	-1,248.8	5,905.4	0.00	0.00	
13,700.0	90.00	0.00	7,788.0	6,005.4	-1,248.8	6,005.4	0.00	0.00	
13,800.0	90.00	0.00	7,788.0	6,105.4	-1,248.8	6,105.4	0.00	0.00	
13,900.0	90.00	0.00	7,788.0	6,205.4	-1,248.8	6,205.4	0.00	0.00	
14,000.0	90.00	0.00	7,788.0	6,305.4	-1,248.8	6,305.4	0.00	0.00	
14,100.0	90.00	0.00	7,788.0	6,405.4	-1,248.8	6,405.4	0.00	0.00	
14,200.0	90.00	0.00	7,788.0	6,505.4	-1,248.8	6,505.4	0.00	0.00	
14,300.0	90.00	0.00	7,788.0	6,605.4	-1,248.8	6,605.4	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site:	S29-T1N-R68W (Pratt/Waste Connections)	North Reference:	True
Well:	Waste Connections 3A-29H-M168	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
14,400.0	90.00	0.00	7,788.0	6,705.4	-1,248.8	6,705.4	0.00	0.00	
14,500.0	90.00	0.00	7,788.0	6,805.4	-1,248.8	6,805.4	0.00	0.00	
14,600.0	90.00	0.00	7,788.0	6,905.4	-1,248.8	6,905.4	0.00	0.00	
14,700.0	90.00	0.00	7,788.0	7,005.4	-1,248.8	7,005.4	0.00	0.00	
14,800.0	90.00	0.00	7,788.0	7,105.4	-1,248.8	7,105.4	0.00	0.00	
14,900.0	90.00	0.00	7,788.0	7,205.4	-1,248.8	7,205.4	0.00	0.00	
14,921.8	90.00	0.00	7,788.0	7,227.3	-1,248.8	7,227.3	0.00	0.00	TD at 14921.8 - Waste Connections 3A-29H-M1

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									
Waste Connections 3A-2	0.00	0.00	7,788.0	7,227.3	-1,248.8	1,257,300.66	3,129,811.09	40.038740	-105.036400
- plan hits target center									
- Point									

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
703.6	703.0	Fox Hills - BASE				
4,765.3	4,706.0	Sussex				
5,092.2	5,028.0	Sussex Marker				
5,460.8	5,391.0	Shannon				
6,790.0	6,700.0	Teepee Buttes (*if present)				
7,626.7	7,510.0	Sharon Springs				
7,697.8	7,568.0	Niobrara				
8,089.4	7,773.0	B Chalk				
8,153.6	7,784.0	B Marl				

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP @ 200'
1,200.2	1,195.1	-3.5	-87.0	EOB; Inc=10°
7,317.9	7,219.8	-45.7	-1,148.7	Start build/turn @ 7317' MD
8,221.8	7,788.0	527.3	-1,248.8	LP @ 7788' TVD; 90°
14,921.8	7,788.0	7,227.3	-1,248.8	TD at 14921.8

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S29-T1N-R68W (Pratt/Waste Connections)

Waste Connections 3A-29H-M168

Hz

Plan #1

Anticollision Report

30 May, 2013

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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	5/30/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	14,921.8	Plan #1 (Hz)	MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance		Separation	Warning
Offset Well - Wellbore - Design			Between Centres (ft)	Between Ellipses (ft)	Factor	
S29-T1N-R68W (Pratt/Waste Connections)						
COSTIGAN 0-6-20 (EXISTING) - ENCANA WELL - PLAN	12,739.8	7,805.8	145.8	39.9	1.377	Level 3, CC, ES, SF
COSTIGAN 0-8-20 (EXISTING) - ENCANA WELL - PLAN	11,516.0	7,999.4	145.7	45.3	1.451	Level 3, CC, ES, SF
COSTIGAN 13-20 (EXISTING) - ENCANA WELL - PLAN	13,533.9	7,760.2	313.6	192.8	2.597	CC, ES, SF
COSTIGAN 14-20 (EXISTING) - ENCANA WELL - PLAN	12,127.8	7,800.4	464.7	363.3	4.581	CC, ES
COSTIGAN 14-20 (EXISTING) - ENCANA WELL - PLAN	12,200.0	7,800.4	470.3	367.6	4.579	SF
COSTIGAN 23-20 (EXISTING) - ENCANA WELL - PLAN						Out of range
COSTIGAN 24-20 (EXISTING) - ENCANA WELL - ENCA						Out of range
COSTIGAN 33-20 (EXISTING) - ENCANA WELL - ENCA						Out of range
COSTIGAN 34-20 (EXISTING) - ENCANA WELL - PLAN						Out of range
COSTIGAN 43-20 (EXISTING) - ENCANA WELL - PLAN						Out of range
COSTIGAN 4-6-20 (EXISTING) - ENCANA WELL - PLAN						Out of range
COSTIGAN 6-8-20 (EXISTING) - ENCANA WELL - PLAN						Out of range
COSTIGAN 8-6-20 (EXISTING) - ENCANA WELL - SUR						Out of range
COSTIGAN 8-8-20 (EXISTING) - ENCANA WELL - SUR						Out of range
COSTIGAN E UNIT 1 (EXISTING) - ENCANA WELL - NO						Out of range
COSTIGAN H UNIT 1 (EXISTING) - VESSELS WELL - N						Out of range
EDWARD P COSTIGAN 1 (EXISTING) - ENCANA WELL						Out of range
M E DRIER 1 (EXISTING) - SYNERGY WELL - NO SUR						Out of range
PRATT 0-2-29 (EXISTING) - ENCANA WELL - SURVEY	10,196.2	7,888.1	101.9	34.0	1.501	CC, ES
PRATT 0-2-29 (EXISTING) - ENCANA WELL - SURVEY	10,200.0	7,888.2	102.0	34.0	1.501	SF
PRATT 1 (EXISTING) - SYNERGY WELL - NO SURVEY						Out of range
PRATT 12-29 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
PRATT 2 (EXISTING) - SYNERGY WELL - NO SURVEY	2,242.4	2,209.5	397.6	387.5	39.353	CC
PRATT 2 (EXISTING) - SYNERGY WELL - NO SURVEY	2,300.0	2,266.2	397.8	387.4	38.234	ES
PRATT 2 (EXISTING) - SYNERGY WELL - NO SURVEY	3,800.0	3,743.4	480.9	464.0	28.415	SF
PRATT 2-0-29 (EXISTING) - ENCANA WELL - SURVEY						Out of range
PRATT 21-29 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
PRATT 22-29 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
PRATT 2-4-29 (EXISTING) - ENCANA WELL - PLAN ON						Out of range
PRATT 29-3 (EXISTING) - SYNERGY WELL - NO SURV						Out of range
PRATT 4-2-29 (EXISTING) - ENCANA WELL - SURVEY						Out of range
Pratt 4B-29H-P168 - Hz - Plan #1						Out of range
Pratt 4C-29H-P168 - Hz - Plan #1						Out of range
Pratt 4D-29H-P168 - Hz - Plan #1						Out of range
Pratt 4E-29H-P168 - Hz - Plan #1						Out of range
Pratt 4F-29H-P168 - Hz - Plan #1						Out of range
Pratt 4G-29H-P168 - Hz - Plan #1						Out of range
PRATT F UNIT 1 (EXISTING) - ENCANA WELL - NO SU	11,008.0	7,739.0	256.6	181.8	3.429	CC, ES, SF
SRC PRATT 13-29D (EXISTING) - SYNERGY WELL - S	2,577.0	2,581.4	182.5	169.8	14.369	CC, ES
SRC PRATT 13-29D (EXISTING) - SYNERGY WELL - S	2,700.0	2,701.5	184.6	171.7	14.290	SF
SRC PRATT 14-29D (EXISTING) - SYNERGY WELL - S	1,357.9	1,314.2	480.2	474.9	90.225	CC, ES
SRC PRATT 14-29D (EXISTING) - SYNERGY WELL - S	1,700.0	1,613.5	496.2	489.2	70.584	SF
SRC PRATT 24-29 PD (EXISTING) - SYNERGY WELL -	443.7	436.0	462.3	460.8	305.651	CC
SRC PRATT 24-29 PD (EXISTING) - SYNERGY WELL -	900.0	887.1	462.7	459.0	122.404	ES
SRC PRATT 24-29 PD (EXISTING) - SYNERGY WELL -	1,400.0	1,344.2	490.6	483.8	71.519	SF
SRC PRATT 29HD (EXISTING) - SYNERGY WELL - PL	7,420.0	7,424.7	210.2	170.8	5.339	CC, ES
SRC PRATT 29HD (EXISTING) - SYNERGY WELL - PL	7,500.0	7,501.2	215.4	174.8	5.308	SF
SRC PRATT 29LD (EXISTING) - SYNERGY WELL - PLA	1,286.6	1,237.3	445.0	440.0	88.810	CC
SRC PRATT 29LD (EXISTING) - SYNERGY WELL - PLA	1,300.0	1,248.9	445.0	439.9	87.670	ES
SRC PRATT 29LD (EXISTING) - SYNERGY WELL - PLA	1,800.0	1,670.9	493.2	485.6	64.685	SF
SRC PRATT 29PD (EXISTING) - SYNERGY WELL - SU						Out of range
SRC PRATT 29QD (EXISTING) - SYNERGY WELL - PL	200.0	189.0	466.2	465.6	710.463	CC, ES
SRC PRATT 29QD (EXISTING) - SYNERGY WELL - PL	1,000.0	939.6	493.8	489.7	120.220	SF

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 Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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

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						
S29-T1N-R68W (Pratt/Waste Connections)						
SRC PRATT 29SD (EXISTING) - SYNERGY WELL - SU						Out of range
SRC PRATT 29TD (EXISTING) - SYNERGY WELL - SU						Out of range
SRC PRATT 29XD (EXISTING) - SYNERGY WELL - PLA						Out of range
SRC PRATT 31-29D (EXISTING) - SYNERGY WELL - S						Out of range
SRC PRATT 32-29D (EXISTING) - SYNERGY WELL - S						Out of range
SRC PRATT 33-29PD (EXISTING) - SYNERGY WELL -						Out of range
SRC PRATT 34-29D (EXISTING) - SYNERGY WELL - S						Out of range
SRC PRATT 41-29D (EXISTING) - SYNERGY WELL - S						Out of range
SRC PRATT 42-29D (EXISTING) - SYNERGY WELL - S						Out of range
SRC PRATT 43-29D (EXISTING) - SYNERGY WELL - S						Out of range
SRC PRATT 44-29D (EXISTING) - SYNERGY WELL - P						Out of range
Waste Connections 3B-29H-M168 - Hz - Plan #1	200.0	200.0	8.4	7.7	12.872	CC, ES
Waste Connections 3B-29H-M168 - Hz - Plan #1	14,728.8	15,516.1	390.0	183.4	1.887	SF
Waste Connections 3C-29H-M168 - Hz - Plan #1	200.0	200.0	19.6	19.0	30.035	CC, ES
Waste Connections 3C-29H-M168 - Hz - Plan #1	500.0	499.9	27.3	25.6	16.069	SF
Waste Connections 3D-29H-M168 - Hz - Plan #1	200.0	200.0	28.0	27.4	42.907	CC, ES
Waste Connections 3D-29H-M168 - Hz - Plan #1	800.0	800.5	54.3	51.6	19.754	SF
Waste Connections 3E-29H-M168 - Hz - Plan #1	200.0	200.0	39.2	38.6	60.070	CC, ES
Waste Connections 3E-29H-M168 - Hz - Plan #1	700.0	698.9	61.9	59.5	25.723	SF
Waste Connections 3F-29H-M168 - Hz - Plan #1	200.0	200.0	47.6	47.0	72.942	CC, ES
Waste Connections 3F-29H-M168 - Hz - Plan #1	700.0	697.3	74.7	72.3	30.847	SF
Waste Connections 3G-29H-M168 - Hz - Plan #1	166.3	167.3	58.8	58.3	109.534	CC
Waste Connections 3G-29H-M168 - Hz - Plan #1	200.0	201.0	58.8	58.2	89.865	ES
Waste Connections 3G-29H-M168 - Hz - Plan #1	700.0	694.5	96.2	93.8	39.771	SF
WILLIAM H PELTIER 1 (EXISTING) - VESSELS WELL -						Out of range
WILLIAM H PELTIER 2 (EXISTING) - ENCANA WELL - P						Out of range
WILLIAM H PELTIER 2 (EXISTING) - ENCANA WELL - S						Out of range
WILLIAM PELTIER 11-20 (EXISTING) - ENCANA WELL						Out of range
WILLIAM PELTIER 12-20 (EXISTING) - ENCANA WELL	14,885.4	7,810.0	291.2	149.0	2.048	CC, ES
WILLIAM PELTIER 12-20 (EXISTING) - ENCANA WELL	14,900.0	7,810.0	291.6	149.1	2.047	SF
WILLIAM PELTIER 12-20 (EXISTING) - ENCANA WELL	14,921.8	7,807.6	274.6	138.6	2.020	CC, ES, SF
WILLIAM PELTIER 1A-20H (EXISTING) - ENCANA WEL	14,921.8	12,516.0	207.1	78.7	1.613	CC, ES, SF
WILLIAM PELTIER 2-0-20 (EXISTING) - ENCANA WELL						Out of range
WILLIAM PELTIER 22-20 (EXISTING) - ENCANA WELL						Out of range
WILLIAM PELTIER 2-4-20 (EXISTING) - ENCANA WELL						Out of range
WILLIAM PELTIER 4-2-20 (EXISTING) - ENCANA WELL						Out of range

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 S29-T1N-R68W (Pratt/Waste Connections) - COSTIGAN 0-6-20 (EXISTING) - ENCANA WELL - PLAN													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		
12,300.0	7,788.0	7,805.8	7,723.0	86.4	22.3	-90.00	5,045.2	-1,394.5	463.3	365.1	98.25	4.716		
12,400.0	7,788.0	7,805.8	7,723.0	88.1	22.3	-90.00	5,045.2	-1,394.5	369.7	269.7	99.98	3.698		
12,500.0	7,788.0	7,805.8	7,723.0	89.8	22.3	-90.00	5,045.2	-1,394.5	280.6	178.9	101.72	2.759		
12,600.0	7,788.0	7,805.8	7,723.0	91.5	22.3	-90.00	5,045.2	-1,394.5	201.9	98.5	103.45	1.952		
12,700.0	7,788.0	7,805.8	7,723.0	93.2	22.3	-90.00	5,045.2	-1,394.5	151.1	45.9	105.19	1.436 Level 3		
12,739.8	7,788.0	7,805.8	7,723.0	93.8	22.3	-90.00	5,045.2	-1,394.5	145.8	39.9	105.88	1.377 Level 3, CC, ES, SF		
12,800.0	7,788.0	7,805.8	7,723.0	94.8	22.3	-90.00	5,045.2	-1,394.5	157.7	50.8	106.92	1.475 Level 3		
12,900.0	7,788.0	7,805.8	7,723.0	96.5	22.3	-90.00	5,045.2	-1,394.5	216.6	107.9	108.66	1.993		
13,000.0	7,788.0	7,805.8	7,723.0	98.2	22.3	-90.00	5,045.2	-1,394.5	298.3	187.9	110.39	2.702		
13,100.0	7,788.0	7,805.8	7,723.0	99.9	22.3	-90.00	5,045.2	-1,394.5	388.6	276.5	112.13	3.465		
13,200.0	7,788.0	7,805.8	7,723.0	101.6	22.3	-90.00	5,045.2	-1,394.5	482.7	368.9	113.87	4.239		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 S29-T1N-R68W (Pratt/Waste Connections) - COSTIGAN 0-8-20 (EXISTING) - ENCANA WELL - PLAN													Offset Site Error:	0.0 ft
Survey Program: 1000-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		
11,100.0	7,788.0	7,999.4	7,723.0	66.6	34.7	-90.00	3,821.5	-1,394.5	440.8	347.6	93.25	4.727		
11,200.0	7,788.0	7,999.4	7,723.0	68.3	34.7	-90.00	3,821.5	-1,394.5	348.0	253.1	94.97	3.665		
11,300.0	7,788.0	7,999.4	7,723.0	69.9	34.7	-90.00	3,821.5	-1,394.5	260.6	163.9	96.68	2.695		
11,400.0	7,788.0	7,999.4	7,723.0	71.5	34.7	-90.00	3,821.5	-1,394.5	186.3	87.9	98.40	1.893		
11,500.0	7,788.0	7,999.4	7,723.0	73.2	34.7	-90.00	3,821.5	-1,394.5	146.6	46.5	100.13	1.464	Level 3	
11,516.0	7,788.0	7,999.4	7,723.0	73.4	34.7	-90.00	3,821.5	-1,394.5	145.7	45.3	100.40	1.451	Level 3, CC, ES, SF	
11,600.0	7,788.0	7,999.4	7,723.0	74.8	34.7	-90.00	3,821.5	-1,394.5	168.2	66.3	101.85	1.651		
11,700.0	7,788.0	7,999.4	7,723.0	76.4	34.7	-90.00	3,821.5	-1,394.5	234.7	131.1	103.57	2.266		
11,800.0	7,788.0	7,999.4	7,723.0	78.1	34.7	-90.00	3,821.5	-1,394.5	319.2	213.9	105.30	3.031		
11,900.0	7,788.0	7,999.4	7,723.0	79.8	34.7	-90.00	3,821.5	-1,394.5	410.7	303.7	107.03	3.837		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 S29-T1N-R68W (Pratt/Waste Connections) - COSTIGAN 13-20 (EXISTING) - ENCANA WELL - PLAN O													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 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		
13,200.0	7,788.0	7,760.2	7,723.0	101.6	18.0	90.00	5,839.4	-935.2	458.1	343.1	114.94	3.985	CC, ES, SF	
13,300.0	7,788.0	7,760.2	7,723.0	103.3	18.0	90.00	5,839.4	-935.2	391.2	274.5	116.68	3.353		
13,400.0	7,788.0	7,760.2	7,723.0	105.0	18.0	90.00	5,839.4	-935.2	341.0	222.5	118.42	2.879		
13,500.0	7,788.0	7,760.2	7,723.0	106.7	18.0	90.00	5,839.4	-935.2	315.4	195.2	120.16	2.625		
13,533.9	7,788.0	7,760.2	7,723.0	107.3	18.0	90.00	5,839.4	-935.2	313.6	192.8	120.75	2.597		
13,600.0	7,788.0	7,760.2	7,723.0	108.4	18.0	90.00	5,839.4	-935.2	320.4	198.5	121.90	2.629		
13,700.0	7,788.0	7,760.2	7,723.0	110.1	18.0	90.00	5,839.4	-935.2	354.8	231.2	123.64	2.870		
13,800.0	7,788.0	7,760.2	7,723.0	111.8	18.0	90.00	5,839.4	-935.2	411.2	285.8	125.38	3.280		
13,900.0	7,788.0	7,760.2	7,723.0	113.5	18.0	90.00	5,839.4	-935.2	482.0	354.9	127.12	3.792		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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													S29-T1N-R68W (Pratt/Waste Connections) - COSTIGAN 14-20 (EXISTING) - ENCANA WELL - PLAN O		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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor							
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)								
12,000.0	7,788.0	7,800.4	7,723.0	81.4	21.6	90.00	4,433.2	-784.0	482.0	382.7	99.25	4.856						
12,100.0	7,788.0	7,800.4	7,723.0	83.1	21.6	90.00	4,433.2	-784.0	465.6	364.6	100.98	4.611						
12,127.8	7,788.0	7,800.4	7,723.0	83.6	21.6	90.00	4,433.2	-784.0	464.7	363.3	101.46	4.581 CC, ES						
12,200.0	7,788.0	7,800.4	7,723.0	84.8	21.6	90.00	4,433.2	-784.0	470.3	367.6	102.71	4.579 SF						
12,300.0	7,788.0	7,800.4	7,723.0	86.4	21.6	90.00	4,433.2	-784.0	495.6	391.2	104.44	4.745						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 S29-T1N-R68W (Pratt/Waste Connections) - PRATT 0-2-29 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error: 0.0 ft
Survey Program: 41-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
9,800.0	7,788.0	7,877.0	7,754.5	46.5	21.1	-84.71	2,501.4	-1,350.9	409.0	347.9	61.12	6.691	
9,900.0	7,788.0	7,879.8	7,757.4	47.9	21.1	-86.28	2,501.4	-1,350.8	313.2	250.3	62.88	4.981	
10,000.0	7,788.0	7,882.6	7,760.2	49.4	21.1	-87.86	2,501.5	-1,350.8	221.1	156.5	64.60	3.422	
10,100.0	7,788.0	7,885.4	7,763.0	50.9	21.1	-89.43	2,501.6	-1,350.7	140.2	73.9	66.30	2.114	
10,196.2	7,788.0	7,888.1	7,765.7	52.4	21.1	-90.95	2,501.7	-1,350.7	101.9	34.0	67.90	1.501 CC, ES	
10,200.0	7,788.0	7,888.2	7,765.8	52.4	21.1	-91.01	2,501.7	-1,350.7	102.0	34.0	67.96	1.501 SF	
10,300.0	7,788.0	7,891.0	7,768.6	54.0	21.1	-92.57	2,501.7	-1,350.7	145.4	75.9	69.58	2.090	
10,400.0	7,788.0	7,893.8	7,771.4	55.5	21.1	-94.13	2,501.8	-1,350.6	227.8	156.6	71.15	3.201	
10,500.0	7,788.0	7,896.6	7,774.1	57.1	21.1	-95.69	2,501.9	-1,350.6	320.3	247.6	72.67	4.407	
10,600.0	7,788.0	7,899.3	7,776.9	58.6	21.1	-97.23	2,502.0	-1,350.5	416.3	342.1	74.15	5.614	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 S29-T1N-R68W (Pratt/Waste Connections) - PRATT 2 (EXISTING) - SYNERGY WELL - NO SURVEYS														Offset Site Error:	0.0 ft
Survey Program: 8540-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	-148.29	-408.0	-252.1	479.7						
100.0	100.0	88.0	88.0	0.2	0.2	-148.29	-408.0	-252.1	479.6	479.3	0.31	1,569.139			
200.0	200.0	188.0	188.0	0.3	0.3	-148.29	-408.0	-252.1	479.6	478.9	0.65	732.521			
300.0	300.0	288.0	288.0	0.5	0.5	-56.10	-408.0	-252.1	479.1	478.1	1.00	477.011			
400.0	400.0	388.0	388.0	0.7	0.7	-56.38	-408.0	-252.1	477.6	476.3	1.36	352.007			
500.0	499.9	487.9	487.9	0.9	0.9	-56.83	-408.0	-252.1	475.2	473.5	1.71	277.108			
600.0	599.7	587.7	587.7	1.1	1.0	-57.48	-408.0	-252.1	471.9	469.8	2.08	226.724			
700.0	699.4	687.4	687.4	1.3	1.2	-58.33	-408.0	-252.1	467.7	465.3	2.46	190.185			
800.0	798.9	786.9	786.9	1.5	1.4	-59.38	-408.0	-252.1	462.8	459.9	2.85	162.260			
900.0	898.3	886.3	886.3	1.8	1.5	-60.64	-408.0	-252.1	457.1	453.8	3.26	140.092			
1,000.0	997.4	985.4	985.4	2.0	1.7	-62.13	-408.0	-252.1	450.8	447.1	3.70	121.997			
1,100.0	1,096.3	1,084.3	1,084.3	2.3	1.9	-63.86	-408.0	-252.1	444.0	439.9	4.15	106.921			
1,200.0	1,194.9	1,182.9	1,182.9	2.7	2.1	-65.85	-408.0	-252.1	436.9	432.3	4.64	94.177			
1,300.0	1,293.4	1,281.4	1,281.4	3.0	2.2	-67.94	-408.0	-252.1	430.0	424.9	5.14	83.669			
1,400.0	1,391.9	1,379.9	1,379.9	3.3	2.4	-70.08	-408.0	-252.1	423.7	418.1	5.65	74.994			
1,500.0	1,490.4	1,478.4	1,478.4	3.7	2.6	-72.29	-408.0	-252.1	418.0	411.9	6.17	67.766			
1,600.0	1,588.9	1,576.9	1,576.9	4.0	2.8	-74.55	-408.0	-252.1	413.0	406.3	6.69	61.697			
1,700.0	1,687.3	1,675.3	1,675.3	4.4	2.9	-76.87	-408.0	-252.1	408.7	401.4	7.22	56.567			
1,800.0	1,785.8	1,773.8	1,773.8	4.7	3.1	-79.23	-408.0	-252.1	405.0	397.2	7.76	52.209			
1,900.0	1,884.3	1,872.3	1,872.3	5.1	3.3	-81.62	-408.0	-252.1	402.1	393.8	8.29	48.491			
2,000.0	1,982.8	1,970.8	1,970.8	5.4	3.4	-84.05	-408.0	-252.1	399.9	391.0	8.83	45.310			
2,100.0	2,081.3	2,069.3	2,069.3	5.8	3.6	-86.50	-408.0	-252.1	398.4	389.1	9.36	42.583			
2,200.0	2,179.7	2,167.7	2,167.7	6.1	3.8	-88.96	-408.0	-252.1	397.7	387.8	9.88	40.243			
2,242.4	2,221.5	2,209.5	2,209.5	6.2	3.9	-90.00	-408.0	-252.1	397.6	387.5	10.10	39.353 CC			
2,300.0	2,278.2	2,266.2	2,266.2	6.4	4.0	-91.42	-408.0	-252.1	397.8	387.4	10.40	38.234 ES			
2,400.0	2,376.7	2,364.7	2,364.7	6.8	4.1	-93.88	-408.0	-252.1	398.6	387.7	10.92	36.512			
2,500.0	2,475.2	2,463.2	2,463.2	7.1	4.3	-96.32	-408.0	-252.1	400.2	388.7	11.42	35.038			
2,600.0	2,573.7	2,561.7	2,561.7	7.5	4.5	-98.74	-408.0	-252.1	402.5	390.6	11.91	33.779			
2,700.0	2,672.1	2,660.1	2,660.1	7.9	4.6	-101.13	-408.0	-252.1	405.5	393.1	12.40	32.709			
2,800.0	2,770.6	2,758.6	2,758.6	8.2	4.8	-103.49	-408.0	-252.1	409.3	396.4	12.87	31.804			
2,900.0	2,869.1	2,857.1	2,857.1	8.6	5.0	-105.79	-408.0	-252.1	413.7	400.4	13.33	31.044			
3,000.0	2,967.6	2,955.6	2,955.6	8.9	5.2	-108.05	-408.0	-252.1	418.9	405.1	13.77	30.410			
3,100.0	3,066.1	3,054.1	3,054.1	9.3	5.3	-110.25	-408.0	-252.1	424.6	410.4	14.21	29.889			
3,200.0	3,164.5	3,152.5	3,152.5	9.6	5.5	-112.39	-408.0	-252.1	431.0	416.4	14.63	29.465			
3,300.0	3,263.0	3,251.0	3,251.0	10.0	5.7	-114.46	-408.0	-252.1	438.0	423.0	15.04	29.128			
3,400.0	3,361.5	3,349.5	3,349.5	10.3	5.8	-116.47	-408.0	-252.1	445.6	430.1	15.44	28.867			
3,500.0	3,460.0	3,448.0	3,448.0	10.7	6.0	-118.41	-408.0	-252.1	453.7	437.9	15.82	28.673			
3,600.0	3,558.5	3,546.5	3,546.5	11.0	6.2	-120.28	-408.0	-252.1	462.3	446.1	16.20	28.537			
3,700.0	3,656.9	3,644.9	3,644.9	11.4	6.4	-122.09	-408.0	-252.1	471.4	454.8	16.57	28.454			
3,800.0	3,755.4	3,743.4	3,743.4	11.7	6.5	-123.82	-408.0	-252.1	480.9	464.0	16.93	28.415 SF			
3,900.0	3,853.9	3,841.9	3,841.9	12.1	6.7	-125.49	-408.0	-252.1	490.9	473.6	17.28	28.415			

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 Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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													S29-T1N-R68W (Pratt/Waste Connections) - PRATT F UNIT 1 (EXISTING) - ENCANA WELL - NO SUR		Offset Site Error:		0.0 ft	
Survey Program:													8585-MWD		Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance											
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)								
10,600.0	7,788.0	7,739.0	7,739.0	58.6	13.5	90.00	3,313.5	-992.2	482.0	414.2	67.86	7.103						
10,700.0	7,788.0	7,739.0	7,739.0	60.2	13.5	90.00	3,313.5	-992.2	400.9	331.4	69.56	5.764						
10,800.0	7,788.0	7,739.0	7,739.0	61.8	13.5	90.00	3,313.5	-992.2	330.3	259.1	71.27	4.635						
10,900.0	7,788.0	7,739.0	7,739.0	63.4	13.5	90.00	3,313.5	-992.2	278.4	205.4	72.97	3.815						
11,000.0	7,788.0	7,739.0	7,739.0	65.0	13.5	90.00	3,313.5	-992.2	256.7	182.0	74.69	3.437						
11,008.0	7,788.0	7,739.0	7,739.0	65.1	13.5	90.00	3,313.5	-992.2	256.6	181.8	74.82	3.429	CC, ES, SF					
11,100.0	7,788.0	7,739.0	7,739.0	66.6	13.5	90.00	3,313.5	-992.2	272.6	196.2	76.40	3.568						
11,200.0	7,788.0	7,739.0	7,739.0	68.3	13.5	90.00	3,313.5	-992.2	320.5	242.3	78.12	4.102						
11,300.0	7,788.0	7,739.0	7,739.0	69.9	13.5	90.00	3,313.5	-992.2	388.7	308.9	79.83	4.869						
11,400.0	7,788.0	7,739.0	7,739.0	71.5	13.5	90.00	3,313.5	-992.2	468.5	386.9	81.55	5.745						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 S29-T1N-R68W (Pratt/Waste Connections) - SRC PRATT 13-29D (EXISTING) - SYNERGY WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 248-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	-147.11	-408.4	-264.1	486.3					
100.0	100.0	98.1	98.1	0.2	0.2	-147.07	-408.5	-264.6	486.7	486.4	0.32	1,532.502		
200.0	200.0	194.2	194.2	0.3	0.3	-146.96	-409.0	-266.0	487.9	487.3	0.65	745.357		
300.0	300.0	297.9	297.9	0.5	0.5	-54.57	-409.5	-268.3	489.1	488.1	1.01	486.175		
400.0	400.0	412.6	412.5	0.7	0.7	-54.54	-407.4	-270.3	487.0	485.6	1.39	349.839		
500.0	499.9	528.9	528.5	0.9	1.0	-54.24	-399.7	-273.8	480.6	478.7	1.82	264.595		
600.0	599.7	637.8	636.5	1.1	1.2	-53.51	-387.2	-279.9	470.5	468.2	2.28	206.287		
700.0	699.4	748.5	745.5	1.3	1.6	-52.37	-369.8	-288.3	457.2	454.4	2.81	162.550		
800.0	798.9	851.7	846.5	1.5	2.0	-51.11	-350.3	-296.8	440.9	437.5	3.38	130.638		
900.0	898.3	950.8	943.0	1.8	2.4	-49.71	-330.4	-306.6	423.7	419.8	3.97	106.830		
1,000.0	997.4	1,051.8	1,041.2	2.0	2.8	-48.27	-309.0	-316.4	404.7	400.1	4.59	88.104		
1,100.0	1,096.3	1,147.4	1,134.0	2.3	3.2	-46.82	-288.2	-326.3	384.9	379.7	5.23	73.585		
1,200.0	1,194.9	1,243.4	1,227.1	2.7	3.7	-45.33	-267.4	-336.8	364.7	358.8	5.89	61.904		
1,300.0	1,293.4	1,338.1	1,319.0	3.0	4.1	-43.59	-247.0	-347.6	344.5	338.0	6.56	52.520		
1,400.0	1,391.9	1,431.7	1,409.7	3.3	4.5	-41.59	-227.3	-359.3	325.9	318.6	7.23	45.051		
1,500.0	1,490.4	1,527.8	1,502.8	3.7	5.0	-39.17	-207.1	-372.5	308.6	300.7	7.92	38.979		
1,600.0	1,588.9	1,626.3	1,598.2	4.0	5.4	-36.43	-186.4	-385.9	291.8	283.2	8.59	33.970		
1,700.0	1,687.3	1,724.9	1,693.7	4.4	5.9	-33.43	-165.8	-398.8	275.6	266.3	9.24	29.810		
1,800.0	1,785.8	1,823.6	1,789.3	4.7	6.4	-29.97	-144.5	-411.7	259.6	249.8	9.87	26.308		
1,900.0	1,884.3	1,922.7	1,885.1	5.1	6.8	-26.06	-123.0	-424.1	244.2	233.8	10.45	23.380		
2,000.0	1,982.8	2,021.6	1,981.0	5.4	7.3	-21.69	-101.3	-435.7	229.3	218.3	10.98	20.893		
2,100.0	2,081.3	2,119.1	2,075.2	5.8	7.8	-16.65	-79.0	-447.0	215.5	204.0	11.44	18.842		
2,200.0	2,179.7	2,215.9	2,168.7	6.1	8.2	-11.00	-56.9	-458.3	203.6	191.8	11.81	17.237		
2,300.0	2,278.2	2,312.9	2,262.7	6.4	8.7	-4.94	-35.3	-469.6	194.1	182.0	12.11	16.023		
2,400.0	2,376.7	2,409.3	2,355.9	6.8	9.1	1.58	-14.0	-481.0	187.2	174.8	12.36	15.140		
2,500.0	2,475.2	2,506.7	2,450.1	7.1	9.6	8.76	8.4	-492.8	183.4	170.9	12.56	14.598		
2,577.0	2,551.0	2,581.4	2,522.3	7.4	10.0	14.33	25.2	-501.7	182.5	169.8	12.70	14.369 CC, ES		
2,600.0	2,573.7	2,603.8	2,543.9	7.5	10.1	15.96	30.2	-504.4	182.5	169.8	12.74	14.329		
2,700.0	2,672.1	2,701.5	2,638.5	7.9	10.5	22.99	51.6	-516.2	184.6	171.7	12.92	14.290 SF		
2,800.0	2,770.6	2,799.3	2,733.2	8.2	11.0	29.82	73.0	-527.7	189.3	176.2	13.10	14.442		
2,900.0	2,869.1	2,897.3	2,828.3	8.6	11.4	36.23	94.2	-539.1	196.2	182.9	13.31	14.736		
3,000.0	2,967.6	2,994.4	2,922.4	8.9	11.9	42.10	115.2	-550.3	205.4	191.8	13.57	15.136		
3,100.0	3,066.1	3,091.6	3,016.6	9.3	12.3	47.41	136.1	-561.6	216.7	202.8	13.89	15.607		
3,200.0	3,164.5	3,189.7	3,111.8	9.6	12.8	52.24	157.3	-572.9	229.7	215.4	14.29	16.074		
3,300.0	3,263.0	3,289.0	3,208.2	10.0	13.2	56.58	178.0	-584.0	243.4	228.6	14.78	16.467		
3,400.0	3,361.5	3,384.3	3,300.8	10.3	13.7	60.29	198.1	-594.8	258.4	243.1	15.35	16.838		
3,500.0	3,460.0	3,478.1	3,391.6	10.7	14.1	63.57	218.7	-605.7	275.6	259.6	15.98	17.250		
3,600.0	3,558.5	3,574.4	3,484.7	11.0	14.6	66.51	240.7	-617.6	294.5	277.9	16.66	17.677		
3,700.0	3,656.9	3,675.4	3,582.5	11.4	15.1	69.34	263.1	-629.0	313.2	295.8	17.41	17.988		
3,800.0	3,755.4	3,770.6	3,674.7	11.7	15.5	71.75	284.3	-639.4	332.5	314.3	18.17	18.297		
3,900.0	3,853.9	3,865.1	3,766.0	12.1	16.0	73.68	305.5	-651.2	352.9	334.0	18.92	18.651		
4,000.0	3,952.4	3,960.3	3,857.8	12.4	16.4	75.36	327.5	-663.6	374.5	354.8	19.67	19.034		
4,100.0	4,050.9	4,063.9	3,957.8	12.8	16.9	77.00	351.1	-677.0	396.0	375.6	20.47	19.352		
4,200.0	4,149.3	4,171.8	4,062.7	13.1	17.4	78.60	373.0	-689.7	415.1	393.9	21.28	19.509		
4,300.0	4,247.8	4,280.8	4,169.1	13.5	17.8	80.20	393.1	-701.1	432.5	410.3	22.11	19.559		
4,400.0	4,346.3	4,394.1	4,280.6	13.8	18.2	81.86	410.8	-711.5	446.9	424.0	22.97	19.456		
4,500.0	4,444.8	4,505.2	4,390.5	14.2	18.5	83.48	424.8	-720.2	458.5	434.7	23.83	19.244		
4,600.0	4,543.3	4,612.4	4,496.8	14.5	18.8	85.11	436.2	-727.3	468.3	443.6	24.67	18.982		
4,700.0	4,641.7	4,721.3	4,605.1	14.9	19.0	86.90	445.8	-732.5	476.5	451.0	25.54	18.660		
4,800.0	4,740.2	4,828.7	4,712.3	15.2	19.2	88.76	453.1	-736.2	483.0	456.6	26.40	18.292		
4,900.0	4,838.7	4,934.2	4,817.5	15.6	19.4	90.54	458.8	-739.7	488.4	461.2	27.25	17.926		
5,000.0	4,937.2	5,046.3	4,929.5	16.0	19.6	92.57	462.7	-741.9	492.5	464.3	28.11	17.517		

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 Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
S29-T1N-R68W (Pratt/Waste Connections) - SRC PRATT 13-29D (EXISTING) - SYNERGY WELL - SU												Offset Well Error:	0.0 ft
Survey Program: 248-MWD													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	+E/-W	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)			
5,100.0	5,035.7	5,148.0	5,031.2	16.3	19.7	94.48	464.3	-743.0	495.1	466.2	28.94	17.111	
5,200.0	5,134.1	5,249.1	5,132.3	16.7	19.8	96.25	465.4	-745.1	497.8	468.1	29.73	16.743	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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													S29-T1N-R68W (Pratt/Waste Connections) - SRC PRATT 14-29D (EXISTING) - SYNERGY WELL - SU		Offset Site Error:		0.0 ft	
Survey Program: 126-MWD															Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance											
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)								
0.0	0.0	0.0	0.0	0.0	0.0	-145.15	-408.7	-284.6	498.0									
100.0	100.0	94.7	94.7	0.2	0.2	-145.17	-409.3	-284.8	498.7	498.4	0.30	1,650.471						
800.0	798.9	779.3	779.0	1.5	1.4	-55.36	-422.5	-297.8	498.9	496.1	2.81	177.511						
900.0	898.3	878.7	878.3	1.8	1.6	-56.34	-425.6	-300.8	496.7	493.5	3.22	154.401						
1,000.0	997.4	982.0	981.6	2.0	1.8	-57.55	-428.5	-303.8	493.5	489.8	3.65	135.152						
1,100.0	1,096.3	1,085.1	1,084.6	2.3	2.0	-59.07	-431.0	-305.5	488.7	484.6	4.11	118.951						
1,200.0	1,194.9	1,178.0	1,177.4	2.7	2.1	-60.67	-433.8	-307.1	483.7	479.1	4.58	105.711						
1,300.0	1,293.4	1,263.7	1,263.0	3.0	2.3	-62.07	-437.3	-310.3	480.7	475.6	5.04	95.283						
1,357.9	1,350.4	1,314.2	1,313.3	3.2	2.4	-62.83	-440.0	-313.2	480.2	474.9	5.32	90.225	CC, ES					
1,400.0	1,391.9	1,350.9	1,349.9	3.3	2.5	-63.39	-442.4	-315.3	480.4	474.9	5.53	86.953						
1,500.0	1,490.4	1,438.3	1,436.8	3.7	2.7	-64.72	-449.5	-321.2	483.0	477.0	6.02	80.286						
1,600.0	1,588.9	1,525.9	1,523.6	4.0	2.9	-65.96	-458.4	-328.4	488.3	481.8	6.52	74.912						
1,700.0	1,687.3	1,613.5	1,610.1	4.4	3.2	-67.01	-468.7	-337.7	496.2	489.2	7.03	70.584	SF					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 S29-T1N-R68W (Pratt/Waste Connections) - SRC PRATT 24-29 PD (EXISTING) - SYNERGY WELL - S													Offset Site Error:	0.0 ft
Survey Program: 248-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
0.0	0.0	2.1	2.1	0.0	0.0	-151.08	-409.1	-226.0	467.4					
100.0	100.0	104.6	104.6	0.2	0.2	-151.05	-408.7	-226.1	467.1	466.8	0.33	1,432.166		
200.0	200.0	207.1	207.1	0.3	0.3	-150.98	-407.7	-226.2	466.3	465.6	0.67	694.340		
300.0	300.0	308.5	308.5	0.5	0.5	-58.81	-406.6	-225.5	464.5	463.5	1.02	456.013		
400.0	400.0	398.5	398.4	0.7	0.7	-59.51	-407.7	-222.1	462.5	461.2	1.36	339.902		
443.7	443.7	436.0	435.8	0.8	0.8	-59.97	-409.3	-220.2	462.3	460.8	1.51	305.651 CC		
500.0	499.9	487.9	487.5	0.9	0.9	-60.78	-412.6	-217.0	462.5	460.8	1.73	267.410		
600.0	599.7	583.9	582.8	1.1	1.1	-62.72	-420.4	-209.0	463.3	461.2	2.16	214.883		
700.0	699.4	687.1	684.9	1.3	1.4	-65.40	-430.0	-197.3	463.9	461.3	2.65	174.758		
800.0	798.9	791.5	787.8	1.5	1.7	-68.66	-439.1	-182.2	463.3	460.1	3.21	144.449		
887.7	886.0	875.6	870.6	1.7	2.0	-71.62	-446.2	-168.5	462.7	459.0	3.71	124.715		
900.0	898.3	887.1	881.8	1.8	2.1	-72.05	-447.2	-166.5	462.7	459.0	3.78	122.404 ES		
1,000.0	997.4	983.0	975.8	2.0	2.4	-75.73	-455.7	-149.9	463.7	459.4	4.37	106.022		
1,100.0	1,096.3	1,076.9	1,068.1	2.3	2.8	-79.43	-463.7	-134.0	466.3	461.3	4.97	93.737		
1,200.0	1,194.9	1,168.8	1,158.2	2.7	3.1	-83.18	-472.0	-118.3	471.2	465.6	5.60	84.068		
1,300.0	1,293.4	1,259.0	1,246.1	3.0	3.5	-87.22	-480.7	-100.2	479.1	472.8	6.25	76.689		
1,400.0	1,391.9	1,344.2	1,328.8	3.3	3.9	-91.11	-489.4	-81.3	490.6	483.8	6.86	71.519 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 S29-T1N-R68W (Pratt/Waste Connections) - SRC PRATT 29HD (EXISTING) - SYNERGY WELL - PLA													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		
900.0	898.3	886.3	886.3	1.8	1.5	-53.22	-408.4	-324.3	494.7	491.5	3.24	152.877		
1,000.0	997.4	985.4	985.4	2.0	1.7	-54.51	-408.4	-324.3	487.0	483.3	3.66	133.177		
1,100.0	1,096.3	1,079.9	1,079.8	2.3	1.9	-55.82	-408.1	-325.4	478.9	474.8	4.09	117.037		
1,200.0	1,194.9	1,174.0	1,173.9	2.7	2.1	-56.97	-407.2	-329.5	471.1	466.5	4.55	103.456		
1,300.0	1,293.4	1,268.7	1,268.4	3.0	2.2	-57.83	-405.6	-336.6	464.0	459.0	5.04	92.152		
1,400.0	1,391.9	1,363.9	1,363.0	3.3	2.4	-58.33	-403.3	-346.9	458.0	452.5	5.54	82.691		
1,500.0	1,490.4	1,459.4	1,457.4	3.7	2.7	-58.46	-400.3	-360.2	453.0	447.0	6.07	74.648		
1,600.0	1,588.9	1,554.9	1,551.5	4.0	2.9	-58.21	-396.7	-376.6	449.0	442.4	6.63	67.735		
1,700.0	1,687.3	1,650.3	1,644.7	4.4	3.3	-57.56	-392.3	-396.1	446.0	438.7	7.22	61.773		
1,800.0	1,785.8	1,747.8	1,739.5	4.7	3.6	-56.55	-387.2	-418.6	443.9	436.1	7.84	56.648		
1,900.0	1,884.3	1,847.4	1,836.2	5.1	4.0	-55.46	-382.0	-441.9	442.1	433.7	8.47	52.208		
2,000.0	1,982.8	1,947.1	1,932.9	5.4	4.4	-54.37	-376.8	-465.3	440.5	431.4	9.11	48.381		
2,100.0	2,081.3	2,046.7	2,029.6	5.8	4.8	-53.26	-371.5	-488.6	439.1	429.3	9.74	45.074		
2,200.0	2,179.7	2,146.3	2,126.3	6.1	5.2	-52.15	-366.3	-512.0	437.8	427.4	10.37	42.204		
2,300.0	2,278.2	2,245.9	2,223.0	6.4	5.6	-51.04	-361.0	-535.3	436.6	425.6	11.00	39.703		
2,400.0	2,376.7	2,345.6	2,319.7	6.8	6.1	-49.92	-355.8	-558.7	435.7	424.1	11.61	37.512		
2,500.0	2,475.2	2,445.2	2,416.4	7.1	6.5	-48.79	-350.6	-582.0	434.9	422.7	12.22	35.586		
2,600.0	2,573.7	2,544.8	2,513.1	7.5	7.0	-47.66	-345.3	-605.4	434.3	421.5	12.82	33.885		
2,700.0	2,672.1	2,644.5	2,609.9	7.9	7.4	-46.53	-340.1	-628.7	433.8	420.4	13.40	32.378		
2,800.0	2,770.6	2,744.1	2,706.6	8.2	7.8	-45.40	-334.9	-652.1	433.5	419.6	13.97	31.039		
2,900.0	2,869.1	2,843.7	2,803.3	8.6	8.3	-44.26	-329.6	-675.4	433.4	418.9	14.52	29.846		
2,913.1	2,882.0	2,856.8	2,815.9	8.6	8.3	-44.11	-328.9	-678.5	433.4	418.8	14.59	29.700		
3,000.0	2,967.6	2,943.3	2,900.0	8.9	8.7	-43.13	-324.4	-698.8	433.5	418.4	15.06	28.780		
3,100.0	3,066.1	3,043.0	2,996.7	9.3	9.2	-41.99	-319.1	-722.1	433.7	418.1	15.59	27.826		
3,200.0	3,164.5	3,142.6	3,093.4	9.6	9.6	-40.86	-313.9	-745.5	434.1	418.0	16.10	26.971		
3,300.0	3,263.0	3,242.2	3,190.1	10.0	10.1	-39.73	-308.7	-768.8	434.7	418.1	16.59	26.204		
3,400.0	3,361.5	3,341.9	3,286.8	10.3	10.5	-38.61	-303.4	-792.2	435.5	418.4	17.07	25.515		
3,500.0	3,460.0	3,441.5	3,383.6	10.7	11.0	-37.48	-298.2	-815.5	436.4	418.8	17.53	24.896		
3,600.0	3,558.5	3,541.1	3,480.3	11.0	11.5	-36.37	-292.9	-838.9	437.5	419.5	17.97	24.340		
3,700.0	3,656.9	3,640.7	3,577.0	11.4	11.9	-35.26	-287.7	-862.2	438.7	420.3	18.40	23.840		
3,800.0	3,755.4	3,740.4	3,673.7	11.7	12.4	-34.15	-282.5	-885.6	440.1	421.3	18.82	23.391		
3,900.0	3,853.9	3,840.0	3,770.4	12.1	12.8	-33.05	-277.2	-908.9	441.7	422.5	19.21	22.989		
4,000.0	3,952.4	3,939.6	3,867.1	12.4	13.3	-31.97	-272.0	-932.3	443.4	423.8	19.60	22.629		
4,100.0	4,050.9	4,039.2	3,963.8	12.8	13.7	-30.89	-266.7	-955.6	445.3	425.4	19.96	22.308		
4,200.0	4,149.3	4,138.9	4,060.5	13.1	14.2	-29.82	-261.5	-979.0	447.4	427.1	20.32	22.021		
4,300.0	4,247.8	4,238.5	4,157.2	13.5	14.6	-28.76	-256.3	-1,002.3	449.6	428.9	20.66	21.767		
4,400.0	4,346.3	4,338.1	4,254.0	13.8	15.1	-27.71	-251.0	-1,025.7	452.0	431.0	20.98	21.542		
4,500.0	4,444.8	4,437.8	4,350.7	14.2	15.6	-26.67	-245.8	-1,049.0	454.5	433.2	21.29	21.343		
4,600.0	4,543.3	4,537.4	4,447.4	14.5	16.0	-25.64	-240.5	-1,072.4	457.2	435.6	21.60	21.169		
4,700.0	4,641.7	4,637.0	4,544.1	14.9	16.5	-24.63	-235.3	-1,095.7	460.0	438.1	21.88	21.018		
4,800.0	4,740.2	4,736.6	4,640.8	15.2	16.9	-23.62	-230.1	-1,119.1	462.9	440.8	22.16	20.887		
4,900.0	4,838.7	4,836.3	4,737.5	15.6	17.4	-22.63	-224.8	-1,142.4	466.0	443.6	22.43	20.775		
5,000.0	4,937.2	4,935.9	4,834.2	16.0	17.9	-21.66	-219.6	-1,165.8	469.2	446.6	22.69	20.680		
5,100.0	5,035.7	5,035.5	4,930.9	16.3	18.3	-20.70	-214.3	-1,189.1	472.6	449.7	22.94	20.601		
5,200.0	5,134.1	5,135.2	5,027.6	16.7	18.8	-19.75	-209.1	-1,212.5	476.1	452.9	23.18	20.536		
5,300.0	5,232.6	5,236.9	5,126.4	17.0	19.2	-18.80	-203.8	-1,236.3	479.7	456.3	23.42	20.485		
5,400.0	5,331.1	5,353.0	5,239.8	17.4	19.7	-17.91	-198.3	-1,260.7	481.3	457.7	23.67	20.335		
5,500.0	5,429.6	5,469.4	5,354.4	17.7	20.1	-17.33	-193.8	-1,280.6	479.6	455.6	23.97	20.008		
5,600.0	5,528.1	5,585.7	5,469.6	18.1	20.4	-17.04	-190.4	-1,296.0	474.4	450.1	24.32	19.509		
5,700.0	5,626.5	5,701.5	5,584.8	18.4	20.6	-17.05	-187.9	-1,306.8	465.9	441.1	24.72	18.843		
5,800.0	5,725.0	5,816.4	5,699.5	18.8	20.8	-17.37	-186.6	-1,312.9	453.9	428.7	25.18	18.022		
5,900.0	5,823.5	5,928.4	5,811.5	19.1	20.9	-18.02	-186.2	-1,314.6	438.6	412.9	25.72	17.053		

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 Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 S29-T1N-R68W (Pratt/Waste Connections) - SRC PRATT 29HD (EXISTING) - SYNERGY WELL - PLA													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		
6,000.0	5,922.0	6,026.8	5,910.0	19.5	21.0	-18.75	-186.2	-1,314.6	422.1	395.8	26.26	16.072		
6,100.0	6,020.5	6,125.3	6,008.5	19.8	21.1	-19.53	-186.2	-1,314.6	405.7	378.8	26.83	15.120		
6,200.0	6,118.9	6,223.8	6,106.9	20.2	21.2	-20.39	-186.2	-1,314.6	389.3	361.9	27.42	14.197		
6,300.0	6,217.4	6,322.3	6,205.4	20.5	21.2	-21.31	-186.2	-1,314.6	373.0	345.0	28.04	13.302		
6,400.0	6,315.9	6,420.8	6,303.9	20.9	21.3	-22.33	-186.2	-1,314.6	356.9	328.2	28.70	12.436		
6,500.0	6,414.4	6,519.2	6,402.4	21.3	21.4	-23.43	-186.2	-1,314.6	340.8	311.5	29.39	11.596		
6,600.0	6,512.9	6,617.7	6,500.9	21.6	21.5	-24.65	-186.2	-1,314.6	324.9	294.8	30.13	10.785		
6,700.0	6,611.3	6,716.2	6,599.3	22.0	21.6	-25.98	-186.2	-1,314.6	309.2	278.3	30.92	10.001		
6,800.0	6,709.8	6,814.7	6,697.8	22.3	21.7	-27.46	-186.2	-1,314.6	293.6	261.9	31.76	9.246		
6,900.0	6,808.3	6,913.2	6,796.3	22.7	21.8	-29.11	-186.2	-1,314.6	278.3	245.6	32.67	8.519		
7,000.0	6,906.8	7,011.6	6,894.8	23.0	21.9	-30.94	-186.2	-1,314.6	263.2	229.5	33.65	7.822		
7,100.0	7,005.3	7,110.1	6,993.3	23.4	22.0	-32.99	-186.2	-1,314.6	248.4	213.7	34.71	7.155		
7,200.0	7,103.7	7,208.6	7,091.7	23.7	22.1	-35.30	-186.2	-1,314.6	233.9	198.1	35.87	6.522		
7,300.0	7,202.2	7,307.1	7,190.2	24.1	22.2	-37.90	-186.2	-1,314.6	219.9	182.8	37.13	5.923		
7,400.0	7,300.5	7,405.3	7,288.5	24.4	22.3	-82.38	-186.2	-1,314.6	210.5	171.5	38.96	5.403		
7,420.0	7,319.9	7,424.7	7,307.9	24.5	22.3	-90.00	-186.2	-1,314.6	210.2	170.8	39.36	5.339 CC, ES		
7,500.0	7,396.4	7,501.2	7,384.4	24.8	22.4	-111.57	-186.2	-1,314.6	215.4	174.8	40.59	5.308 SF		
7,600.0	7,487.0	7,591.9	7,475.0	25.1	22.5	-127.99	-186.2	-1,314.6	238.5	197.6	40.86	5.836		
7,700.0	7,569.7	7,674.5	7,557.7	25.4	22.6	-138.64	-186.2	-1,314.6	280.9	241.6	39.28	7.152		
7,800.0	7,641.9	7,746.7	7,629.9	25.8	22.6	-145.41	-186.2	-1,314.6	341.2	305.1	36.10	9.453		
7,900.0	7,701.3	7,806.1	7,689.3	26.3	22.7	-149.03	-186.2	-1,314.6	416.3	384.3	31.94	13.032		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 S29-T1N-R68W (Pratt/Waste Connections) - SRC PRATT 29LD (EXISTING) - SYNERGY WELL - PLAN													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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-147.11	-408.4	-264.1	486.5					
100.0	100.0	88.0	88.0	0.2	0.2	-147.11	-408.4	-264.1	486.4	486.1	0.31	1,592.250		
200.0	200.0	188.0	188.0	0.3	0.3	-147.11	-408.4	-264.1	486.4	485.7	0.65	743.109		
300.0	300.0	288.0	288.0	0.5	0.5	-54.92	-408.4	-264.1	485.9	484.9	1.00	483.855		
400.0	400.0	388.0	388.0	0.7	0.7	-55.18	-408.4	-264.1	484.4	483.0	1.36	357.048		
500.0	499.9	487.9	487.9	0.9	0.9	-55.63	-408.4	-264.1	481.9	480.2	1.71	281.082		
600.0	599.7	587.7	587.7	1.1	1.0	-56.26	-408.4	-264.1	478.5	476.4	2.08	229.988		
700.0	699.4	687.4	687.4	1.3	1.2	-57.08	-408.4	-264.1	474.1	471.7	2.46	192.936		
800.0	798.9	786.9	786.9	1.5	1.4	-58.11	-408.4	-264.1	469.0	466.1	2.85	164.617		
900.0	898.3	886.3	886.3	1.8	1.5	-59.34	-408.4	-264.1	463.1	459.8	3.26	142.131		
1,000.0	997.4	985.4	985.4	2.0	1.7	-60.80	-408.4	-264.1	456.5	452.8	3.69	123.766		
1,100.0	1,096.3	1,074.9	1,074.9	2.3	1.9	-62.40	-409.4	-263.9	450.3	446.2	4.13	109.108		
1,200.0	1,194.9	1,162.2	1,162.1	2.7	2.0	-64.35	-412.9	-263.2	446.3	441.7	4.59	97.152		
1,286.6	1,280.2	1,237.3	1,237.0	3.0	2.2	-66.24	-418.0	-262.2	445.0	440.0	5.01	88.810 CC		
1,300.0	1,293.4	1,248.9	1,248.6	3.0	2.2	-66.55	-419.0	-262.0	445.0	439.9	5.08	87.670 ES		
1,400.0	1,391.9	1,335.1	1,334.3	3.3	2.4	-68.90	-427.6	-260.3	447.2	441.7	5.57	80.262		
1,500.0	1,490.4	1,420.5	1,419.0	3.7	2.6	-71.35	-438.6	-258.2	453.1	447.0	6.08	74.533		
1,600.0	1,588.9	1,500.0	1,497.5	4.0	2.8	-73.69	-451.1	-255.7	462.7	456.1	6.58	70.303		
1,700.0	1,687.3	1,588.5	1,584.4	4.4	3.0	-76.32	-467.5	-252.4	476.0	468.9	7.11	66.961		
1,800.0	1,785.8	1,670.9	1,664.7	4.7	3.3	-78.74	-485.1	-249.0	493.2	485.6	7.62	64.685 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 S29-T1N-R68W (Pratt/Waste Connections) - SRC PRATT 29QD (EXISTING) - SYNERGY WELL - PLA													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	-151.23	-408.7	-224.4	466.4					
100.0	100.0	89.0	89.0	0.2	0.2	-151.23	-408.7	-224.4	466.2	465.9	0.31	1,517.697		
200.0	200.0	189.0	189.0	0.3	0.3	-151.23	-408.7	-224.4	466.2	465.6	0.66	710.463 CC, ES		
300.0	300.0	279.0	278.9	0.5	0.5	-59.12	-409.8	-224.2	466.7	465.8	0.99	471.714		
400.0	400.0	367.5	367.4	0.7	0.7	-59.63	-413.5	-223.5	468.8	467.5	1.33	353.087		
500.0	499.9	456.4	456.0	0.9	0.8	-60.50	-420.0	-222.4	472.5	470.8	1.68	281.565		
600.0	599.7	556.2	555.4	1.1	1.1	-61.97	-429.3	-219.1	476.5	474.4	2.08	229.128		
700.0	699.4	654.9	653.3	1.3	1.3	-63.98	-439.9	-212.7	480.1	477.5	2.52	190.596		
800.0	798.9	751.9	749.1	1.5	1.6	-66.49	-451.7	-203.4	483.7	480.7	3.00	161.111		
900.0	898.3	846.9	842.5	1.8	2.0	-69.44	-464.4	-191.4	488.0	484.5	3.53	138.157		
1,000.0	997.4	939.6	933.1	2.0	2.3	-72.76	-477.9	-176.9	493.8	489.7	4.11	120.220 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 S29-T1N-R68W (Pratt/Waste Connections) - Waste Connections 3B-29H-M168 - 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	90.06	0.0	8.4	8.4					
100.0	100.0	100.0	100.0	0.2	0.2	90.06	0.0	8.4	8.4	8.1	0.30	27.668		
200.0	200.0	200.0	200.0	0.3	0.3	90.06	0.0	8.4	8.4	7.7	0.65	12.872 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-177.88	0.0	8.4	9.3	8.3	1.00	9.258		
400.0	400.0	400.1	400.1	0.7	0.7	-175.76	-0.5	7.7	11.2	9.8	1.35	8.282		
500.0	499.9	500.2	500.2	0.9	0.9	-170.30	-2.1	5.6	13.5	11.8	1.70	7.949		
600.0	599.7	600.4	600.2	1.1	1.0	-163.43	-4.6	2.0	16.5	14.4	2.06	8.002		
700.0	699.4	700.5	700.1	1.3	1.2	-156.44	-8.2	-2.9	20.3	17.8	2.44	8.310		
800.0	798.9	800.5	799.9	1.5	1.4	-150.03	-12.8	-9.3	24.9	22.1	2.84	8.779		
900.0	898.3	900.5	899.4	1.8	1.7	-144.49	-18.4	-17.1	30.6	27.3	3.28	9.334		
1,000.0	997.4	1,000.4	998.7	2.0	1.9	-139.83	-25.1	-26.2	37.3	33.6	3.76	9.919		
1,100.0	1,096.3	1,100.3	1,097.7	2.3	2.2	-135.95	-32.7	-36.8	45.1	40.8	4.29	10.498		
1,200.0	1,194.9	1,200.0	1,196.3	2.7	2.5	-132.72	-41.4	-48.7	53.9	49.0	4.88	11.047		
1,300.0	1,293.4	1,299.5	1,294.6	3.0	2.8	-130.18	-50.6	-61.4	63.2	57.7	5.48	11.537		
1,400.0	1,391.9	1,399.1	1,392.9	3.3	3.1	-128.30	-59.8	-74.1	72.7	66.6	6.09	11.925		
1,500.0	1,490.4	1,498.6	1,491.2	3.7	3.4	-126.86	-68.9	-86.8	82.2	75.4	6.71	12.237		
1,600.0	1,588.9	1,598.1	1,589.5	4.0	3.7	-125.71	-78.1	-99.5	91.7	84.4	7.34	12.493		
1,700.0	1,687.3	1,697.7	1,687.8	4.4	4.0	-124.78	-87.3	-112.2	101.3	93.3	7.97	12.706		
1,800.0	1,785.8	1,797.2	1,786.1	4.7	4.3	-124.01	-96.5	-124.9	110.9	102.2	8.60	12.886		
1,900.0	1,884.3	1,896.7	1,884.3	5.1	4.7	-123.36	-105.7	-137.6	120.5	111.2	9.24	13.040		
2,000.0	1,982.8	1,996.3	1,982.6	5.4	5.0	-122.81	-114.9	-150.3	130.1	120.2	9.87	13.172		
2,100.0	2,081.3	2,095.8	2,080.9	5.8	5.3	-122.33	-124.1	-163.0	139.7	129.2	10.51	13.288		
2,200.0	2,179.7	2,195.3	2,179.2	6.1	5.6	-121.92	-133.3	-175.7	149.3	138.2	11.15	13.390		
2,300.0	2,278.2	2,294.8	2,277.5	6.4	5.9	-121.56	-142.4	-188.4	159.0	147.2	11.80	13.479		
2,400.0	2,376.7	2,394.4	2,375.8	6.8	6.3	-121.23	-151.6	-201.0	168.6	156.2	12.44	13.560		
2,500.0	2,475.2	2,493.9	2,474.1	7.1	6.6	-120.95	-160.8	-213.7	178.3	165.2	13.08	13.631		
2,600.0	2,573.7	2,593.4	2,572.4	7.5	6.9	-120.69	-170.0	-226.4	188.0	174.2	13.72	13.696		
2,700.0	2,672.1	2,693.0	2,670.6	7.9	7.2	-120.46	-179.2	-239.1	197.6	183.3	14.37	13.755		
2,800.0	2,770.6	2,792.5	2,768.9	8.2	7.5	-120.25	-188.4	-251.8	207.3	192.3	15.01	13.808		
2,900.0	2,869.1	2,892.0	2,867.2	8.6	7.9	-120.05	-197.6	-264.5	217.0	201.3	15.66	13.856		
3,000.0	2,967.6	2,991.5	2,965.5	8.9	8.2	-119.88	-206.8	-277.2	226.6	210.3	16.30	13.901		
3,100.0	3,066.1	3,091.1	3,063.8	9.3	8.5	-119.72	-216.0	-289.9	236.3	219.4	16.95	13.942		
3,200.0	3,164.5	3,190.6	3,162.1	9.6	8.8	-119.57	-225.1	-302.6	246.0	228.4	17.59	13.980		
3,300.0	3,263.0	3,290.1	3,260.4	10.0	9.2	-119.43	-234.3	-315.3	255.7	237.4	18.24	14.015		
3,400.0	3,361.5	3,389.7	3,358.7	10.3	9.5	-119.30	-243.5	-328.0	265.3	246.4	18.89	14.048		
3,500.0	3,460.0	3,489.2	3,456.9	10.7	9.8	-119.19	-252.7	-340.7	275.0	255.5	19.53	14.078		
3,600.0	3,558.5	3,588.7	3,555.2	11.0	10.1	-119.07	-261.9	-353.3	284.7	264.5	20.18	14.107		
3,700.0	3,656.9	3,688.2	3,653.5	11.4	10.5	-118.97	-271.1	-366.0	294.4	273.5	20.83	14.133		
3,800.0	3,755.4	3,787.8	3,751.8	11.7	10.8	-118.88	-280.3	-378.7	304.1	282.6	21.48	14.158		
3,900.0	3,853.9	3,887.3	3,850.1	12.1	11.1	-118.78	-289.5	-391.4	313.7	291.6	22.12	14.181		
4,000.0	3,952.4	3,986.8	3,948.4	12.4	11.4	-118.70	-298.6	-404.1	323.4	300.6	22.77	14.203		
4,100.0	4,050.9	4,086.4	4,046.7	12.8	11.8	-118.62	-307.8	-416.8	333.1	309.7	23.42	14.224		
4,200.0	4,149.3	4,185.9	4,145.0	13.1	12.1	-118.54	-317.0	-429.5	342.8	318.7	24.07	14.243		
4,300.0	4,247.8	4,285.4	4,243.2	13.5	12.4	-118.47	-326.2	-442.2	352.5	327.8	24.71	14.262		
4,400.0	4,346.3	4,384.9	4,341.5	13.8	12.7	-118.40	-335.4	-454.9	362.2	336.8	25.36	14.279		
4,500.0	4,444.8	4,484.5	4,439.8	14.2	13.1	-118.34	-344.6	-467.6	371.8	345.8	26.01	14.296		
4,600.0	4,543.3	4,584.0	4,538.1	14.5	13.4	-118.28	-353.8	-480.3	381.5	354.9	26.66	14.312		
4,700.0	4,641.7	4,683.5	4,636.4	14.9	13.7	-118.22	-363.0	-493.0	391.2	363.9	27.31	14.327		
4,800.0	4,740.2	4,783.1	4,734.7	15.2	14.0	-118.17	-372.2	-505.7	400.9	372.9	27.96	14.341		
4,900.0	4,838.7	4,882.6	4,833.0	15.6	14.4	-118.11	-381.3	-518.3	410.6	382.0	28.60	14.354		
5,000.0	4,937.2	4,982.1	4,931.3	16.0	14.7	-118.06	-390.5	-531.0	420.3	391.0	29.25	14.367		
5,100.0	5,035.7	5,081.6	5,029.5	16.3	15.0	-118.02	-399.7	-543.7	430.0	400.1	29.90	14.380		

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 Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 S29-T1N-R68W (Pratt/Waste Connections) - Waste Connections 3B-29H-M168 - 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	5,134.1	5,181.2	5,127.8	16.7	15.3	-117.97	-408.9	-556.4	439.7	409.1		30.55	14.392
5,300.0	5,232.6	5,280.7	5,226.1	17.0	15.7	-117.93	-418.1	-569.1	449.3	418.1		31.20	14.403
5,400.0	5,331.1	5,380.2	5,324.4	17.4	16.0	-117.88	-427.3	-581.8	459.0	427.2		31.85	14.414
5,500.0	5,429.6	5,479.8	5,422.7	17.7	16.3	-117.84	-436.5	-594.5	468.7	436.2		32.50	14.424
5,600.0	5,528.1	5,579.3	5,521.0	18.1	16.6	-117.81	-445.7	-607.2	478.4	445.3		33.14	14.434
5,700.0	5,626.5	5,678.8	5,619.3	18.4	17.0	-117.77	-454.8	-619.9	488.1	454.3		33.79	14.444
5,800.0	5,725.0	5,778.4	5,717.6	18.8	17.3	-117.73	-464.0	-632.6	497.8	463.4		34.44	14.453
7,800.0	7,641.9	8,619.8	8,016.0	25.8	22.4	136.55	139.9	-922.2	480.1	451.2		28.85	16.642
7,900.0	7,701.3	8,699.2	8,016.0	26.3	22.7	132.82	219.4	-921.5	443.1	415.7		27.44	16.152
8,000.0	7,746.2	8,788.0	8,016.0	26.8	23.1	129.11	308.1	-920.8	419.1	391.5		27.51	15.233
8,100.0	7,775.3	8,883.4	8,016.0	27.3	23.7	126.18	403.5	-919.9	405.7	376.6		29.13	13.930
8,200.0	7,787.6	8,982.4	8,016.0	28.0	24.4	124.72	502.6	-919.1	401.1	369.3		31.77	12.624
8,224.0	7,788.4	9,006.4	8,016.0	28.1	24.6	124.60	526.5	-918.9	400.9	368.6		32.26	12.425
8,300.0	7,788.0	9,082.4	8,016.0	28.7	25.2	124.59	602.5	-918.2	401.6	367.8		33.84	11.867
8,400.0	7,788.0	9,182.4	8,016.0	29.4	26.1	124.52	702.5	-917.3	402.3	366.5		35.78	11.245
8,500.0	7,788.0	9,282.4	8,016.0	30.3	27.1	124.45	802.5	-916.4	403.0	365.2		37.84	10.650
8,600.0	7,788.0	9,382.4	8,016.0	31.3	28.1	124.38	902.5	-915.6	403.8	363.7		40.02	10.090
8,700.0	7,788.0	9,482.4	8,016.0	32.3	29.2	124.31	1,002.5	-914.7	404.5	362.2		42.28	9.565
8,800.0	7,788.0	9,582.4	8,016.0	33.4	30.4	124.24	1,102.5	-913.8	405.2	360.6		44.63	9.078
8,900.0	7,788.0	9,682.4	8,016.0	34.5	31.7	124.17	1,202.5	-913.0	405.9	358.9		47.05	8.627
9,000.0	7,788.0	9,782.4	8,016.0	35.7	33.0	124.10	1,302.5	-912.1	406.6	357.1		49.53	8.210
9,100.0	7,788.0	9,882.4	8,016.0	36.9	34.3	124.04	1,402.5	-911.2	407.4	355.3		52.06	7.825
9,200.0	7,788.0	9,982.4	8,016.0	38.2	35.6	123.97	1,502.5	-910.3	408.1	353.5		54.63	7.470
9,300.0	7,788.0	10,082.4	8,016.0	39.5	37.0	123.90	1,602.5	-909.5	408.8	351.6		57.24	7.142
9,400.0	7,788.0	10,182.4	8,016.0	40.8	38.5	123.83	1,702.5	-908.6	409.5	349.6		59.89	6.838
9,500.0	7,788.0	10,282.4	8,016.0	42.2	39.9	123.76	1,802.5	-907.7	410.3	347.7		62.57	6.556
9,600.0	7,788.0	10,382.4	8,016.0	43.6	41.4	123.70	1,902.4	-906.8	411.0	345.7		65.28	6.295
9,700.0	7,788.0	10,482.4	8,016.0	45.0	42.9	123.63	2,002.4	-906.0	411.7	343.7		68.02	6.053
9,800.0	7,788.0	10,582.4	8,016.0	46.5	44.4	123.56	2,102.4	-905.1	412.4	341.7		70.78	5.827
9,900.0	7,788.0	10,682.4	8,016.0	47.9	45.9	123.49	2,202.4	-904.2	413.2	339.6		73.55	5.617
10,000.0	7,788.0	10,782.4	8,016.0	49.4	47.5	123.43	2,302.4	-903.4	413.9	337.5		76.35	5.421
10,100.0	7,788.0	10,882.4	8,016.0	50.9	49.0	123.36	2,402.4	-902.5	414.6	335.5		79.16	5.237
10,200.0	7,788.0	10,982.4	8,016.0	52.4	50.6	123.29	2,502.4	-901.6	415.4	333.4		82.00	5.066
10,300.0	7,788.0	11,082.4	8,016.0	54.0	52.2	123.23	2,602.4	-900.7	416.1	331.2		84.84	4.904
10,400.0	7,788.0	11,182.4	8,016.0	55.5	53.8	123.16	2,702.4	-899.9	416.8	329.1		87.70	4.753
10,500.0	7,788.0	11,282.4	8,016.0	57.1	55.4	123.10	2,802.4	-899.0	417.5	327.0		90.57	4.610
10,600.0	7,788.0	11,382.3	8,016.0	58.6	57.0	123.03	2,902.4	-898.1	418.3	324.8		93.46	4.476
10,700.0	7,788.0	11,482.3	8,016.0	60.2	58.6	122.97	3,002.4	-897.3	419.0	322.7		96.35	4.349
10,800.0	7,788.0	11,582.3	8,016.0	61.8	60.3	122.90	3,102.4	-896.4	419.7	320.5		99.26	4.229
10,900.0	7,788.0	11,682.3	8,016.0	63.4	61.9	122.84	3,202.3	-895.5	420.5	318.3		102.17	4.115
11,000.0	7,788.0	11,782.3	8,016.0	65.0	63.6	122.77	3,302.3	-894.6	421.2	316.1		105.10	4.008
11,100.0	7,788.0	11,882.3	8,016.0	66.6	65.2	122.71	3,402.3	-893.8	421.9	313.9		108.03	3.906
11,200.0	7,788.0	11,982.3	8,016.0	68.3	66.9	122.65	3,502.3	-892.9	422.7	311.7		110.98	3.809
11,300.0	7,788.0	12,082.3	8,016.0	69.9	68.5	122.58	3,602.3	-892.0	423.4	309.5		113.93	3.716
11,400.0	7,788.0	12,182.3	8,016.0	71.5	70.2	122.52	3,702.3	-891.1	424.1	307.3		116.89	3.629
11,500.0	7,788.0	12,282.3	8,016.0	73.2	71.8	122.46	3,802.3	-890.3	424.9	305.0		119.86	3.545
11,600.0	7,788.0	12,382.3	8,016.0	74.8	73.5	122.39	3,902.3	-889.4	425.6	302.8		122.83	3.465
11,700.0	7,788.0	12,482.3	8,016.0	76.4	75.2	122.33	4,002.3	-888.5	426.4	300.5		125.81	3.389
11,800.0	7,788.0	12,582.3	8,016.0	78.1	76.9	122.27	4,102.3	-887.7	427.1	298.3		128.80	3.316
11,900.0	7,788.0	12,682.3	8,016.0	79.8	78.6	122.20	4,202.3	-886.8	427.8	296.0		131.79	3.246
12,000.0	7,788.0	12,782.3	8,016.0	81.4	80.2	122.14	4,302.3	-885.9	428.6	293.8		134.79	3.179
12,100.0	7,788.0	12,882.3	8,016.0	83.1	81.9	122.08	4,402.3	-885.0	429.3	291.5		137.80	3.115

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 Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 S29-T1N-R68W (Pratt/Waste Connections) - Waste Connections 3B-29H-M168 - 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
12,200.0	7,788.0	12,982.3	8,016.0	84.8	83.6	122.02	4,502.2	-884.2	430.0	289.2	140.81	3.054	
12,300.0	7,788.0	13,082.3	8,016.0	86.4	85.3	121.96	4,602.2	-883.3	430.8	287.0	143.83	2.995	
12,400.0	7,788.0	13,182.3	8,016.0	88.1	87.0	121.90	4,702.2	-882.4	431.5	284.7	146.86	2.938	
12,500.0	7,788.0	13,282.3	8,016.0	89.8	88.7	121.83	4,802.2	-881.5	432.3	282.4	149.89	2.884	
12,600.0	7,788.0	13,382.3	8,016.0	91.5	90.4	121.77	4,902.2	-880.7	433.0	280.1	152.92	2.832	
12,700.0	7,788.0	13,482.3	8,016.0	93.2	92.1	121.71	5,002.2	-879.8	433.8	277.8	155.96	2.781	
12,800.0	7,788.0	13,582.3	8,016.0	94.8	93.8	121.65	5,102.2	-878.9	434.5	275.5	159.00	2.733	
12,900.0	7,788.0	13,682.3	8,016.0	96.5	95.5	121.59	5,202.2	-878.1	435.2	273.2	162.05	2.686	
13,000.0	7,788.0	13,782.3	8,016.0	98.2	97.2	121.53	5,302.2	-877.2	436.0	270.9	165.11	2.641	
13,100.0	7,788.0	13,882.3	8,016.0	99.9	98.9	121.47	5,402.2	-876.3	436.7	268.6	168.17	2.597	
13,200.0	7,788.0	13,982.2	8,016.0	101.6	100.6	121.41	5,502.2	-875.4	437.5	266.2	171.23	2.555	
13,300.0	7,788.0	14,082.2	8,016.0	103.3	102.4	121.35	5,602.2	-874.6	438.2	263.9	174.30	2.514	
13,400.0	7,788.0	14,182.2	8,016.0	105.0	104.1	121.29	5,702.2	-873.7	439.0	261.6	177.37	2.475	
13,500.0	7,788.0	14,282.2	8,016.0	106.7	105.8	121.23	5,802.1	-872.8	439.7	259.3	180.45	2.437	
13,600.0	7,788.0	14,385.9	8,016.0	108.4	107.6	121.19	5,905.8	-872.2	440.2	256.7	183.56	2.398	
13,700.0	7,788.0	14,492.9	8,016.0	110.1	109.4	121.27	6,012.8	-873.3	439.4	252.9	186.50	2.356	
13,800.0	7,788.0	14,599.9	8,016.0	111.8	111.3	121.48	6,119.7	-876.4	436.9	247.7	189.18	2.309	
13,900.0	7,788.0	14,706.6	8,016.0	113.5	113.1	121.83	6,226.4	-881.5	432.8	241.3	191.56	2.259	
14,000.0	7,788.0	14,808.7	8,016.0	115.2	114.9	122.28	6,328.2	-887.8	427.6	233.9	193.66	2.208	
14,100.0	7,788.0	14,908.5	8,016.0	117.0	116.6	122.73	6,427.8	-894.1	422.2	226.6	195.66	2.158	
14,200.0	7,788.0	15,008.3	8,016.0	118.7	118.4	123.20	6,527.4	-900.4	416.9	219.3	197.61	2.110	
14,300.0	7,788.0	15,108.1	8,016.0	120.4	120.1	123.68	6,627.0	-906.7	411.7	212.2	199.48	2.064	
14,400.0	7,788.0	15,207.9	8,016.0	122.1	121.8	124.17	6,726.6	-913.0	406.5	205.2	201.28	2.019	
14,500.0	7,788.0	15,307.7	8,016.0	123.8	123.6	124.68	6,826.2	-919.3	401.2	198.2	203.00	1.977	
14,600.0	7,788.0	15,407.5	8,016.0	125.5	125.3	125.20	6,925.8	-925.5	396.1	191.4	204.65	1.935	
14,700.0	7,788.0	15,507.3	8,016.0	127.2	127.0	125.73	7,025.4	-931.8	390.9	184.7	206.21	1.896	
14,728.8	7,788.0	15,516.1	8,016.0	127.7	127.2	125.78	7,034.2	-932.4	390.0	183.4	206.63	1.887 SF	
14,800.0	7,788.0	15,516.1	8,016.0	129.0	127.2	125.78	7,034.2	-932.4	396.4	188.8	207.64	1.909	
14,900.0	7,788.0	15,516.1	8,016.0	130.7	127.2	125.78	7,034.2	-932.4	425.9	216.9	209.05	2.037	
14,921.8	7,788.0	15,516.1	8,016.0	131.1	127.2	125.78	7,034.2	-932.4	435.2	225.8	209.36	2.078	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 S29-T1N-R68W (Pratt/Waste Connections) - Waste Connections 3C-29H-M168 - 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	90.05	0.0	19.6	19.6					
100.0	100.0	100.0	100.0	0.2	0.2	90.05	0.0	19.6	19.6	19.3	0.30	64.558		
200.0	200.0	200.0	200.0	0.3	0.3	90.05	0.0	19.6	19.6	19.0	0.65	30.035 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-177.77	0.0	19.6	20.5	19.5	1.00	20.442		
400.0	400.0	400.0	400.0	0.7	0.7	-178.02	0.0	19.6	23.1	21.7	1.35	17.101		
500.0	499.9	499.9	499.9	0.9	0.9	-176.54	-0.9	19.5	27.3	25.6	1.70	16.069 SF		
600.0	599.7	599.8	599.8	1.1	1.0	-172.69	-3.4	19.0	33.1	31.0	2.05	16.124		
700.0	699.4	699.5	699.4	1.3	1.2	-167.96	-7.7	18.2	40.6	38.2	2.41	16.848		
800.0	798.9	799.0	798.6	1.5	1.4	-163.25	-13.7	17.2	50.1	47.3	2.78	18.005		
900.0	898.3	898.1	897.5	1.8	1.6	-159.01	-21.3	15.8	61.7	58.6	3.18	19.431		
1,000.0	997.4	996.8	995.8	2.0	1.8	-155.34	-30.6	14.2	75.5	71.9	3.59	21.005		
1,100.0	1,096.3	1,095.1	1,093.4	2.3	2.1	-152.25	-41.5	12.3	91.4	87.4	4.04	22.638		
1,200.0	1,194.9	1,192.9	1,190.4	2.7	2.3	-149.65	-54.0	10.1	109.5	105.0	4.51	24.267		
1,300.0	1,293.4	1,290.2	1,286.6	3.0	2.6	-147.35	-68.0	7.6	129.1	124.0	5.02	25.705		
1,400.0	1,391.9	1,387.1	1,382.2	3.3	2.9	-145.06	-83.5	4.9	149.4	143.8	5.56	26.880		
1,500.0	1,490.4	1,483.6	1,477.1	3.7	3.2	-142.82	-100.6	1.9	170.5	164.4	6.12	27.866		
1,600.0	1,588.9	1,579.6	1,571.2	4.0	3.6	-140.63	-119.2	-1.4	192.6	185.9	6.71	28.722		
1,700.0	1,687.3	1,675.0	1,664.5	4.4	3.9	-138.51	-139.1	-4.9	215.7	208.3	7.31	29.491		
1,800.0	1,785.8	1,769.8	1,756.8	4.7	4.3	-136.47	-160.5	-8.7	239.8	231.8	7.94	30.206		
1,900.0	1,884.3	1,864.9	1,849.0	5.1	4.7	-134.52	-183.3	-12.7	264.9	256.4	8.57	30.900		
2,000.0	1,982.8	1,961.3	1,942.4	5.4	5.2	-132.83	-206.8	-16.8	290.5	281.3	9.22	31.525		
2,100.0	2,081.3	2,059.0	2,037.1	5.8	5.6	-131.38	-230.5	-21.1	316.3	306.4	9.86	32.063		
2,200.0	2,179.7	2,160.5	2,135.5	6.1	6.0	-129.99	-254.8	-26.9	341.1	330.5	10.54	32.365		
2,300.0	2,278.2	2,261.1	2,233.0	6.4	6.5	-128.65	-278.5	-34.2	364.6	353.4	11.22	32.512		
2,400.0	2,376.7	2,358.1	2,326.9	6.8	6.9	-127.47	-301.2	-41.7	388.0	376.1	11.88	32.661		
2,500.0	2,475.2	2,455.0	2,420.9	7.1	7.4	-126.43	-324.0	-49.2	411.5	399.0	12.54	32.806		
2,600.0	2,573.7	2,551.9	2,514.8	7.5	7.8	-125.51	-346.7	-56.7	435.2	422.0	13.21	32.947		
2,700.0	2,672.1	2,648.9	2,608.7	7.9	8.2	-124.67	-369.4	-64.2	458.9	445.0	13.87	33.083		
2,800.0	2,770.6	2,745.8	2,702.7	8.2	8.7	-123.92	-392.1	-71.8	482.7	468.2	14.53	33.214		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 S29-T1N-R68W (Pratt/Waste Connections) - Waste Connections 3D-29H-M168 - 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	90.05	0.0	28.0	28.0					
100.0	100.0	100.0	100.0	0.2	0.2	90.05	0.0	28.0	28.0	27.7	0.30	92.225		
200.0	200.0	200.0	200.0	0.3	0.3	90.05	0.0	28.0	28.0	27.4	0.65	42.907 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-177.74	0.0	28.0	28.9	27.9	1.00	28.830		
400.0	400.0	400.0	400.0	0.7	0.7	-177.93	0.0	28.0	31.5	30.1	1.35	23.323		
500.0	499.9	499.9	499.9	0.9	0.8	-178.18	0.0	28.0	35.9	34.2	1.70	21.109		
600.0	599.7	600.2	600.2	1.1	1.0	-177.56	-0.7	27.4	41.4	39.3	2.05	20.204		
700.0	699.4	700.5	700.4	1.3	1.2	-175.61	-2.6	25.6	47.5	45.1	2.40	19.797		
800.0	798.9	800.5	800.4	1.5	1.4	-172.98	-5.7	22.8	54.3	51.6	2.75	19.754 SF		
900.0	898.3	900.2	899.9	1.8	1.6	-170.97	-9.0	19.7	62.8	59.7	3.11	20.230		
1,000.0	997.4	999.6	999.3	2.0	1.8	-169.69	-12.4	16.7	73.1	69.6	3.46	21.106		
1,100.0	1,096.3	1,098.9	1,098.5	2.3	1.9	-168.94	-15.7	13.6	85.1	81.3	3.82	22.264		
1,200.0	1,194.9	1,197.9	1,197.4	2.7	2.1	-168.57	-19.0	10.6	98.8	94.6	4.18	23.628		
1,300.0	1,293.4	1,296.9	1,296.2	3.0	2.3	-168.40	-22.3	7.5	113.4	108.8	4.55	24.931		
1,400.0	1,391.9	1,395.8	1,395.1	3.3	2.5	-168.27	-25.6	4.5	127.9	123.0	4.91	26.036		
1,500.0	1,490.4	1,494.8	1,493.9	3.7	2.7	-168.17	-28.9	1.5	142.5	137.2	5.28	26.984		
1,600.0	1,588.9	1,593.7	1,592.7	4.0	2.9	-168.08	-32.2	-1.6	157.0	151.4	5.65	27.806		
1,700.0	1,687.3	1,692.6	1,691.6	4.4	3.1	-168.01	-35.5	-4.6	171.6	165.6	6.02	28.525		
1,800.0	1,785.8	1,791.6	1,790.4	4.7	3.2	-167.96	-38.8	-7.6	186.2	179.8	6.38	29.159		
1,900.0	1,884.3	1,890.5	1,889.2	5.1	3.4	-167.90	-42.1	-10.7	200.7	194.0	6.75	29.723		
2,000.0	1,982.8	1,989.4	1,988.1	5.4	3.6	-167.86	-45.4	-13.7	215.3	208.2	7.12	30.228		
2,100.0	2,081.3	2,088.4	2,086.9	5.8	3.8	-167.82	-48.7	-16.7	229.8	222.3	7.49	30.681		
2,200.0	2,179.7	2,187.3	2,185.7	6.1	4.0	-167.79	-52.0	-19.8	244.4	236.5	7.86	31.092		
2,300.0	2,278.2	2,286.2	2,284.6	6.4	4.2	-167.76	-55.3	-22.8	258.9	250.7	8.23	31.465		
2,400.0	2,376.7	2,385.2	2,383.4	6.8	4.4	-167.73	-58.6	-25.8	273.5	264.9	8.60	31.805		
2,500.0	2,475.2	2,484.1	2,482.2	7.1	4.6	-167.71	-61.9	-28.9	288.1	279.1	8.97	32.116		
2,600.0	2,573.7	2,583.0	2,581.1	7.5	4.8	-167.69	-65.2	-31.9	302.6	293.3	9.34	32.403		
2,700.0	2,672.1	2,682.0	2,679.9	7.9	4.9	-167.67	-68.5	-34.9	317.2	307.5	9.71	32.667		
2,800.0	2,770.6	2,780.9	2,778.7	8.2	5.1	-167.65	-71.8	-38.0	331.7	321.7	10.08	32.912		
2,900.0	2,869.1	2,879.8	2,877.6	8.6	5.3	-167.63	-75.1	-41.0	346.3	335.9	10.45	33.139		
3,000.0	2,967.6	2,978.8	2,976.4	8.9	5.5	-167.62	-78.4	-44.0	360.9	350.0	10.82	33.351		
3,100.0	3,066.1	3,077.7	3,075.2	9.3	5.7	-167.61	-81.7	-47.1	375.4	364.2	11.19	33.548		
3,200.0	3,164.5	3,176.6	3,174.1	9.6	5.9	-167.59	-85.0	-50.1	390.0	378.4	11.56	33.732		
3,300.0	3,263.0	3,275.6	3,272.9	10.0	6.1	-167.58	-88.3	-53.1	404.5	392.6	11.93	33.905		
3,400.0	3,361.5	3,374.5	3,371.7	10.3	6.3	-167.57	-91.6	-56.2	419.1	406.8	12.30	34.067		
3,500.0	3,460.0	3,473.4	3,470.6	10.7	6.5	-167.56	-94.9	-59.2	433.7	421.0	12.67	34.219		
3,600.0	3,558.5	3,572.4	3,569.4	11.0	6.6	-167.55	-98.2	-62.3	448.2	435.2	13.04	34.363		
3,700.0	3,656.9	3,671.3	3,668.2	11.4	6.8	-167.54	-101.5	-65.3	462.8	449.4	13.41	34.499		
3,800.0	3,755.4	3,770.2	3,767.1	11.7	7.0	-167.53	-104.8	-68.3	477.3	463.5	13.78	34.627		
3,900.0	3,853.9	3,869.2	3,865.9	12.1	7.2	-167.52	-108.1	-71.4	491.9	477.7	14.16	34.749		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 S29-T1N-R68W (Pratt/Waste Connections) - Waste Connections 3E-29H-M168 - 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	90.05	0.0	39.2	39.2					
100.0	100.0	100.0	100.0	0.2	0.2	90.05	0.0	39.2	39.2	38.9	0.30	129.115		
200.0	200.0	200.0	200.0	0.3	0.3	90.05	0.0	39.2	39.2	38.6	0.65	60.070 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-177.72	0.0	39.2	40.1	39.1	1.00	40.014		
400.0	400.0	400.0	400.0	0.7	0.7	-177.86	0.0	39.2	42.7	41.3	1.35	31.619		
500.0	499.9	499.8	499.8	0.9	0.8	-177.00	-0.9	39.3	47.1	45.4	1.70	27.733		
600.0	599.7	599.5	599.4	1.1	1.0	-174.55	-3.5	39.4	53.5	51.4	2.05	26.084		
700.0	699.4	698.9	698.8	1.3	1.2	-171.24	-7.8	39.7	61.9	59.5	2.41	25.723 SF		
800.0	798.9	798.0	797.7	1.5	1.4	-167.66	-13.8	40.2	72.6	69.8	2.77	26.175		
900.0	898.3	896.7	896.0	1.8	1.6	-164.20	-21.5	40.7	85.7	82.5	3.16	27.153		
1,000.0	997.4	994.8	993.7	2.0	1.8	-161.04	-30.8	41.3	101.2	97.7	3.56	28.467		
1,100.0	1,096.3	1,092.3	1,090.7	2.3	2.1	-158.25	-41.7	42.1	119.2	115.2	3.98	29.981		
1,200.0	1,194.9	1,189.2	1,186.7	2.7	2.3	-155.83	-54.2	42.9	139.7	135.3	4.42	31.600		
1,300.0	1,293.4	1,285.4	1,281.9	3.0	2.6	-153.70	-68.2	43.9	161.8	156.9	4.89	33.081		
1,400.0	1,391.9	1,381.1	1,376.3	3.3	2.9	-151.65	-83.6	44.9	185.0	179.6	5.39	34.338		
1,500.0	1,490.4	1,476.3	1,469.9	3.7	3.2	-149.67	-100.6	46.1	209.1	203.2	5.90	35.429		
1,600.0	1,588.9	1,570.8	1,562.7	4.0	3.5	-147.77	-119.0	47.3	234.3	227.9	6.44	36.402		
1,700.0	1,687.3	1,664.7	1,654.4	4.4	3.9	-145.95	-138.7	48.7	260.6	253.7	6.99	37.294		
1,800.0	1,785.8	1,757.8	1,745.2	4.7	4.3	-144.22	-159.8	50.1	288.1	280.6	7.55	38.141		
1,900.0	1,884.3	1,852.7	1,837.3	5.1	4.7	-142.60	-182.3	51.7	316.5	308.3	8.13	38.916		
2,000.0	1,982.8	1,948.3	1,930.1	5.4	5.1	-141.23	-205.0	53.2	345.1	336.3	8.71	39.603		
2,100.0	2,081.3	2,043.8	2,022.9	5.8	5.5	-140.07	-227.7	54.8	373.8	364.5	9.29	40.220		
2,200.0	2,179.7	2,139.3	2,115.7	6.1	5.9	-139.08	-250.4	56.3	402.7	392.8	9.87	40.776		
2,300.0	2,278.2	2,234.9	2,208.5	6.4	6.3	-138.22	-273.1	57.9	431.6	421.2	10.46	41.281		
2,400.0	2,376.7	2,330.4	2,301.2	6.8	6.7	-137.46	-295.9	59.4	460.6	449.6	11.04	41.740		
2,500.0	2,475.2	2,425.9	2,394.0	7.1	7.2	-136.80	-318.6	61.0	489.7	478.1	11.62	42.158		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 S29-T1N-R68W (Pratt/Waste Connections) - Waste Connections 3F-29H-M168 - 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	90.05	0.0	47.6	47.6					
100.0	100.0	100.0	100.0	0.2	0.2	90.05	0.0	47.6	47.6	47.3	0.30	156.783		
200.0	200.0	200.0	200.0	0.3	0.3	90.05	0.0	47.6	47.6	47.0	0.65	72.942 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-177.71	0.0	47.6	48.5	47.5	1.00	48.402		
400.0	400.0	399.7	399.7	0.7	0.7	-176.91	-0.9	47.9	51.4	50.0	1.35	38.041		
500.0	499.9	499.2	499.2	0.9	0.9	-174.65	-3.3	48.7	56.6	54.9	1.70	33.268		
600.0	599.7	598.4	598.3	1.1	1.0	-171.55	-7.4	50.0	64.3	62.3	2.06	31.265		
700.0	699.4	697.3	697.0	1.3	1.2	-168.19	-13.1	51.9	74.7	72.3	2.42	30.847 SF		
800.0	798.9	795.6	795.0	1.5	1.4	-164.95	-20.4	54.2	87.8	85.0	2.80	31.409		
900.0	898.3	893.4	892.3	1.8	1.7	-162.04	-29.2	57.1	103.7	100.5	3.18	32.591		
1,000.0	997.4	990.4	988.8	2.0	1.9	-159.52	-39.6	60.5	122.3	118.7	3.58	34.165		
1,100.0	1,096.3	1,086.6	1,084.2	2.3	2.2	-157.38	-51.3	64.3	143.7	139.7	4.00	35.977		
1,200.0	1,194.9	1,181.9	1,178.5	2.7	2.4	-155.57	-64.5	68.5	167.9	163.4	4.43	37.922		
1,300.0	1,293.4	1,276.4	1,271.7	3.0	2.7	-154.04	-79.0	73.3	193.9	189.1	4.88	39.743		
1,400.0	1,391.9	1,370.2	1,364.0	3.3	3.0	-152.57	-94.8	78.4	221.2	215.8	5.35	41.361		
1,500.0	1,490.4	1,463.3	1,455.3	3.7	3.4	-151.16	-112.0	84.0	249.6	243.8	5.83	42.825		
1,600.0	1,588.9	1,555.6	1,545.6	4.0	3.7	-149.81	-130.4	90.0	279.2	272.9	6.32	44.174		
1,700.0	1,687.3	1,647.1	1,634.7	4.4	4.1	-148.53	-150.0	96.3	310.1	303.3	6.82	45.445		
1,800.0	1,785.8	1,740.3	1,725.3	4.7	4.5	-147.31	-171.0	103.2	342.0	334.7	7.34	46.604		
1,900.0	1,884.3	1,834.9	1,817.1	5.1	4.9	-146.27	-192.5	110.1	374.1	366.2	7.86	47.605		
2,000.0	1,982.8	1,929.4	1,908.9	5.4	5.3	-145.40	-213.9	117.1	406.3	397.9	8.38	48.486		
2,100.0	2,081.3	2,023.9	2,000.7	5.8	5.7	-144.66	-235.4	124.1	438.5	429.6	8.90	49.267		
2,200.0	2,179.7	2,118.4	2,092.4	6.1	6.1	-144.01	-256.8	131.0	470.8	461.4	9.42	49.965		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 S29-T1N-R68W (Pratt/Waste Connections) - Waste Connections 3G-29H-M168 - 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	90.05	-0.1	58.8	58.8				
100.0	100.0	101.0	101.0	0.2	0.2	90.05	-0.1	58.8	58.8	58.5	0.31	192.566	
166.3	166.3	167.3	167.3	0.3	0.3	90.05	-0.1	58.8	58.8	58.3	0.54	109.534 CC	
200.0	200.0	201.0	201.0	0.3	0.3	90.05	-0.1	58.8	58.8	58.2	0.65	89.865 ES	
300.0	300.0	300.0	300.0	0.5	0.5	-177.09	-0.7	59.4	60.3	59.3	1.00	60.147	
400.0	400.0	399.4	399.4	0.7	0.7	-175.50	-2.6	61.1	64.7	63.3	1.35	47.822	
500.0	499.9	498.3	498.2	0.9	0.9	-173.30	-5.8	64.0	72.1	70.4	1.71	42.285	
600.0	599.7	596.7	596.4	1.1	1.1	-170.89	-10.3	68.0	82.6	80.5	2.06	40.086	
700.0	699.4	694.5	693.9	1.3	1.3	-168.57	-16.0	73.0	96.2	93.8	2.42	39.771 SF	
800.0	798.9	791.7	790.6	1.5	1.5	-166.50	-22.8	79.2	113.0	110.2	2.78	40.609	
900.0	898.3	887.9	886.3	1.8	1.7	-164.72	-30.8	86.3	132.9	129.7	3.15	42.182	
1,000.0	997.4	983.2	980.8	2.0	2.0	-163.22	-39.9	94.4	155.8	152.3	3.52	44.236	
1,100.0	1,096.3	1,077.4	1,074.0	2.3	2.3	-161.97	-50.0	103.5	181.8	177.9	3.90	46.606	
1,200.0	1,194.9	1,171.0	1,166.4	2.7	2.6	-160.92	-61.2	113.5	210.7	206.4	4.28	49.184	
1,300.0	1,293.4	1,266.3	1,260.4	3.0	2.9	-160.19	-72.9	124.0	240.8	236.2	4.68	51.431	
1,400.0	1,391.9	1,361.7	1,354.4	3.3	3.2	-159.63	-84.7	134.4	271.0	265.9	5.08	53.304	
1,500.0	1,490.4	1,457.0	1,448.4	3.7	3.5	-159.18	-96.4	144.9	301.2	295.7	5.49	54.884	
1,600.0	1,588.9	1,552.3	1,542.4	4.0	3.8	-158.81	-108.1	155.4	331.4	325.5	5.89	56.232	
1,700.0	1,687.3	1,647.6	1,636.4	4.4	4.1	-158.51	-119.8	165.9	361.6	355.3	6.30	57.396	
1,800.0	1,785.8	1,742.9	1,730.4	4.7	4.4	-158.25	-131.5	176.3	391.8	385.1	6.71	58.408	
1,900.0	1,884.3	1,838.2	1,824.4	5.1	4.7	-158.02	-143.2	186.8	422.1	415.0	7.12	59.298	
2,000.0	1,982.8	1,933.5	1,918.4	5.4	5.1	-157.83	-155.0	197.3	452.3	444.8	7.53	60.084	
2,100.0	2,081.3	2,028.8	2,012.4	5.8	5.4	-157.66	-166.7	207.7	482.5	474.6	7.94	60.785	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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													S29-T1N-R68W (Pratt/Waste Connections) - WILLIAM PELTIER 12-20 (EXISTING) - ENCANA WELL -		Offset Site Error:		0.0 ft	
Survey Program: 0-MWD															Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance											
Measured Depth	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between	Total	Separation	Warning					
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Centres (ft)	Ellipses (ft)	Uncertainty Axis	Factor						
14,500.0	7,788.0	7,810.0	7,810.0	123.8	13.6	90.00	7,190.8	-957.6	483.0	347.6	135.45	3.566						
14,600.0	7,788.0	7,810.0	7,810.0	125.5	13.6	90.00	7,190.8	-957.6	407.7	270.5	137.20	2.972						
14,700.0	7,788.0	7,810.0	7,810.0	127.2	13.6	90.00	7,190.8	-957.6	345.2	206.3	138.94	2.485						
14,800.0	7,788.0	7,810.0	7,810.0	129.0	13.6	90.00	7,190.8	-957.6	303.5	162.8	140.68	2.157						
14,885.4	7,788.0	7,810.0	7,810.0	130.4	13.6	90.00	7,190.8	-957.6	291.2	149.0	142.17	2.048 CC, ES						
14,900.0	7,788.0	7,810.0	7,810.0	130.7	13.6	90.00	7,190.8	-957.6	291.6	149.1	142.43	2.047 SF						
14,921.8	7,788.0	7,810.0	7,810.0	131.1	13.6	90.00	7,190.8	-957.6	293.5	150.7	142.81	2.055						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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											S29-T1N-R68W (Pratt/Waste Connections) - WILLIAM PELTIER 12-20 (EXISTING) - ENCANA WELL -			Offset Site Error:		0.0 ft
Survey Program: 100-Gyro														Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance									
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)						
14,600.0	7,788.0	7,801.0	7,798.8	125.5	6.8	87.65	7,230.8	-974.3	425.8	295.5	130.29	3.268				
14,700.0	7,788.0	7,803.1	7,800.9	127.2	6.8	88.10	7,230.8	-974.3	355.3	223.2	132.07	2.690				
14,800.0	7,788.0	7,805.2	7,803.0	129.0	6.8	88.53	7,230.8	-974.2	301.9	168.1	133.84	2.256				
14,900.0	7,788.0	7,807.2	7,805.0	130.7	6.8	88.95	7,230.9	-974.2	275.8	140.2	135.61	2.034				
14,921.8	7,788.0	7,807.6	7,805.4	131.1	6.8	89.04	7,230.9	-974.2	274.6	138.6	135.99	2.020 CC, ES, SF				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
S29-T1N-R68W (Pratt/Waste Connections) - WILLIAM PELTIER 1A-20H (EXISTING) - ENCANA WELL												Offset Well Error:	0.0 ft
Survey Program: 911-MWD													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	+E/-W	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)			
14,500.0	7,788.0	12,516.0	7,679.5	123.8	116.5	50.90	7,237.1	-1,088.2	478.7	356.0	122.63	3.903	
14,600.0	7,788.0	12,516.0	7,679.5	125.5	116.5	50.90	7,237.1	-1,088.2	390.9	266.9	123.99	3.153	
14,700.0	7,788.0	12,516.0	7,679.5	127.2	116.5	50.90	7,237.1	-1,088.2	310.6	185.2	125.35	2.478	
14,800.0	7,788.0	12,516.0	7,679.5	129.0	116.5	50.90	7,237.1	-1,088.2	245.2	118.5	126.71	1.935	
14,900.0	7,788.0	12,516.0	7,679.5	130.7	116.5	50.90	7,237.1	-1,088.2	209.3	81.2	128.07	1.634	
14,921.8	7,788.0	12,516.0	7,679.5	131.1	116.5	50.90	7,237.1	-1,088.2	207.1	78.7	128.37	1.613 CC, ES, SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Waste Connections 3A-29H-M168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Waste Connections 3A-29H-M168	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 @ 5153.0ft (Original Well Elev)

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Waste Connections 3A-29H-M168

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.30°

