

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site:	S29-T1N-R68W (Pratt/Waste Connections)	North Reference:	True
Well:	Pratt 4F-29H-P168	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	Pratt 4F-29H-P168					
Well Position	+N/-S	0.0 ft	Northing:	1,249,256.49 ft	Latitude:	40.016600
	+E/-W	0.0 ft	Easting:	3,133,777.21 ft	Longitude:	-105.022390
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,176.0 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	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,214.2	7.14	147.43	1,212.3	-37.5	23.9	1.00	1.00	0.00	147.43	
7,008.4	7.14	147.43	6,961.6	-644.5	411.8	0.00	0.00	0.00	0.00	
7,970.2	90.00	357.50	7,595.0	-73.7	426.7	10.00	8.62	-15.59	-149.73	
12,020.2	90.00	357.50	7,595.0	3,972.4	250.0	0.00	0.00	0.00	0.00	Pratt 4F-29H-P168 TC
12,356.5	90.00	0.86	7,595.0	4,308.7	245.2	1.00	0.00	1.00	90.00	
17,082.5	90.00	0.86	7,595.0	9,034.1	316.4	0.00	0.00	0.00	0.00	Pratt 4F-29H-P168 Pf

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Site:	S29-T1N-R68W (Pratt/Waste Connections)	North Reference:	True
Well:	Pratt 4F-29H-P168	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	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	KOP @ 500'
600.0	1.00	147.43	600.0	-0.7	0.5	-0.7	1.00	1.00	
700.0	2.00	147.43	700.0	-2.9	1.9	-2.9	1.00	1.00	
789.1	2.89	147.43	789.0	-6.1	3.9	-6.1	1.00	1.00	Fox Hills - BASE
800.0	3.00	147.43	799.9	-6.6	4.2	-6.6	1.00	1.00	
900.0	4.00	147.43	899.7	-11.8	7.5	-11.8	1.00	1.00	
1,000.0	5.00	147.43	999.4	-18.4	11.7	-18.4	1.00	1.00	
1,100.0	6.00	147.43	1,098.9	-26.5	16.9	-26.5	1.00	1.00	
1,200.0	7.00	147.43	1,198.3	-36.0	23.0	-36.0	1.00	1.00	
1,214.2	7.14	147.43	1,212.3	-37.5	23.9	-37.5	1.00	1.00	EOB; Inc=7.14°
1,300.0	7.14	147.43	1,297.5	-46.5	29.7	-46.5	0.00	0.00	
1,400.0	7.14	147.43	1,396.7	-56.9	36.4	-56.9	0.00	0.00	
1,500.0	7.14	147.43	1,495.9	-67.4	43.1	-67.4	0.00	0.00	
1,600.0	7.14	147.43	1,595.2	-77.9	49.8	-77.9	0.00	0.00	
1,700.0	7.14	147.43	1,694.4	-88.4	56.5	-88.4	0.00	0.00	
1,800.0	7.14	147.43	1,793.6	-98.8	63.1	-98.8	0.00	0.00	
1,900.0	7.14	147.43	1,892.8	-109.3	69.8	-109.3	0.00	0.00	
2,000.0	7.14	147.43	1,992.1	-119.8	76.5	-119.8	0.00	0.00	
2,100.0	7.14	147.43	2,091.3	-130.3	83.2	-130.3	0.00	0.00	
2,200.0	7.14	147.43	2,190.5	-140.7	89.9	-140.7	0.00	0.00	
2,300.0	7.14	147.43	2,289.7	-151.2	96.6	-151.2	0.00	0.00	
2,400.0	7.14	147.43	2,389.0	-161.7	103.3	-161.7	0.00	0.00	
2,500.0	7.14	147.43	2,488.2	-172.2	110.0	-172.2	0.00	0.00	
2,600.0	7.14	147.43	2,587.4	-182.7	116.7	-182.7	0.00	0.00	
2,700.0	7.14	147.43	2,686.6	-193.1	123.4	-193.1	0.00	0.00	
2,800.0	7.14	147.43	2,785.8	-203.6	130.1	-203.6	0.00	0.00	
2,900.0	7.14	147.43	2,885.1	-214.1	136.8	-214.1	0.00	0.00	
3,000.0	7.14	147.43	2,984.3	-224.6	143.5	-224.6	0.00	0.00	
3,100.0	7.14	147.43	3,083.5	-235.0	150.2	-235.0	0.00	0.00	
3,200.0	7.14	147.43	3,182.7	-245.5	156.9	-245.5	0.00	0.00	
3,300.0	7.14	147.43	3,282.0	-256.0	163.5	-256.0	0.00	0.00	
3,400.0	7.14	147.43	3,381.2	-266.5	170.2	-266.5	0.00	0.00	
3,500.0	7.14	147.43	3,480.4	-276.9	176.9	-276.9	0.00	0.00	
3,600.0	7.14	147.43	3,579.6	-287.4	183.6	-287.4	0.00	0.00	
3,700.0	7.14	147.43	3,678.9	-297.9	190.3	-297.9	0.00	0.00	
3,800.0	7.14	147.43	3,778.1	-308.4	197.0	-308.4	0.00	0.00	
3,900.0	7.14	147.43	3,877.3	-318.9	203.7	-318.9	0.00	0.00	
4,000.0	7.14	147.43	3,976.5	-329.3	210.4	-329.3	0.00	0.00	
4,100.0	7.14	147.43	4,075.8	-339.8	217.1	-339.8	0.00	0.00	
4,200.0	7.14	147.43	4,175.0	-350.3	223.8	-350.3	0.00	0.00	
4,300.0	7.14	147.43	4,274.2	-360.8	230.5	-360.8	0.00	0.00	
4,400.0	7.14	147.43	4,373.4	-371.2	237.2	-371.2	0.00	0.00	
4,500.0	7.14	147.43	4,472.7	-381.7	243.9	-381.7	0.00	0.00	
4,600.0	7.14	147.43	4,571.9	-392.2	250.6	-392.2	0.00	0.00	
4,700.0	7.14	147.43	4,671.1	-402.7	257.3	-402.7	0.00	0.00	
4,795.6	7.14	147.43	4,766.0	-412.7	263.7	-412.7	0.00	0.00	Sussex
4,800.0	7.14	147.43	4,770.3	-413.1	264.0	-413.1	0.00	0.00	

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Well:	Pratt 4F-29H-P168	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	7.14	147.43	4,869.6	-423.6	270.6	-423.6	0.00	0.00	
5,000.0	7.14	147.43	4,968.8	-434.1	277.3	-434.1	0.00	0.00	
5,100.0	7.14	147.43	5,068.0	-444.6	284.0	-444.6	0.00	0.00	
5,111.1	7.14	147.43	5,079.0	-445.7	284.8	-445.7	0.00	0.00	Sussex Marker
5,200.0	7.14	147.43	5,167.2	-455.1	290.7	-455.1	0.00	0.00	
5,300.0	7.14	147.43	5,266.5	-465.5	297.4	-465.5	0.00	0.00	
5,400.0	7.14	147.43	5,365.7	-476.0	304.1	-476.0	0.00	0.00	
5,477.9	7.14	147.43	5,443.0	-484.2	309.3	-484.2	0.00	0.00	Shannon
5,500.0	7.14	147.43	5,464.9	-486.5	310.8	-486.5	0.00	0.00	
5,600.0	7.14	147.43	5,564.1	-497.0	317.5	-497.0	0.00	0.00	
5,700.0	7.14	147.43	5,663.3	-507.4	324.2	-507.4	0.00	0.00	
5,800.0	7.14	147.43	5,762.6	-517.9	330.9	-517.9	0.00	0.00	
5,900.0	7.14	147.43	5,861.8	-528.4	337.6	-528.4	0.00	0.00	
6,000.0	7.14	147.43	5,961.0	-538.9	344.3	-538.9	0.00	0.00	
6,100.0	7.14	147.43	6,060.2	-549.4	351.0	-549.4	0.00	0.00	
6,200.0	7.14	147.43	6,159.5	-559.8	357.7	-559.8	0.00	0.00	
6,300.0	7.14	147.43	6,258.7	-570.3	364.4	-570.3	0.00	0.00	
6,400.0	7.14	147.43	6,357.9	-580.8	371.0	-580.8	0.00	0.00	
6,500.0	7.14	147.43	6,457.1	-591.3	377.7	-591.3	0.00	0.00	
6,543.2	7.14	147.43	6,500.0	-595.8	380.6	-595.8	0.00	0.00	Teepee Buttes (*if present)
6,600.0	7.14	147.43	6,556.4	-601.7	384.4	-601.7	0.00	0.00	
6,700.0	7.14	147.43	6,655.6	-612.2	391.1	-612.2	0.00	0.00	
6,800.0	7.14	147.43	6,754.8	-622.7	397.8	-622.7	0.00	0.00	
6,900.0	7.14	147.43	6,854.0	-633.2	404.5	-633.2	0.00	0.00	
7,000.0	7.14	147.43	6,953.3	-643.6	411.2	-643.6	0.00	0.00	
7,008.4	7.14	147.43	6,961.6	-644.5	411.8	-644.5	0.00	0.00	Start build/turn @ 7008' MD
7,100.0	4.67	47.80	7,052.9	-646.8	417.6	-646.8	10.00	-2.70	
7,200.0	13.46	12.71	7,151.6	-632.7	423.2	-632.7	10.00	8.79	
7,300.0	23.24	5.91	7,246.4	-601.7	427.8	-601.7	10.00	9.78	
7,400.0	33.15	3.02	7,334.4	-554.6	431.3	-554.6	10.00	9.91	
7,500.0	43.10	1.35	7,413.0	-493.0	433.5	-493.0	10.00	9.95	
7,600.0	53.06	0.21	7,479.7	-418.7	434.5	-418.7	10.00	9.96	
7,700.0	63.04	359.33	7,532.6	-333.9	434.1	-333.9	10.00	9.97	
7,733.8	66.41	359.07	7,547.0	-303.4	433.7	-303.4	10.00	9.98	Sharon Springs
7,800.0	73.01	358.60	7,570.0	-241.3	432.4	-241.3	10.00	9.98	
7,838.7	76.87	358.34	7,580.0	-204.0	431.4	-204.0	10.00	9.98	Niobrara
7,900.0	82.99	357.94	7,590.7	-143.7	429.4	-143.7	10.00	9.98	
7,970.2	90.00	357.50	7,595.0	-73.7	426.7	-73.7	10.00	9.98	LP @ 7595' TVD; 90°
8,000.0	90.00	357.50	7,595.0	-43.9	425.4	-43.9	0.00	0.00	
8,100.0	90.00	357.50	7,595.0	56.0	421.0	56.0	0.00	0.00	
8,200.0	90.00	357.50	7,595.0	155.9	416.6	155.9	0.00	0.00	
8,300.0	90.00	357.50	7,595.0	255.8	412.3	255.8	0.00	0.00	
8,400.0	90.00	357.50	7,595.0	355.7	407.9	355.7	0.00	0.00	
8,500.0	90.00	357.50	7,595.0	455.6	403.5	455.6	0.00	0.00	
8,600.0	90.00	357.50	7,595.0	555.5	399.2	555.5	0.00	0.00	
8,700.0	90.00	357.50	7,595.0	655.4	394.8	655.4	0.00	0.00	
8,800.0	90.00	357.50	7,595.0	755.3	390.5	755.3	0.00	0.00	
8,900.0	90.00	357.50	7,595.0	855.2	386.1	855.2	0.00	0.00	
9,000.0	90.00	357.50	7,595.0	955.1	381.7	955.1	0.00	0.00	
9,100.0	90.00	357.50	7,595.0	1,055.0	377.4	1,055.0	0.00	0.00	
9,200.0	90.00	357.50	7,595.0	1,154.9	373.0	1,154.9	0.00	0.00	
9,300.0	90.00	357.50	7,595.0	1,254.8	368.7	1,254.8	0.00	0.00	

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Wellbore:	Hz		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
9,400.0	90.00	357.50	7,595.0	1,354.7	364.3	1,354.7	0.00	0.00	
9,500.0	90.00	357.50	7,595.0	1,454.6	359.9	1,454.6	0.00	0.00	
9,600.0	90.00	357.50	7,595.0	1,554.5	355.6	1,554.5	0.00	0.00	
9,700.0	90.00	357.50	7,595.0	1,654.4	351.2	1,654.4	0.00	0.00	
9,800.0	90.00	357.50	7,595.0	1,754.3	346.8	1,754.3	0.00	0.00	
9,900.0	90.00	357.50	7,595.0	1,854.2	342.5	1,854.2	0.00	0.00	
10,000.0	90.00	357.50	7,595.0	1,954.2	338.1	1,954.2	0.00	0.00	
10,100.0	90.00	357.50	7,595.0	2,054.1	333.8	2,054.1	0.00	0.00	
10,200.0	90.00	357.50	7,595.0	2,154.0	329.4	2,154.0	0.00	0.00	
10,300.0	90.00	357.50	7,595.0	2,253.9	325.0	2,253.9	0.00	0.00	
10,400.0	90.00	357.50	7,595.0	2,353.8	320.7	2,353.8	0.00	0.00	
10,500.0	90.00	357.50	7,595.0	2,453.7	316.3	2,453.7	0.00	0.00	
10,600.0	90.00	357.50	7,595.0	2,553.6	311.9	2,553.6	0.00	0.00	
10,700.0	90.00	357.50	7,595.0	2,653.5	307.6	2,653.5	0.00	0.00	
10,800.0	90.00	357.50	7,595.0	2,753.4	303.2	2,753.4	0.00	0.00	
10,900.0	90.00	357.50	7,595.0	2,853.3	298.9	2,853.3	0.00	0.00	
11,000.0	90.00	357.50	7,595.0	2,953.2	294.5	2,953.2	0.00	0.00	
11,100.0	90.00	357.50	7,595.0	3,053.1	290.1	3,053.1	0.00	0.00	
11,200.0	90.00	357.50	7,595.0	3,153.0	285.8	3,153.0	0.00	0.00	
11,300.0	90.00	357.50	7,595.0	3,252.9	281.4	3,252.9	0.00	0.00	
11,400.0	90.00	357.50	7,595.0	3,352.8	277.1	3,352.8	0.00	0.00	
11,500.0	90.00	357.50	7,595.0	3,452.7	272.7	3,452.7	0.00	0.00	
11,600.0	90.00	357.50	7,595.0	3,552.6	268.3	3,552.6	0.00	0.00	
11,700.0	90.00	357.50	7,595.0	3,652.5	264.0	3,652.5	0.00	0.00	
11,800.0	90.00	357.50	7,595.0	3,752.4	259.6	3,752.4	0.00	0.00	
11,900.0	90.00	357.50	7,595.0	3,852.3	255.2	3,852.3	0.00	0.00	
12,000.0	90.00	357.50	7,595.0	3,952.2	250.9	3,952.2	0.00	0.00	
12,020.2	90.00	357.50	7,595.0	3,972.4	250.0	3,972.4	0.00	0.00	Start turn @ 12020' MD - Pratt 4F-29H-P168 TC
12,100.0	90.00	358.30	7,595.0	4,052.2	247.1	4,052.2	1.00	0.00	
12,200.0	90.00	359.30	7,595.0	4,152.1	245.0	4,152.1	1.00	0.00	
12,300.0	90.00	0.30	7,595.0	4,252.1	244.6	4,252.1	1.00	0.00	
12,356.5	90.00	0.86	7,595.0	4,308.7	245.2	4,308.7	1.00	0.00	End of turn @ 12356' MD
12,400.0	90.00	0.86	7,595.0	4,352.1	245.9	4,352.1	0.00	0.00	
12,500.0	90.00	0.86	7,595.0	4,452.1	247.4	4,452.1	0.00	0.00	
12,600.0	90.00	0.86	7,595.0	4,552.1	248.9	4,552.1	0.00	0.00	
12,700.0	90.00	0.86	7,595.0	4,652.1	250.4	4,652.1	0.00	0.00	
12,800.0	90.00	0.86	7,595.0	4,752.1	251.9	4,752.1	0.00	0.00	
12,900.0	90.00	0.86	7,595.0	4,852.1	253.4	4,852.1	0.00	0.00	
13,000.0	90.00	0.86	7,595.0	4,952.1	254.9	4,952.1	0.00	0.00	
13,100.0	90.00	0.86	7,595.0	5,052.1	256.4	5,052.1	0.00	0.00	
13,200.0	90.00	0.86	7,595.0	5,152.0	257.9	5,152.0	0.00	0.00	
13,300.0	90.00	0.86	7,595.0	5,252.0	259.4	5,252.0	0.00	0.00	
13,400.0	90.00	0.86	7,595.0	5,352.0	260.9	5,352.0	0.00	0.00	
13,500.0	90.00	0.86	7,595.0	5,452.0	262.4	5,452.0	0.00	0.00	
13,600.0	90.00	0.86	7,595.0	5,552.0	263.9	5,552.0	0.00	0.00	
13,700.0	90.00	0.86	7,595.0	5,652.0	265.4	5,652.0	0.00	0.00	
13,800.0	90.00	0.86	7,595.0	5,752.0	266.9	5,752.0	0.00	0.00	
13,900.0	90.00	0.86	7,595.0	5,852.0	268.4	5,852.0	0.00	0.00	
14,000.0	90.00	0.86	7,595.0	5,952.0	270.0	5,952.0	0.00	0.00	
14,100.0	90.00	0.86	7,595.0	6,051.9	271.5	6,051.9	0.00	0.00	
14,200.0	90.00	0.86	7,595.0	6,151.9	273.0	6,151.9	0.00	0.00	
14,300.0	90.00	0.86	7,595.0	6,251.9	274.5	6,251.9	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site:	S29-T1N-R68W (Pratt/Waste Connections)	North Reference:	True
Well:	Pratt 4F-29H-P168	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	0.86	7,595.0	6,351.9	276.0	6,351.9	0.00	0.00	
14,500.0	90.00	0.86	7,595.0	6,451.9	277.5	6,451.9	0.00	0.00	
14,600.0	90.00	0.86	7,595.0	6,551.9	279.0	6,551.9	0.00	0.00	
14,700.0	90.00	0.86	7,595.0	6,651.9	280.5	6,651.9	0.00	0.00	
14,800.0	90.00	0.86	7,595.0	6,751.9	282.0	6,751.9	0.00	0.00	
14,900.0	90.00	0.86	7,595.0	6,851.9	283.5	6,851.9	0.00	0.00	
15,000.0	90.00	0.86	7,595.0	6,951.8	285.0	6,951.8	0.00	0.00	
15,100.0	90.00	0.86	7,595.0	7,051.8	286.5	7,051.8	0.00	0.00	
15,200.0	90.00	0.86	7,595.0	7,151.8	288.0	7,151.8	0.00	0.00	
15,300.0	90.00	0.86	7,595.0	7,251.8	289.5	7,251.8	0.00	0.00	
15,400.0	90.00	0.86	7,595.0	7,351.8	291.0	7,351.8	0.00	0.00	
15,500.0	90.00	0.86	7,595.0	7,451.8	292.5	7,451.8	0.00	0.00	
15,600.0	90.00	0.86	7,595.0	7,551.8	294.1	7,551.8	0.00	0.00	
15,700.0	90.00	0.86	7,595.0	7,651.8	295.6	7,651.8	0.00	0.00	
15,800.0	90.00	0.86	7,595.0	7,751.8	297.1	7,751.8	0.00	0.00	
15,900.0	90.00	0.86	7,595.0	7,851.7	298.6	7,851.7	0.00	0.00	
16,000.0	90.00	0.86	7,595.0	7,951.7	300.1	7,951.7	0.00	0.00	
16,100.0	90.00	0.86	7,595.0	8,051.7	301.6	8,051.7	0.00	0.00	
16,200.0	90.00	0.86	7,595.0	8,151.7	303.1	8,151.7	0.00	0.00	
16,300.0	90.00	0.86	7,595.0	8,251.7	304.6	8,251.7	0.00	0.00	
16,400.0	90.00	0.86	7,595.0	8,351.7	306.1	8,351.7	0.00	0.00	
16,500.0	90.00	0.86	7,595.0	8,451.7	307.6	8,451.7	0.00	0.00	
16,600.0	90.00	0.86	7,595.0	8,551.7	309.1	8,551.7	0.00	0.00	
16,700.0	90.00	0.86	7,595.0	8,651.7	310.6	8,651.7	0.00	0.00	
16,800.0	90.00	0.86	7,595.0	8,751.6	312.1	8,751.6	0.00	0.00	
16,900.0	90.00	0.86	7,595.0	8,851.6	313.6	8,851.6	0.00	0.00	
17,000.0	90.00	0.86	7,595.0	8,951.6	315.1	8,951.6	0.00	0.00	
17,082.5	90.00	0.86	7,595.0	9,034.1	316.4	9,034.1	0.00	0.00	TD at 17082.5 - Pratt 4F-29H-P168 PBHL

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Pratt 4F-29H-P168 PBH	0.00	0.00	7,595.0	9,034.1	316.4	1,258,292.14	3,134,044.93	40.041400	-105.021260
- plan hits target center									
- Point									
Pratt 4F-29H-P168 TGT	0.00	0.00	7,595.0	3,972.4	250.0	1,253,230.22	3,134,005.81	40.027505	-105.021497
- plan hits target center									
- Point									

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site:	S29-T1N-R68W (Pratt/Waste Connections)	North Reference:	True
Well:	Pratt 4F-29H-P168	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
789.1	789.0	Fox Hills - BASE			
4,795.6	4,766.0	Sussex			
5,111.1	5,079.0	Sussex Marker			
5,477.9	5,443.0	Shannon			
6,543.2	6,500.0	Teepee Buttes (*if present)			
7,733.8	7,547.0	Sharon Springs			
7,838.7	7,580.0	Niobrara			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
500.0	500.0	0.0	0.0	KOP @ 500'
1,214.2	1,212.3	-37.5	23.9	EOB; Inc=7.14°
7,008.4	6,961.6	-644.5	411.8	Start build/turn @ 7008' MD
7,970.2	7,595.0	-73.7	426.7	LP @ 7595' TVD; 90°
12,020.2	7,595.0	3,972.4	250.0	Start turn @ 12020' MD
12,356.5	7,595.0	4,308.7	245.2	End of turn @ 12356' MD
17,082.5	7,595.0	9,034.1	316.4	TD at 17082.5

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S29-T1N-R68W (Pratt/Waste Connections)

Pratt 4F-29H-P168

Hz

Plan #1

Anticollision Report

31 May, 2013

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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	5/31/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	17,082.5	Plan #1 (Hz)	MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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)						
COSTIGAN 0-6-20 (EXISTING) - ENCANA WELL - PLAN						Out of range
COSTIGAN 0-8-20 (EXISTING) - ENCANA WELL - PLAN						Out of range
COSTIGAN 13-20 (EXISTING) - ENCANA WELL - PLAN						Out of range
COSTIGAN 14-20 (EXISTING) - ENCANA WELL - PLAN						Out of range
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	14,676.2	7,728.3	361.7	220.2	2.557	CC, ES
COSTIGAN 43-20 (EXISTING) - ENCANA WELL - PLAN	14,700.0	7,728.3	362.5	220.6	2.555	SF
COSTIGAN 4-6-20 (EXISTING) - ENCANA WELL - PLAN						Out of range
COSTIGAN 6-8-20 (EXISTING) - ENCANA WELL - PLAN	12,727.9	7,692.1	406.2	300.5	3.841	CC, ES, SF
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	13,639.4	7,618.0	88.1	-26.1	0.772	Level 1, CC, ES, SF
M E DRIER 1 (EXISTING) - SYNERGY WELL - NO SUR	11,072.5	7,614.0	215.9	146.3	3.100	CC, ES, SF
PRATT 0-2-29 (EXISTING) - ENCANA WELL - SURVEY						Out of range
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						Out of range
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	500.0	488.0	307.9	306.2	180.899	CC, ES
PRATT 29-3 (EXISTING) - SYNERGY WELL - NO SURV	8,400.0	7,583.0	377.6	348.4	12.952	SF
PRATT 4-2-29 (EXISTING) - ENCANA WELL - SURVEY						Out of range
Pratt 4B-29H-P168 - Hz - Plan #1	300.0	300.0	39.2	38.2	39.141	CC, ES
Pratt 4B-29H-P168 - Hz - Plan #1	700.0	697.1	52.8	50.4	21.953	SF
Pratt 4C-29H-P168 - Hz - Plan #1	400.0	400.0	30.8	29.5	22.807	CC, ES
Pratt 4C-29H-P168 - Hz - Plan #1	700.0	698.9	36.9	34.5	15.347	SF
Pratt 4D-29H-P168 - Hz - Plan #1	500.0	500.0	19.6	17.9	11.533	CC, ES
Pratt 4D-29H-P168 - Hz - Plan #1	700.0	699.6	23.3	20.9	9.684	SF
Pratt 4E-29H-P168 - Hz - Plan #1	500.0	500.0	11.2	9.5	6.590	CC, ES
Pratt 4E-29H-P168 - Hz - Plan #1	700.0	700.0	13.4	11.0	5.590	SF
Pratt 4G-29H-P168 - Hz - Plan #1	400.0	400.0	8.4	7.1	6.220	CC, ES
Pratt 4G-29H-P168 - Hz - Plan #1	600.0	599.7	10.7	8.7	5.236	SF
PRATT F UNIT 1 (EXISTING) - ENCANA WELL - NO SU						Out of range
SRC PRATT 13-29D (EXISTING) - SYNERGY WELL - S						Out of range
SRC PRATT 14-29D (EXISTING) - SYNERGY WELL - S						Out of range
SRC PRATT 24-29 PD (EXISTING) - SYNERGY WELL -						Out of range
SRC PRATT 29HD (EXISTING) - SYNERGY WELL - PL						Out of range
SRC PRATT 29LD (EXISTING) - SYNERGY WELL - PLA						Out of range
SRC PRATT 29PD (EXISTING) - SYNERGY WELL - SU	606.7	618.6	312.8	310.5	134.496	CC, ES
SRC PRATT 29PD (EXISTING) - SYNERGY WELL - SU	1,300.0	1,241.0	434.8	428.9	73.225	SF
SRC PRATT 29QD (EXISTING) - SYNERGY WELL - PL						Out of range
SRC PRATT 29SD (EXISTING) - SYNERGY WELL - SU	10,112.2	7,760.6	495.6	434.5	8.120	CC, ES, SF
SRC PRATT 29TD (EXISTING) - SYNERGY WELL - SU	2,853.5	2,908.0	168.9	155.8	12.886	CC
SRC PRATT 29TD (EXISTING) - SYNERGY WELL - SU	2,900.0	2,952.8	169.3	155.7	12.463	ES
SRC PRATT 29TD (EXISTING) - SYNERGY WELL - SU	3,300.0	3,343.1	192.8	175.2	10.952	SF
SRC PRATT 29XD (EXISTING) - SYNERGY WELL - PLA	200.0	190.0	287.2	286.5	436.416	CC, ES

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 Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Separation Factor	Warning
S29-T1N-R68W (Pratt/Waste Connections)						
SRC PRATT 29XD (EXISTING) - SYNERGY WELL - PLA	1,500.0	1,422.4	480.5	474.1	75.165	SF
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 -	0.0	3.0	341.3			
SRC PRATT 33-29PD (EXISTING) - SYNERGY WELL -	100.0	102.5	341.3	341.0	1,092.391	ES
SRC PRATT 33-29PD (EXISTING) - SYNERGY WELL -	1,500.0	1,420.8	484.9	479.7	93.475	SF
SRC PRATT 34-29D (EXISTING) - SYNERGY WELL - S	605.8	600.9	315.4	313.3	151.217	CC, ES
SRC PRATT 34-29D (EXISTING) - SYNERGY WELL - S	2,400.0	2,374.4	485.2	475.7	51.225	SF
SRC PRATT 41-29D (EXISTING) - SYNERGY WELL - S	12,078.0	7,780.7	186.0	90.4	1.946	CC, ES, SF
SRC PRATT 42-29D (EXISTING) - SYNERGY WELL - S	10,566.3	7,700.3	315.3	251.6	4.950	CC, ES
SRC PRATT 42-29D (EXISTING) - SYNERGY WELL - S	10,600.0	7,700.3	317.1	252.8	4.934	SF
SRC PRATT 43-29D (EXISTING) - SYNERGY WELL - S	9,407.9	7,747.3	181.4	129.8	3.515	CC, ES, SF
SRC PRATT 44-29D (EXISTING) - SYNERGY WELL - P	7,899.3	7,645.2	235.5	206.4	8.077	CC, ES, SF
Waste Connections 3A-29H-M168 - Hz - Plan #1						Out of range
Waste Connections 3B-29H-M168 - Hz - Plan #1						Out of range
Waste Connections 3C-29H-M168 - Hz - Plan #1						Out of range
Waste Connections 3D-29H-M168 - Hz - Plan #1						Out of range
Waste Connections 3E-29H-M168 - Hz - Plan #1						Out of range
Waste Connections 3F-29H-M168 - Hz - Plan #1						Out of range
Waste Connections 3G-29H-M168 - Hz - Plan #1						Out of range
WILLIAM H PELTIER 1 (EXISTING) - VESSELS WELL -	16,671.8	7,592.0	342.7	175.7	2.052	CC, ES, SF
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						Out of range
WILLIAM PELTIER 12-20 (EXISTING) - ENCANA WELL						Out of range
WILLIAM PELTIER 1A-20H (EXISTING) - ENCANA WEL	17,064.0	8,324.9	129.7	91.3	3.374	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 Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 43-20 (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							
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
14,400.0	7,595.0	7,728.3	7,619.0	114.2	24.5	90.00	6,622.6	641.8	455.0	318.4	136.65	3.330	
14,500.0	7,595.0	7,728.3	7,619.0	115.9	24.5	90.00	6,622.6	641.8	402.3	263.9	138.39	2.907	
14,600.0	7,595.0	7,728.3	7,619.0	117.7	24.5	90.00	6,622.6	641.8	369.6	229.5	140.13	2.637	
14,676.2	7,595.0	7,728.3	7,619.0	119.0	24.5	90.00	6,622.6	641.8	361.7	220.2	141.46	2.557 CC, ES	
14,700.0	7,595.0	7,728.3	7,619.0	119.4	24.5	90.00	6,622.6	641.8	362.5	220.6	141.88	2.555 SF	
14,800.0	7,595.0	7,728.3	7,619.0	121.2	24.5	90.00	6,622.6	641.8	382.3	238.7	143.62	2.662	
14,900.0	7,595.0	7,728.3	7,619.0	122.9	24.5	90.00	6,622.6	641.8	425.3	280.0	145.36	2.926	
15,000.0	7,595.0	7,728.3	7,619.0	124.6	24.5	90.00	6,622.6	641.8	485.5	338.4	147.10	3.300	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 6-8-20 (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		
12,500.0	7,595.0	7,692.1	7,624.0	81.2	21.1	-90.00	4,686.1	-155.4	465.8	364.0	101.83	4.574		
12,600.0	7,595.0	7,692.1	7,624.0	83.0	21.1	-90.00	4,686.1	-155.4	425.9	322.3	103.56	4.113		
12,700.0	7,595.0	7,692.1	7,624.0	84.7	21.1	-90.00	4,686.1	-155.4	407.2	301.9	105.28	3.867		
12,727.9	7,595.0	7,692.1	7,624.0	85.2	21.1	-90.00	4,686.1	-155.4	406.2	300.5	105.77	3.841	CC, ES, SF	
12,800.0	7,595.0	7,692.1	7,624.0	86.4	21.1	-90.00	4,686.1	-155.4	412.6	305.6	107.02	3.855		
12,900.0	7,595.0	7,692.1	7,624.0	88.1	21.1	-90.00	4,686.1	-155.4	441.2	332.4	108.75	4.057		
13,000.0	7,595.0	7,692.1	7,624.0	89.9	21.1	-90.00	4,686.1	-155.4	488.9	378.5	110.48	4.426		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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) - EDWARD P COSTIGAN 1 (EXISTING) - ENCANA WELL													Offset Site Error:	0.0 ft
Survey Program: 8480-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		
13,200.0	7,595.0	7,618.0	7,618.0	93.3	13.3	-90.00	5,592.8	176.4	448.2	341.6	106.59	4.205		
13,300.0	7,595.0	7,618.0	7,618.0	95.1	13.3	-90.00	5,592.8	176.4	350.7	242.4	108.32	3.237		
13,400.0	7,595.0	7,618.0	7,618.0	96.8	13.3	-90.00	5,592.8	176.4	255.1	145.1	110.06	2.318		
13,500.0	7,595.0	7,618.0	7,618.0	98.5	13.3	-90.00	5,592.8	176.4	164.9	53.2	111.79	1.475	Level 3	
13,600.0	7,595.0	7,618.0	7,618.0	100.3	13.3	-90.00	5,592.8	176.4	96.5	-17.0	113.53	0.850	Level 1	
13,639.4	7,595.0	7,618.0	7,618.0	101.0	13.3	-90.00	5,592.8	176.4	88.1	-26.1	114.21	0.772	Level 1, CC, ES, SF	
13,700.0	7,595.0	7,618.0	7,618.0	102.0	13.3	-90.00	5,592.8	176.4	106.9	-8.3	115.27	0.928	Level 1	
13,800.0	7,595.0	7,618.0	7,618.0	103.8	13.3	-90.00	5,592.8	176.4	183.2	66.2	117.00	1.565		
13,900.0	7,595.0	7,618.0	7,618.0	105.5	13.3	-90.00	5,592.8	176.4	275.1	156.3	118.74	2.316		
14,000.0	7,595.0	7,618.0	7,618.0	107.2	13.3	-90.00	5,592.8	176.4	371.2	250.7	120.48	3.081		
14,100.0	7,595.0	7,618.0	7,618.0	109.0	13.3	-90.00	5,592.8	176.4	468.9	346.7	122.22	3.837		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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) - M E DRIER 1 (EXISTING) - SYNERGY WELL - NO SURV		Offset Site Error:		0.0 ft	
Survey Program: 8824-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)								
10,700.0	7,595.0	7,614.0	7,614.0	50.6	13.3	-90.00	3,016.2	75.6	430.6	367.3	63.33	6.799						
10,800.0	7,595.0	7,614.0	7,614.0	52.3	13.3	-90.00	3,016.2	75.6	347.7	282.7	65.02	5.348						
10,900.0	7,595.0	7,614.0	7,614.0	53.9	13.3	-90.00	3,016.2	75.6	276.4	209.7	66.71	4.143						
11,000.0	7,595.0	7,614.0	7,614.0	55.6	13.3	-90.00	3,016.2	75.6	227.8	159.4	68.41	3.330						
11,072.5	7,595.0	7,614.0	7,614.0	56.8	13.3	-90.00	3,016.2	75.6	215.9	146.3	69.64	3.100	CC, ES, SF					
11,100.0	7,595.0	7,614.0	7,614.0	57.3	13.3	-90.00	3,016.2	75.6	217.7	147.6	70.11	3.105						
11,200.0	7,595.0	7,614.0	7,614.0	59.0	13.3	-90.00	3,016.2	75.6	250.7	178.9	71.81	3.492						
11,300.0	7,595.0	7,614.0	7,614.0	60.7	13.3	-90.00	3,016.2	75.6	313.6	240.1	73.52	4.266						
11,400.0	7,595.0	7,614.0	7,614.0	62.4	13.3	-90.00	3,016.2	75.6	392.3	317.0	75.23	5.214						
11,500.0	7,595.0	7,614.0	7,614.0	64.1	13.3	-90.00	3,016.2	75.6	478.9	402.0	76.94	6.224						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 29-3 (EXISTING) - SYNERGY WELL - NO SURVE													Offset Site Error:	0.0 ft
Survey Program: 8615-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	6.27	306.0	33.6	308.1					
100.0	100.0	88.0	88.0	0.2	0.2	6.27	306.0	33.6	307.9	307.6	0.31	1,007.324		
200.0	200.0	188.0	188.0	0.3	0.3	6.27	306.0	33.6	307.9	307.2	0.65	470.249		
300.0	300.0	288.0	288.0	0.5	0.5	6.27	306.0	33.6	307.9	306.9	1.00	306.717		
400.0	400.0	388.0	388.0	0.7	0.7	6.27	306.0	33.6	307.9	306.5	1.35	227.576		
500.0	500.0	488.0	488.0	0.8	0.9	6.27	306.0	33.6	307.9	306.2	1.70	180.899 CC, ES		
600.0	600.0	588.0	588.0	1.0	1.0	-141.26	306.0	33.6	308.5	306.5	2.05	150.439		
700.0	700.0	688.0	688.0	1.2	1.2	-141.55	306.0	33.6	310.6	308.2	2.40	129.374		
800.0	799.9	787.9	787.9	1.4	1.4	-142.02	306.0	33.6	314.0	311.3	2.75	114.103		
900.0	899.7	887.7	887.7	1.6	1.5	-142.66	306.0	33.6	318.9	315.8	3.11	102.660		
1,000.0	999.4	987.4	987.4	1.8	1.7	-143.46	306.0	33.6	325.1	321.7	3.46	93.889		
1,100.0	1,098.9	1,086.9	1,086.9	2.0	1.9	-144.40	306.0	33.6	332.9	329.1	3.82	87.065		
1,200.0	1,198.3	1,186.3	1,186.3	2.2	2.1	-145.45	306.0	33.6	342.2	338.0	4.19	81.712		
1,300.0	1,297.5	1,285.5	1,285.5	2.5	2.2	-146.58	306.0	33.6	352.5	347.9	4.55	77.392		
1,400.0	1,396.7	1,384.7	1,384.7	2.7	2.4	-147.66	306.0	33.6	363.0	358.0	4.92	73.744		
1,500.0	1,495.9	1,483.9	1,483.9	3.0	2.6	-148.68	306.0	33.6	373.6	368.3	5.29	70.635		
1,600.0	1,595.2	1,583.2	1,583.2	3.3	2.8	-149.64	306.0	33.6	384.3	378.6	5.65	67.962		
1,700.0	1,694.4	1,682.4	1,682.4	3.5	2.9	-150.55	306.0	33.6	395.1	389.0	6.02	65.643		
1,800.0	1,793.6	1,781.6	1,781.6	3.8	3.1	-151.41	306.0	33.6	405.9	399.6	6.38	63.617		
1,900.0	1,892.8	1,880.8	1,880.8	4.1	3.3	-152.23	306.0	33.6	416.9	410.2	6.74	61.833		
2,000.0	1,992.1	1,980.1	1,980.1	4.3	3.5	-153.00	306.0	33.6	428.0	420.9	7.10	60.252		
2,100.0	2,091.3	2,079.3	2,079.3	4.6	3.6	-153.74	306.0	33.6	439.1	431.6	7.46	58.843		
2,200.0	2,190.5	2,178.5	2,178.5	4.9	3.8	-154.44	306.0	33.6	450.3	442.5	7.82	57.580		
2,300.0	2,289.7	2,277.7	2,277.7	5.1	4.0	-155.10	306.0	33.6	461.6	453.4	8.18	56.443		
2,400.0	2,389.0	2,377.0	2,377.0	5.4	4.1	-155.73	306.0	33.6	472.9	464.4	8.53	55.415		
2,500.0	2,488.2	2,476.2	2,476.2	5.7	4.3	-156.34	306.0	33.6	484.3	475.4	8.89	54.480		
2,600.0	2,587.4	2,575.4	2,575.4	6.0	4.5	-156.91	306.0	33.6	495.7	486.5	9.24	53.628		
8,100.0	7,595.0	7,583.0	7,583.0	16.0	13.2	-90.00	306.0	33.6	461.1	433.7	27.38	16.837		
8,200.0	7,595.0	7,583.0	7,583.0	16.3	13.2	-90.00	306.0	33.6	411.4	383.6	27.79	14.806		
8,300.0	7,595.0	7,583.0	7,583.0	16.9	13.2	-90.00	306.0	33.6	382.0	353.6	28.38	13.458		
8,366.7	7,595.0	7,583.0	7,583.0	17.3	13.2	-90.00	306.0	33.6	376.1	347.2	28.90	13.015		
8,400.0	7,595.0	7,583.0	7,583.0	17.6	13.2	-90.00	306.0	33.6	377.6	348.4	29.15	12.952 SF		
8,500.0	7,595.0	7,583.0	7,583.0	18.4	13.2	-90.00	306.0	33.6	399.0	369.0	30.07	13.270		
8,600.0	7,595.0	7,583.0	7,583.0	19.4	13.2	-90.00	306.0	33.6	442.6	411.5	31.11	14.224		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 4B-29H-P168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total	Separation	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.95	0.0	-39.2	39.2					
100.0	100.0	100.0	100.0	0.2	0.2	-89.95	0.0	-39.2	39.2	38.9	0.30	129.120		
200.0	200.0	200.0	200.0	0.3	0.3	-89.95	0.0	-39.2	39.2	38.6	0.65	60.072		
300.0	300.0	300.0	300.0	0.5	0.5	-89.95	0.0	-39.2	39.2	38.2	1.00	39.141 CC, ES		
400.0	400.0	399.4	399.4	0.7	0.7	-90.65	-0.5	-39.9	39.9	38.6	1.35	29.569		
500.0	500.0	498.8	498.8	0.8	0.9	-92.59	-1.9	-42.1	42.1	40.4	1.70	24.754		
600.0	600.0	598.0	597.9	1.0	1.0	118.08	-4.3	-45.6	46.3	44.2	2.05	22.577		
700.0	700.0	697.1	696.8	1.2	1.2	117.27	-7.7	-50.6	52.8	50.4	2.40	21.953 SF		
800.0	799.9	795.8	795.2	1.4	1.4	117.29	-12.0	-56.9	61.6	58.8	2.77	22.267		
900.0	899.7	894.2	893.1	1.6	1.7	117.83	-17.3	-64.7	72.7	69.6	3.14	23.163		
1,000.0	999.4	992.1	990.4	1.8	1.9	118.63	-23.4	-73.7	86.1	82.6	3.53	24.423		
1,100.0	1,098.9	1,089.5	1,087.0	2.0	2.2	119.53	-30.5	-84.1	101.8	97.9	3.93	25.904		
1,200.0	1,198.3	1,186.3	1,182.7	2.2	2.4	120.42	-38.4	-95.8	119.8	115.5	4.36	27.508		
1,300.0	1,297.5	1,282.4	1,277.6	2.5	2.7	121.19	-47.2	-108.7	139.8	135.0	4.80	29.137		
1,400.0	1,396.7	1,378.4	1,372.1	2.7	3.1	121.46	-56.8	-122.9	161.1	155.9	5.25	30.691		
1,500.0	1,495.9	1,476.0	1,468.0	3.0	3.4	121.58	-66.9	-137.7	182.9	177.2	5.71	32.017		
1,600.0	1,595.2	1,573.6	1,563.9	3.3	3.7	121.68	-77.0	-152.6	204.7	198.6	6.18	33.117		
1,700.0	1,694.4	1,671.2	1,659.8	3.5	4.1	121.75	-87.1	-167.4	226.5	219.9	6.65	34.042		
1,800.0	1,793.6	1,768.8	1,755.8	3.8	4.4	121.81	-97.2	-182.3	248.3	241.2	7.13	34.827		
1,900.0	1,892.8	1,866.4	1,851.7	4.1	4.8	121.87	-107.3	-197.1	270.1	262.5	7.61	35.502		
2,000.0	1,992.1	1,964.0	1,947.6	4.3	5.1	121.91	-117.4	-212.0	291.9	283.8	8.09	36.087		
2,100.0	2,091.3	2,061.6	2,043.6	4.6	5.5	121.95	-127.5	-226.8	313.7	305.2	8.57	36.598		
2,200.0	2,190.5	2,159.2	2,139.5	4.9	5.8	121.98	-137.6	-241.7	335.5	326.5	9.06	37.049		
2,300.0	2,289.7	2,256.8	2,235.4	5.1	6.2	122.01	-147.7	-256.5	357.3	347.8	9.54	37.449		
2,400.0	2,389.0	2,354.4	2,331.3	5.4	6.5	122.04	-157.8	-271.4	379.1	369.1	10.03	37.805		
2,500.0	2,488.2	2,452.0	2,427.3	5.7	6.9	122.06	-167.9	-286.3	400.9	390.4	10.52	38.126		
2,600.0	2,587.4	2,549.6	2,523.2	6.0	7.2	122.08	-178.0	-301.1	422.7	411.7	11.00	38.415		
2,700.0	2,686.6	2,647.1	2,619.1	6.2	7.6	122.10	-188.1	-316.0	444.5	433.0	11.49	38.676		
2,800.0	2,785.8	2,744.7	2,715.1	6.5	8.0	122.12	-198.2	-330.8	466.3	454.3	11.98	38.915		
2,900.0	2,885.1	2,842.3	2,811.0	6.8	8.3	122.13	-208.3	-345.7	488.1	475.7	12.47	39.133		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 4C-29H-P168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total	Separation	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.95	0.0	-30.8	30.8					
100.0	100.0	100.0	100.0	0.2	0.2	-89.95	0.0	-30.8	30.8	30.5	0.30	101.451		
200.0	200.0	200.0	200.0	0.3	0.3	-89.95	0.0	-30.8	30.8	30.2	0.65	47.199		
300.0	300.0	300.0	300.0	0.5	0.5	-89.95	0.0	-30.8	30.8	29.8	1.00	30.754		
400.0	400.0	400.0	400.0	0.7	0.7	-89.95	0.0	-30.8	30.8	29.5	1.35	22.807 CC, ES		
500.0	500.0	499.7	499.7	0.8	0.8	-91.31	-0.7	-31.3	31.3	29.6	1.70	18.394		
600.0	600.0	599.4	599.3	1.0	1.0	118.75	-2.9	-32.6	33.2	31.1	2.05	16.170		
700.0	700.0	698.9	698.8	1.2	1.2	116.77	-6.6	-34.9	36.9	34.5	2.41	15.347 SF		
800.0	799.9	798.3	798.0	1.4	1.4	115.44	-11.8	-38.0	42.6	39.8	2.77	15.355		
900.0	899.7	897.6	896.9	1.6	1.6	114.68	-18.4	-42.0	50.1	46.9	3.15	15.873		
1,000.0	999.4	996.5	995.5	1.8	1.8	114.33	-26.5	-46.9	59.4	55.8	3.55	16.702		
1,100.0	1,098.9	1,095.6	1,094.0	2.0	2.1	114.45	-35.8	-52.6	70.3	66.3	3.98	17.683		
1,200.0	1,198.3	1,194.9	1,192.7	2.2	2.3	115.53	-45.2	-58.3	82.0	77.6	4.42	18.577		
1,300.0	1,297.5	1,294.2	1,291.3	2.5	2.5	117.01	-54.6	-64.1	94.3	89.4	4.87	19.366		
1,400.0	1,396.7	1,393.4	1,389.9	2.7	2.8	118.17	-64.0	-69.8	106.6	101.3	5.33	20.005		
1,500.0	1,495.9	1,492.6	1,488.5	3.0	3.0	119.09	-73.4	-75.5	119.0	113.2	5.80	20.531		
1,600.0	1,595.2	1,591.8	1,587.1	3.3	3.3	119.84	-82.8	-81.3	131.4	125.1	6.27	20.969		
1,700.0	1,694.4	1,691.0	1,685.7	3.5	3.5	120.45	-92.2	-87.0	143.8	137.0	6.74	21.340		
1,800.0	1,793.6	1,790.2	1,784.3	3.8	3.8	120.97	-101.7	-92.7	156.2	149.0	7.21	21.657		
1,900.0	1,892.8	1,889.5	1,882.9	4.1	4.0	121.42	-111.1	-98.5	168.6	160.9	7.69	21.931		
2,000.0	1,992.1	1,988.7	1,981.5	4.3	4.3	121.80	-120.5	-104.2	181.1	172.9	8.17	22.170		
2,100.0	2,091.3	2,087.9	2,080.1	4.6	4.5	122.13	-129.9	-109.9	193.5	184.9	8.65	22.380		
2,200.0	2,190.5	2,187.1	2,178.7	4.9	4.8	122.42	-139.3	-115.7	205.9	196.8	9.13	22.566		
2,300.0	2,289.7	2,286.3	2,277.3	5.1	5.1	122.68	-148.7	-121.4	218.4	208.8	9.61	22.731		
2,400.0	2,389.0	2,385.5	2,375.9	5.4	5.3	122.91	-158.1	-127.2	230.9	220.8	10.09	22.880		
2,500.0	2,488.2	2,484.8	2,474.5	5.7	5.6	123.12	-167.6	-132.9	243.3	232.7	10.57	23.013		
2,600.0	2,587.4	2,584.0	2,573.1	6.0	5.8	123.31	-177.0	-138.6	255.8	244.7	11.06	23.135		
2,700.0	2,686.6	2,683.2	2,671.7	6.2	6.1	123.48	-186.4	-144.4	268.2	256.7	11.54	23.245		
2,800.0	2,785.8	2,782.4	2,770.3	6.5	6.3	123.63	-195.8	-150.1	280.7	268.7	12.02	23.346		
2,900.0	2,885.1	2,881.6	2,868.9	6.8	6.6	123.77	-205.2	-155.8	293.2	280.7	12.51	23.438		
3,000.0	2,984.3	2,980.9	2,967.5	7.1	6.9	123.90	-214.6	-161.6	305.6	292.7	12.99	23.523		
3,100.0	3,083.5	3,080.1	3,066.1	7.3	7.1	124.02	-224.0	-167.3	318.1	304.6	13.48	23.601		
3,200.0	3,182.7	3,179.3	3,164.7	7.6	7.4	124.14	-233.5	-173.0	330.6	316.6	13.96	23.674		
3,300.0	3,282.0	3,278.5	3,263.3	7.9	7.6	124.24	-242.9	-178.8	343.1	328.6	14.45	23.741		
3,400.0	3,381.2	3,377.7	3,361.9	8.2	7.9	124.33	-252.3	-184.5	355.5	340.6	14.94	23.804		
3,500.0	3,480.4	3,476.9	3,460.5	8.4	8.1	124.42	-261.7	-190.2	368.0	352.6	15.42	23.862		
3,600.0	3,579.6	3,576.2	3,559.1	8.7	8.4	124.51	-271.1	-196.0	380.5	364.6	15.91	23.917		
3,700.0	3,678.9	3,675.4	3,657.7	9.0	8.7	124.58	-280.5	-201.7	393.0	376.6	16.40	23.968		
3,800.0	3,778.1	3,774.6	3,756.3	9.3	8.9	124.66	-289.9	-207.4	405.5	388.6	16.88	24.016		
3,900.0	3,877.3	3,873.8	3,854.9	9.6	9.2	124.73	-299.4	-213.2	417.9	400.6	17.37	24.062		
4,000.0	3,976.5	3,973.0	3,953.5	9.8	9.4	124.79	-308.8	-218.9	430.4	412.6	17.86	24.104		
4,100.0	4,075.8	4,072.2	4,052.1	10.1	9.7	124.85	-318.2	-224.6	442.9	424.5	18.34	24.145		
4,200.0	4,175.0	4,171.5	4,150.7	10.4	9.9	124.91	-327.6	-230.4	455.4	436.5	18.83	24.183		
4,300.0	4,274.2	4,270.7	4,249.3	10.7	10.2	124.97	-337.0	-236.1	467.9	448.5	19.32	24.219		
4,400.0	4,373.4	4,369.9	4,347.9	10.9	10.5	125.02	-346.4	-241.8	480.3	460.5	19.81	24.253		
4,500.0	4,472.7	4,469.1	4,446.5	11.2	10.7	125.07	-355.8	-247.6	492.8	472.5	20.29	24.286		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 4D-29H-P168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.95	0.0	-19.6	19.6					
100.0	100.0	100.0	100.0	0.2	0.2	-89.95	0.0	-19.6	19.6	19.3	0.30	64.560		
200.0	200.0	200.0	200.0	0.3	0.3	-89.95	0.0	-19.6	19.6	19.0	0.65	30.036		
300.0	300.0	300.0	300.0	0.5	0.5	-89.95	0.0	-19.6	19.6	18.6	1.00	19.570		
400.0	400.0	400.0	400.0	0.7	0.7	-89.95	0.0	-19.6	19.6	18.3	1.35	14.513		
500.0	500.0	500.0	500.0	0.8	0.8	-89.95	0.0	-19.6	19.6	17.9	1.70	11.533 CC, ES		
600.0	600.0	599.8	599.8	1.0	1.0	122.55	-0.7	-20.0	20.5	18.5	2.05	10.013		
700.0	700.0	699.6	699.5	1.2	1.2	122.35	-3.0	-21.4	23.3	20.9	2.40	9.684 SF		
800.0	799.9	799.3	799.1	1.4	1.4	122.11	-6.8	-23.6	27.8	25.1	2.76	10.073		
900.0	899.7	898.8	898.4	1.6	1.6	121.86	-12.1	-26.7	34.2	31.1	3.14	10.911		
1,000.0	999.4	998.3	997.7	1.8	1.8	122.07	-18.5	-30.5	42.2	38.7	3.52	11.988		
1,100.0	1,098.9	1,097.9	1,097.0	2.0	2.0	123.73	-25.1	-34.3	51.3	47.3	3.92	13.064		
1,200.0	1,198.3	1,197.4	1,196.2	2.2	2.2	126.21	-31.7	-38.2	61.3	57.0	4.34	14.144		
1,300.0	1,297.5	1,296.7	1,295.3	2.5	2.4	128.72	-38.2	-42.0	72.2	67.4	4.75	15.179		
1,400.0	1,396.7	1,396.1	1,394.3	2.7	2.6	130.60	-44.8	-45.8	83.1	77.9	5.18	16.059		
1,500.0	1,495.9	1,495.5	1,493.4	3.0	2.8	132.03	-51.4	-49.7	94.1	88.5	5.60	16.811		
1,600.0	1,595.2	1,594.8	1,592.5	3.3	3.0	133.17	-57.9	-53.5	105.2	99.2	6.03	17.461		
1,700.0	1,694.4	1,694.2	1,691.6	3.5	3.2	134.09	-64.5	-57.3	116.3	109.9	6.45	18.026		
1,800.0	1,793.6	1,793.6	1,790.6	3.8	3.5	134.85	-71.0	-61.2	127.4	120.5	6.88	18.522		
1,900.0	1,892.8	1,892.9	1,889.7	4.1	3.7	135.48	-77.6	-65.0	138.6	131.3	7.31	18.960		
2,000.0	1,992.1	1,992.3	1,988.8	4.3	3.9	136.02	-84.1	-68.8	149.7	142.0	7.74	19.350		
2,100.0	2,091.3	2,091.7	2,087.9	4.6	4.1	136.49	-90.7	-72.7	160.9	152.7	8.17	19.699		
2,200.0	2,190.5	2,191.0	2,186.9	4.9	4.3	136.90	-97.2	-76.5	172.1	163.5	8.60	20.012		
2,300.0	2,289.7	2,290.4	2,286.0	5.1	4.5	137.25	-103.8	-80.4	183.2	174.2	9.03	20.296		
2,400.0	2,389.0	2,389.8	2,385.1	5.4	4.7	137.57	-110.4	-84.2	194.4	185.0	9.46	20.554		
2,500.0	2,488.2	2,489.1	2,484.2	5.7	5.0	137.85	-116.9	-88.0	205.6	195.7	9.89	20.789		
2,600.0	2,587.4	2,588.5	2,583.2	6.0	5.2	138.10	-123.5	-91.9	216.8	206.5	10.32	21.004		
2,700.0	2,686.6	2,687.9	2,682.3	6.2	5.4	138.33	-130.0	-95.7	228.0	217.3	10.76	21.202		
2,800.0	2,785.8	2,787.2	2,781.4	6.5	5.6	138.54	-136.6	-99.5	239.2	228.1	11.19	21.384		
2,900.0	2,885.1	2,886.6	2,880.5	6.8	5.8	138.72	-143.1	-103.4	250.5	238.8	11.62	21.553		
3,000.0	2,984.3	2,986.0	2,979.5	7.1	6.0	138.90	-149.7	-107.2	261.7	249.6	12.05	21.709		
3,100.0	3,083.5	3,085.3	3,078.6	7.3	6.3	139.05	-156.2	-111.0	272.9	260.4	12.49	21.855		
3,200.0	3,182.7	3,184.7	3,177.7	7.6	6.5	139.20	-162.8	-114.9	284.1	271.2	12.92	21.991		
3,300.0	3,282.0	3,284.1	3,276.8	7.9	6.7	139.33	-169.4	-118.7	295.3	282.0	13.35	22.118		
3,400.0	3,381.2	3,383.4	3,375.8	8.2	6.9	139.46	-175.9	-122.6	306.5	292.7	13.79	22.236		
3,500.0	3,480.4	3,482.8	3,474.9	8.4	7.1	139.57	-182.5	-126.4	317.7	303.5	14.22	22.348		
3,600.0	3,579.6	3,582.2	3,574.0	8.7	7.3	139.68	-189.0	-130.2	329.0	314.3	14.65	22.453		
3,700.0	3,678.9	3,681.5	3,673.1	9.0	7.6	139.78	-195.6	-134.1	340.2	325.1	15.09	22.551		
3,800.0	3,778.1	3,780.9	3,772.2	9.3	7.8	139.87	-202.1	-137.9	351.4	335.9	15.52	22.644		
3,900.0	3,877.3	3,880.3	3,871.2	9.6	8.0	139.96	-208.7	-141.7	362.6	346.7	15.95	22.732		
4,000.0	3,976.5	3,979.6	3,970.3	9.8	8.2	140.05	-215.3	-145.6	373.9	357.5	16.39	22.816		
4,100.0	4,075.8	4,079.0	4,069.4	10.1	8.4	140.12	-221.8	-149.4	385.1	368.3	16.82	22.895		
4,200.0	4,175.0	4,178.4	4,168.5	10.4	8.6	140.20	-228.4	-153.2	396.3	379.1	17.25	22.970		
4,300.0	4,274.2	4,277.7	4,267.5	10.7	8.9	140.27	-234.9	-157.1	407.5	389.9	17.69	23.041		
4,400.0	4,373.4	4,377.1	4,366.6	10.9	9.1	140.33	-241.5	-160.9	418.8	400.6	18.12	23.109		
4,500.0	4,472.7	4,476.5	4,465.7	11.2	9.3	140.40	-248.0	-164.8	430.0	411.4	18.56	23.174		
4,600.0	4,571.9	4,575.8	4,564.8	11.5	9.5	140.46	-254.6	-168.6	441.2	422.2	18.99	23.235		
4,700.0	4,671.1	4,675.2	4,663.8	11.8	9.7	140.51	-261.1	-172.4	452.5	433.0	19.42	23.294		
4,800.0	4,770.3	4,774.6	4,762.9	12.0	10.0	140.57	-267.7	-176.3	463.7	443.8	19.86	23.350		
4,900.0	4,869.6	4,873.9	4,862.0	12.3	10.2	140.62	-274.3	-180.1	474.9	454.6	20.29	23.404		
5,000.0	4,968.8	4,973.3	4,961.1	12.6	10.4	140.67	-280.8	-183.9	486.1	465.4	20.73	23.456		
5,100.0	5,068.0	5,072.7	5,060.1	12.9	10.6	140.71	-287.4	-187.8	497.4	476.2	21.16	23.505		

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 Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 4E-29H-P168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program:		0-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.96	0.0	-11.2	11.2					
100.0	100.0	100.0	100.0	0.2	0.2	-89.96	0.0	-11.2	11.2	10.9	0.30	36.891		
200.0	200.0	200.0	200.0	0.3	0.3	-89.96	0.0	-11.2	11.2	10.6	0.65	17.163		
300.0	300.0	300.0	300.0	0.5	0.5	-89.96	0.0	-11.2	11.2	10.2	1.00	11.183		
400.0	400.0	400.0	400.0	0.7	0.7	-89.96	0.0	-11.2	11.2	9.9	1.35	8.293		
500.0	500.0	500.0	500.0	0.8	0.8	-89.96	0.0	-11.2	11.2	9.5	1.70	6.590	CC, ES	
600.0	600.0	600.0	600.0	1.0	1.0	126.22	0.0	-11.2	11.7	9.6	2.05	5.708		
700.0	700.0	700.0	700.0	1.2	1.2	135.26	0.0	-11.2	13.4	11.0	2.40	5.590	SF	
800.0	799.9	799.9	799.9	1.4	1.4	145.77	0.0	-11.2	16.8	14.0	2.75	6.108		
900.0	899.7	899.7	899.7	1.6	1.5	154.68	0.0	-11.2	22.1	19.0	3.10	7.138		
1,000.0	999.4	999.4	999.4	1.8	1.7	161.21	0.0	-11.2	29.4	26.0	3.44	8.535		
1,100.0	1,098.9	1,098.9	1,098.9	2.0	1.9	165.77	0.0	-11.2	38.6	34.8	3.79	10.187		
1,200.0	1,198.3	1,198.3	1,198.3	2.2	2.1	168.96	0.0	-11.2	49.7	45.5	4.13	12.016		
1,300.0	1,297.5	1,297.5	1,297.5	2.5	2.2	171.16	0.0	-11.2	61.9	57.4	4.48	13.819		
1,400.0	1,396.7	1,396.7	1,396.7	2.7	2.4	172.64	0.0	-11.2	74.2	69.4	4.83	15.377		
1,500.0	1,495.9	1,495.9	1,495.9	3.0	2.6	173.69	0.0	-11.2	86.5	81.4	5.17	16.733		
1,600.0	1,595.2	1,595.2	1,595.2	3.3	2.8	174.48	0.0	-11.2	98.9	93.4	5.52	17.922		
1,700.0	1,694.4	1,694.4	1,694.4	3.5	2.9	175.10	0.0	-11.2	111.3	105.4	5.87	18.973		
1,800.0	1,793.6	1,793.6	1,793.6	3.8	3.1	175.59	0.0	-11.2	123.7	117.5	6.21	19.907		
1,900.0	1,892.8	1,892.8	1,892.8	4.1	3.3	175.99	0.0	-11.2	136.1	129.5	6.56	20.745		
2,000.0	1,992.1	1,992.1	1,992.1	4.3	3.5	176.33	0.0	-11.2	148.5	141.6	6.91	21.498		
2,100.0	2,091.3	2,093.8	2,093.8	4.6	3.6	176.54	-0.7	-11.0	160.2	152.9	7.26	22.068		
2,200.0	2,190.5	2,196.1	2,196.1	4.9	3.8	176.54	-3.2	-10.1	170.2	162.6	7.61	22.358		
2,300.0	2,289.7	2,298.7	2,298.6	5.1	4.0	176.36	-7.4	-8.7	178.5	170.5	7.97	22.405		
2,400.0	2,389.0	2,401.6	2,401.3	5.4	4.2	176.03	-13.3	-6.7	185.1	176.8	8.32	22.239		
2,500.0	2,488.2	2,504.7	2,504.1	5.7	4.4	175.55	-21.0	-4.0	190.0	181.3	8.68	21.884		
2,600.0	2,587.4	2,607.9	2,606.8	6.0	4.6	174.92	-30.5	-0.8	193.2	184.2	9.04	21.364		
2,700.0	2,686.6	2,711.2	2,709.3	6.2	4.8	174.13	-41.7	3.0	194.8	185.4	9.41	20.698		
2,800.0	2,785.8	2,812.6	2,809.9	6.5	5.0	173.20	-54.2	7.2	194.9	185.1	9.78	19.936		
2,900.0	2,885.1	2,912.5	2,909.0	6.8	5.2	172.28	-66.6	11.5	195.0	184.8	10.15	19.217		
3,000.0	2,984.3	3,012.5	3,008.0	7.1	5.5	171.35	-79.1	15.7	195.1	184.5	10.52	18.545		
3,100.0	3,083.5	3,112.4	3,107.1	7.3	5.7	170.43	-91.5	20.0	195.2	184.3	10.89	17.917		
3,200.0	3,182.7	3,212.4	3,206.2	7.6	5.9	169.51	-104.0	24.2	195.4	184.1	11.28	17.328		
3,300.0	3,282.0	3,312.3	3,305.3	7.9	6.2	168.59	-116.4	28.4	195.7	184.0	11.66	16.774		
3,400.0	3,381.2	3,412.3	3,404.4	8.2	6.4	167.67	-128.9	32.7	195.9	183.9	12.06	16.253		
3,500.0	3,480.4	3,512.2	3,503.4	8.4	6.7	166.75	-141.3	36.9	196.3	183.8	12.45	15.762		
3,600.0	3,579.6	3,612.2	3,602.5	8.7	6.9	165.84	-153.8	41.1	196.7	183.8	12.86	15.298		
3,700.0	3,678.9	3,712.1	3,701.6	9.0	7.2	164.93	-166.2	45.4	197.1	183.9	13.27	14.859		
3,800.0	3,778.1	3,812.1	3,800.7	9.3	7.5	164.03	-178.7	49.6	197.6	184.0	13.68	14.444		
3,900.0	3,877.3	3,912.0	3,899.8	9.6	7.7	163.13	-191.1	53.9	198.2	184.1	14.11	14.050		
4,000.0	3,976.5	4,012.0	3,998.9	9.8	8.0	162.24	-203.6	58.1	198.8	184.2	14.53	13.677		
4,100.0	4,075.8	4,111.9	4,097.9	10.1	8.2	161.35	-216.0	62.3	199.4	184.5	14.97	13.322		
4,200.0	4,175.0	4,211.9	4,197.0	10.4	8.5	160.47	-228.5	66.6	200.1	184.7	15.41	12.985		
4,300.0	4,274.2	4,311.8	4,296.1	10.7	8.8	159.59	-240.9	70.8	200.8	185.0	15.86	12.664		
4,400.0	4,373.4	4,411.8	4,395.2	10.9	9.0	158.72	-253.4	75.0	201.6	185.3	16.31	12.359		
4,500.0	4,472.7	4,511.7	4,494.3	11.2	9.3	157.86	-265.8	79.3	202.5	185.7	16.78	12.068		
4,600.0	4,571.9	4,611.7	4,593.3	11.5	9.6	157.01	-278.3	83.5	203.3	186.1	17.24	11.792		
4,700.0	4,671.1	4,711.6	4,692.4	11.8	9.9	156.16	-290.7	87.8	204.3	186.5	17.72	11.528		
4,800.0	4,770.3	4,811.6	4,791.5	12.0	10.1	155.32	-303.1	92.0	205.2	187.0	18.20	11.276		
4,900.0	4,869.6	4,911.5	4,890.6	12.3	10.4	154.49	-315.6	96.2	206.2	187.5	18.69	11.036		
5,000.0	4,968.8	5,011.5	4,989.7	12.6	10.7	153.67	-328.0	100.5	207.3	188.1	19.18	10.807		
5,100.0	5,068.0	5,111.4	5,088.7	12.9	11.0	152.85	-340.5	104.7	208.4	188.7	19.68	10.588		

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 Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 4E-29H-P168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
5,200.0	5,167.2	5,211.4	5,187.8	13.2	11.2	152.05	-352.9	109.0	209.5	189.3	20.18	10.380		
5,300.0	5,266.5	5,311.3	5,286.9	13.4	11.5	151.25	-365.4	113.2	210.7	190.0	20.70	10.180		
5,400.0	5,365.7	5,411.3	5,386.0	13.7	11.8	150.46	-377.8	117.4	211.9	190.7	21.21	9.990		
5,500.0	5,464.9	5,511.2	5,485.1	14.0	12.1	149.68	-390.3	121.7	213.2	191.4	21.73	9.808		
5,600.0	5,564.1	5,611.2	5,584.2	14.3	12.3	148.91	-402.7	125.9	214.5	192.2	22.26	9.634		
5,700.0	5,663.3	5,711.1	5,683.2	14.6	12.6	148.15	-415.2	130.1	215.8	193.0	22.79	9.467		
5,800.0	5,762.6	5,811.1	5,782.3	14.8	12.9	147.40	-427.6	134.4	217.2	193.8	23.33	9.308		
5,900.0	5,861.8	5,911.0	5,881.4	15.1	13.2	146.66	-440.1	138.6	218.6	194.7	23.87	9.156		
6,000.0	5,961.0	6,011.0	5,980.5	15.4	13.5	145.93	-452.5	142.9	220.0	195.6	24.42	9.011		
6,100.0	6,060.2	6,110.9	6,079.6	15.7	13.7	145.20	-465.0	147.1	221.5	196.5	24.97	8.871		
6,200.0	6,159.5	6,210.9	6,178.6	15.9	14.0	144.49	-477.4	151.3	223.0	197.5	25.52	8.738		
6,300.0	6,258.7	6,310.8	6,277.7	16.2	14.3	143.79	-489.9	155.6	224.6	198.5	26.08	8.611		
6,400.0	6,357.9	6,410.8	6,376.8	16.5	14.6	143.09	-502.3	159.8	226.1	199.5	26.64	8.488		
6,500.0	6,457.1	6,510.7	6,475.9	16.8	14.9	142.41	-514.8	164.0	227.7	200.5	27.21	8.371		
6,600.0	6,556.4	6,610.7	6,575.0	17.1	15.1	141.74	-527.2	168.3	229.4	201.6	27.77	8.259		
6,700.0	6,655.6	6,710.6	6,674.1	17.3	15.4	141.07	-539.7	172.5	231.1	202.7	28.35	8.152		
6,800.0	6,754.8	6,810.6	6,773.1	17.6	15.7	140.42	-552.1	176.8	232.8	203.9	28.92	8.049		
6,900.0	6,854.0	6,910.5	6,872.2	17.9	16.0	139.77	-564.6	181.0	234.5	205.0	29.50	7.950		
7,000.0	6,953.3	7,010.5	6,971.3	18.2	16.3	139.14	-577.0	185.2	236.3	206.2	30.08	7.856		
7,100.0	7,052.9	7,109.9	7,069.9	18.3	16.6	138.46	-589.4	189.4	238.1	207.3	30.67	7.764		
7,200.0	7,151.6	7,206.2	7,165.4	18.3	16.8	137.79	-601.4	193.5	239.9	208.4	31.26	7.672		
7,273.5	7,221.8	7,273.3	7,231.9	18.1	17.0	137.12	-609.8	196.4	240.5	209.5	31.85	7.580		
7,300.0	7,246.4	7,296.5	7,254.9	18.1	17.1	136.45	-612.6	197.4	241.6	210.6	32.44	7.488		
7,400.0	7,334.4	7,378.1	7,335.7	17.7	17.3	135.78	-622.8	200.8	243.3	212.3	33.03	7.396		
7,500.0	7,413.0	7,452.7	7,409.7	17.3	17.5	135.11	-631.8	204.0	245.0	214.0	33.62	7.304		
7,600.0	7,479.7	7,548.2	7,505.0	16.8	17.6	134.44	-632.9	208.1	246.7	215.7	34.21	7.212		
7,700.0	7,532.6	7,667.8	7,622.4	16.4	17.5	133.77	-611.9	213.1	248.4	217.4	34.80	7.120		
7,800.0	7,570.0	7,834.7	7,773.7	16.0	17.0	133.10	-543.0	219.5	250.1	219.1	35.39	7.028		
7,900.0	7,590.7	8,096.0	7,953.9	15.8	15.9	132.43	-357.0	227.3	251.8	220.8	35.98	6.936		
8,000.0	7,595.0	8,424.1	8,036.0	15.8	15.3	131.76	-43.9	230.8	253.5	222.5	36.57	6.844		
8,100.0	7,595.0	8,523.4	8,036.0	16.0	15.5	131.09	55.4	230.7	255.2	224.2	37.16	6.752		
8,200.0	7,595.0	8,620.2	8,036.0	16.3	15.9	130.42	152.2	229.6	256.9	225.9	37.75	6.660		
8,300.0	7,595.0	8,717.0	8,036.0	16.9	16.4	129.75	249.0	226.9	258.6	227.6	38.34	6.568		
8,340.8	7,595.0	8,756.5	8,036.0	17.1	16.7	129.08	288.4	225.3	260.3	229.3	38.93	6.476		
8,400.0	7,595.0	8,813.9	8,036.0	17.6	17.1	128.41	345.7	222.5	262.0	231.0	39.52	6.384		
8,500.0	7,595.0	8,910.7	8,036.0	18.4	18.0	127.74	442.4	216.5	263.7	232.7	40.11	6.292		
8,600.0	7,595.0	9,007.5	8,036.0	19.4	18.9	127.07	538.8	208.9	265.4	234.4	40.70	6.200		
8,700.0	7,595.0	9,104.1	8,036.0	20.4	19.9	126.40	635.0	199.6	267.1	236.1	41.29	6.108		
8,800.0	7,595.0	9,201.8	8,036.0	21.6	21.0	125.73	732.0	188.8	268.8	237.8	41.88	6.016		
8,900.0	7,595.0	9,301.5	8,036.0	22.8	22.2	125.06	831.1	177.4	270.5	239.5	42.47	5.924		
9,000.0	7,595.0	9,401.3	8,036.0	24.1	23.5	124.39	930.2	165.9	272.2	241.2	43.06	5.832		
9,100.0	7,595.0	9,501.0	8,036.0	25.5	24.9	123.72	1,029.3	154.5	273.9	242.9	43.65	5.740		
9,200.0	7,595.0	9,600.8	8,036.0	26.9	26.3	123.05	1,128.4	143.1	275.6	244.6	44.24	5.648		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 4G-29H-P168 - Hz - Plan #1														Offset Site Error:	0.0 ft
Survey Program: 0-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	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	27.669			
200.0	200.0	200.0	200.0	0.3	0.3	90.06	0.0	8.4	8.4	7.7	0.65	12.873			
300.0	300.0	300.0	300.0	0.5	0.5	90.06	0.0	8.4	8.4	7.4	1.00	8.387			
400.0	400.0	400.0	400.0	0.7	0.7	90.06	0.0	8.4	8.4	7.1	1.35	6.220 CC, ES			
500.0	500.0	499.9	499.9	0.8	0.9	93.53	-0.6	9.1	9.1	7.4	1.70	5.350			
600.0	600.0	599.7	599.7	1.0	1.0	-49.49	-2.2	11.1	10.7	8.7	2.05	5.236 SF			
700.0	700.0	699.5	699.4	1.2	1.2	-48.23	-5.0	14.5	12.8	10.4	2.40	5.309			
800.0	799.9	799.3	799.0	1.4	1.4	-48.95	-8.8	19.2	15.1	12.4	2.76	5.478			
900.0	899.7	899.0	898.4	1.6	1.6	-50.82	-13.8	25.2	17.9	14.7	3.13	5.702			
1,000.0	999.4	998.7	997.6	1.8	1.8	-53.27	-19.8	32.6	21.0	17.5	3.52	5.959			
1,100.0	1,098.9	1,098.3	1,096.6	2.0	2.1	-55.98	-26.9	41.3	24.5	20.6	3.93	6.231			
1,200.0	1,198.3	1,197.8	1,195.3	2.2	2.3	-58.71	-35.1	51.3	28.5	24.1	4.38	6.504			
1,300.0	1,297.5	1,297.5	1,293.8	2.5	2.6	-60.55	-44.4	62.6	33.2	28.3	4.85	6.840			
1,400.0	1,396.7	1,397.3	1,392.6	2.7	2.9	-61.59	-53.8	74.2	38.2	32.8	5.33	7.156			
1,500.0	1,495.9	1,497.2	1,491.3	3.0	3.2	-62.39	-63.3	85.8	43.1	37.3	5.82	7.409			
1,600.0	1,595.2	1,597.1	1,590.1	3.3	3.5	-63.02	-72.8	97.3	48.1	41.8	6.32	7.615			
1,700.0	1,694.4	1,697.0	1,688.8	3.5	3.8	-63.54	-82.3	108.9	53.1	46.3	6.82	7.786			
1,800.0	1,793.6	1,796.8	1,787.6	3.8	4.1	-63.97	-91.8	120.5	58.1	50.8	7.33	7.929			
1,900.0	1,892.8	1,896.7	1,886.3	4.1	4.4	-64.32	-101.2	132.1	63.1	55.3	7.84	8.049			
2,000.0	1,992.1	1,996.6	1,985.1	4.3	4.7	-64.63	-110.7	143.7	68.1	59.8	8.35	8.153			
2,100.0	2,091.3	2,096.5	2,083.8	4.6	5.0	-64.90	-120.2	155.2	73.1	64.2	8.87	8.242			
2,200.0	2,190.5	2,196.3	2,182.5	4.9	5.3	-65.13	-129.7	166.8	78.1	68.7	9.39	8.320			
2,300.0	2,289.7	2,296.2	2,281.3	5.1	5.6	-65.33	-139.1	178.4	83.1	73.2	9.91	8.388			
2,400.0	2,389.0	2,396.1	2,380.0	5.4	5.9	-65.51	-148.6	190.0	88.1	77.7	10.43	8.449			
2,500.0	2,488.2	2,496.0	2,478.8	5.7	6.3	-65.67	-158.1	201.6	93.1	82.2	10.95	8.502			
2,600.0	2,587.4	2,595.8	2,577.5	6.0	6.6	-65.81	-167.6	213.2	98.1	86.7	11.48	8.550			
2,700.0	2,686.6	2,695.7	2,676.3	6.2	6.9	-65.94	-177.1	224.7	103.1	91.1	12.00	8.594			
2,800.0	2,785.8	2,795.6	2,775.0	6.5	7.2	-66.06	-186.5	236.3	108.1	95.6	12.53	8.633			
2,900.0	2,885.1	2,895.5	2,873.8	6.8	7.5	-66.17	-196.0	247.9	113.1	100.1	13.05	8.668			
3,000.0	2,984.3	2,995.3	2,972.5	7.1	7.8	-66.27	-205.5	259.5	118.2	104.6	13.58	8.701			
3,100.0	3,083.5	3,095.2	3,071.3	7.3	8.1	-66.36	-215.0	271.1	123.2	109.1	14.11	8.730			
3,200.0	3,182.7	3,195.1	3,170.0	7.6	8.4	-66.44	-224.5	282.6	128.2	113.5	14.64	8.757			
3,300.0	3,282.0	3,295.0	3,268.8	7.9	8.7	-66.52	-233.9	294.2	133.2	118.0	15.16	8.782			
3,400.0	3,381.2	3,394.8	3,367.5	8.2	9.1	-66.59	-243.4	305.8	138.2	122.5	15.69	8.806			
3,500.0	3,480.4	3,494.7	3,466.3	8.4	9.4	-66.66	-252.9	317.4	143.2	127.0	16.22	8.827			
3,600.0	3,579.6	3,594.6	3,565.0	8.7	9.7	-66.72	-262.4	329.0	148.2	131.5	16.75	8.847			
3,700.0	3,678.9	3,694.5	3,663.7	9.0	10.0	-66.78	-271.8	340.5	153.2	135.9	17.28	8.865			
3,800.0	3,778.1	3,794.3	3,762.5	9.3	10.3	-66.83	-281.3	352.1	158.2	140.4	17.81	8.883			
3,900.0	3,877.3	3,894.2	3,861.2	9.6	10.6	-66.88	-290.8	363.7	163.2	144.9	18.34	8.899			
4,000.0	3,976.5	3,994.1	3,960.0	9.8	10.9	-66.93	-300.3	375.3	168.2	149.4	18.87	8.914			
4,100.0	4,075.8	4,094.0	4,058.7	10.1	11.3	-66.97	-309.8	386.9	173.3	153.8	19.40	8.928			
4,200.0	4,175.0	4,193.8	4,157.5	10.4	11.6	-67.02	-319.2	398.5	178.3	158.3	19.94	8.942			
4,300.0	4,274.2	4,293.7	4,256.2	10.7	11.9	-67.06	-328.7	410.0	183.3	162.8	20.47	8.954			
4,400.0	4,373.4	4,393.6	4,355.0	10.9	12.2	-67.10	-338.2	421.6	188.3	167.3	21.00	8.966			
4,500.0	4,472.7	4,493.5	4,453.7	11.2	12.5	-67.13	-347.7	433.2	193.3	171.8	21.53	8.978			
4,600.0	4,571.9	4,593.3	4,552.5	11.5	12.8	-67.17	-357.1	444.8	198.3	176.2	22.06	8.988			
4,700.0	4,671.1	4,693.2	4,651.2	11.8	13.1	-67.20	-366.6	456.4	203.3	180.7	22.59	8.998			
4,800.0	4,770.3	4,793.1	4,750.0	12.0	13.5	-67.23	-376.1	467.9	208.3	185.2	23.13	9.008			
4,900.0	4,869.6	4,893.0	4,848.7	12.3	13.8	-67.26	-385.6	479.5	213.3	189.7	23.66	9.017			
5,000.0	4,968.8	4,992.8	4,947.5	12.6	14.1	-67.29	-395.1	491.1	218.3	194.2	24.19	9.026			
5,100.0	5,068.0	5,092.7	5,046.2	12.9	14.4	-67.31	-404.5	502.7	223.4	198.6	24.72	9.034			

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 Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 4G-29H-P168 - 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	5,167.2	5,192.6	5,144.9	13.2	14.7	-67.34	-414.0	514.3	228.4	203.1	25.26	9.042		
5,300.0	5,266.5	5,292.4	5,243.7	13.4	15.0	-67.37	-423.5	525.8	233.4	207.6	25.79	9.050		
5,400.0	5,365.7	5,392.3	5,342.4	13.7	15.3	-67.39	-433.0	537.4	238.4	212.1	26.32	9.057		
5,500.0	5,464.9	5,492.2	5,441.2	14.0	15.7	-67.41	-442.5	549.0	243.4	216.5	26.85	9.064		
5,600.0	5,564.1	5,592.1	5,539.9	14.3	16.0	-67.43	-451.9	560.6	248.4	221.0	27.39	9.070		
5,700.0	5,663.3	5,691.9	5,638.7	14.6	16.3	-67.45	-461.4	572.2	253.4	225.5	27.92	9.077		
5,800.0	5,762.6	5,791.8	5,737.4	14.8	16.6	-67.47	-470.9	583.8	258.4	230.0	28.45	9.083		
5,900.0	5,861.8	5,891.7	5,836.2	15.1	16.9	-67.49	-480.4	595.3	263.4	234.5	28.98	9.089		
6,000.0	5,961.0	5,991.6	5,934.9	15.4	17.2	-67.51	-489.8	606.9	268.4	238.9	29.52	9.094		
6,100.0	6,060.2	6,091.4	6,033.7	15.7	17.5	-67.53	-499.3	618.5	273.5	243.4	30.05	9.100		
6,200.0	6,159.5	6,191.3	6,132.4	15.9	17.9	-67.55	-508.8	630.1	278.5	247.9	30.58	9.105		
6,300.0	6,258.7	6,291.2	6,231.2	16.2	18.2	-67.56	-518.3	641.7	283.5	252.4	31.12	9.110		
6,400.0	6,357.9	6,391.1	6,329.9	16.5	18.5	-67.58	-527.8	653.2	288.5	256.8	31.65	9.115		
6,500.0	6,457.1	6,490.9	6,428.7	16.8	18.8	-67.60	-537.2	664.8	293.5	261.3	32.18	9.119		
6,600.0	6,556.4	6,590.8	6,527.4	17.1	19.1	-67.61	-546.7	676.4	298.5	265.8	32.72	9.124		
6,700.0	6,655.6	6,690.7	6,626.2	17.3	19.4	-67.63	-556.2	688.0	303.5	270.3	33.25	9.128		
6,800.0	6,754.8	6,790.6	6,724.9	17.6	19.7	-67.64	-565.7	699.6	308.5	274.7	33.78	9.132		
6,900.0	6,854.0	6,890.4	6,823.6	17.9	20.1	-67.65	-575.1	711.1	313.5	279.2	34.32	9.137		
7,000.0	6,953.3	6,990.3	6,922.4	18.2	20.4	-67.67	-584.6	722.7	318.6	283.7	34.85	9.140		
7,100.0	7,052.9	7,089.9	7,020.8	18.3	20.7	32.58	-594.1	734.3	322.6	287.6	35.05	9.203		
7,200.0	7,151.6	7,186.8	7,116.6	18.3	21.0	71.16	-603.3	745.5	325.5	291.1	34.39	9.465		
7,300.0	7,246.4	7,278.1	7,206.9	18.1	21.3	83.52	-611.9	756.1	330.8	297.7	33.11	9.991		
7,400.0	7,334.4	7,361.1	7,289.0	17.7	21.5	92.53	-619.8	765.7	343.8	312.1	31.63	10.867		
7,500.0	7,413.0	7,433.2	7,360.2	17.3	21.8	99.20	-626.6	774.1	369.6	339.2	30.42	12.150		
7,600.0	7,479.7	7,496.4	7,422.7	16.8	22.0	103.30	-632.5	781.4	411.5	381.8	29.73	13.841		
7,700.0	7,532.6	7,594.5	7,520.1	16.4	22.2	109.51	-631.6	792.7	466.2	437.5	28.65	16.274		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 29PD (EXISTING) - SYNERGY WELL - SUR												Offset Site Error: 0.0 ft			
Survey Program: 218-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	4.2	4.2	0.0	0.0	-3.58	328.3	-20.6	329.0						
100.0	100.0	108.2	108.2	0.2	0.2	-3.50	327.7	-20.0	328.3	328.0	0.34	974.880			
200.0	200.0	212.2	212.1	0.3	0.4	-3.25	325.8	-18.5	326.4	325.7	0.69	473.717			
300.0	300.0	316.3	316.2	0.5	0.6	-3.33	322.5	-18.8	323.3	322.2	1.04	311.068			
400.0	400.0	418.0	417.6	0.7	0.8	-4.43	318.0	-24.6	319.2	317.8	1.38	230.512			
500.0	500.0	517.2	516.1	0.8	1.0	-6.46	312.8	-35.4	315.0	313.3	1.75	179.950			
600.0	600.0	612.3	609.9	1.0	1.3	-156.73	308.0	-50.1	312.9	310.6	2.29	136.546			
606.7	606.7	618.6	616.1	1.0	1.3	-156.94	307.7	-51.2	312.8	310.5	2.33	134.496	CC, ES		
700.0	700.0	704.9	700.7	1.2	1.6	-160.21	304.0	-67.9	314.8	312.0	2.82	111.669			
800.0	799.9	794.0	787.5	1.4	2.0	-164.01	301.3	-87.8	321.8	318.4	3.37	95.433			
900.0	899.7	877.6	868.5	1.6	2.4	-167.64	301.2	-108.5	335.6	331.7	3.91	85.929			
1,000.0	999.4	971.1	958.9	1.8	2.8	-171.44	302.8	-132.2	354.7	350.3	4.45	79.704			
1,100.0	1,098.9	1,063.7	1,048.5	2.0	3.2	-174.80	305.0	-155.5	377.6	372.6	4.97	75.978			
1,200.0	1,198.3	1,151.5	1,133.2	2.2	3.6	-177.73	307.8	-178.4	404.3	398.9	5.46	74.083			
1,300.0	1,297.5	1,241.0	1,219.2	2.5	4.1	179.56	311.6	-202.9	434.8	428.9	5.94	73.225	SF		
1,400.0	1,396.7	1,316.0	1,291.0	2.7	4.5	177.57	316.4	-224.2	468.3	462.0	6.35	73.778			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 29SD (EXISTING) - SYNERGY WELL - SUR										Offset Site Error:		0.0 ft
Survey Program:		216-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	Separation		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	Centres	Ellipses (ft)	Axis	Factor		
10,100.0	7,595.0	7,760.3	7,645.4	40.7	21.3	-91.78	2,044.6	-161.6	495.7	434.9	60.83	8.150		
10,112.2	7,595.0	7,760.6	7,645.6	40.9	21.3	-91.80	2,044.6	-161.6	495.6	434.5	61.03	8.120	CC, ES, SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 29TD (EXISTING) - SYNERGY WELL - SUR													Offset Site Error:	0.0 ft
Survey Program: 1020-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	3.0	3.0	0.0	0.0	14.36	280.1	71.7	289.2					
100.0	100.0	103.1	103.1	0.2	0.2	14.38	280.1	71.8	289.2	288.8	0.33	870.974		
200.0	200.0	203.1	203.1	0.3	0.4	14.44	280.0	72.1	289.1	288.4	0.68	424.304		
300.0	300.0	303.2	303.2	0.5	0.5	14.53	279.8	72.5	289.1	288.1	1.03	280.438		
400.0	400.0	403.2	403.2	0.7	0.7	14.67	279.6	73.2	289.0	287.6	1.38	209.403		
500.0	500.0	503.2	503.2	0.8	0.9	14.83	279.3	74.0	288.9	287.2	1.73	167.061		
507.0	507.0	510.3	510.3	0.9	0.9	-132.58	279.3	74.0	288.9	287.2	1.76	164.415		
600.0	600.0	603.3	603.3	1.0	1.1	-132.51	279.0	75.0	289.4	287.4	2.08	138.956		
700.0	700.0	703.3	703.3	1.2	1.2	-132.64	278.5	76.1	291.1	288.7	2.43	119.586		
800.0	799.9	803.3	803.3	1.4	1.4	-132.97	278.1	77.4	294.0	291.2	2.79	105.424		
900.0	899.7	903.2	903.2	1.6	1.6	-133.49	277.5	79.0	298.0	294.8	3.15	94.708		
1,000.0	999.4	1,003.1	1,003.0	1.8	1.8	-134.19	276.9	80.6	303.2	299.7	3.51	86.398		
1,100.0	1,098.9	1,111.1	1,111.0	2.0	2.0	-135.23	275.1	81.9	308.6	304.7	3.89	79.291		
1,200.0	1,198.3	1,225.4	1,225.1	2.2	2.2	-136.96	269.4	80.2	311.7	307.4	4.28	72.749		
1,300.0	1,297.5	1,342.5	1,341.6	2.5	2.4	-138.92	257.1	77.3	310.0	305.3	4.69	66.146		
1,400.0	1,396.7	1,452.5	1,450.3	2.7	2.7	-140.75	241.0	74.1	304.5	299.4	5.07	60.030		
1,500.0	1,495.9	1,563.2	1,559.0	3.0	3.0	-142.95	221.0	69.1	295.8	290.3	5.45	54.229		
1,600.0	1,595.2	1,668.5	1,661.9	3.3	3.3	-145.20	198.7	64.1	284.2	278.3	5.82	48.782		
1,700.0	1,694.4	1,771.0	1,761.4	3.5	3.7	-147.89	175.2	57.6	271.3	265.1	6.19	43.822		
1,800.0	1,793.6	1,873.8	1,860.9	3.8	4.1	-150.98	150.0	50.8	257.3	250.8	6.56	39.207		
1,900.0	1,892.8	1,970.1	1,954.0	4.1	4.5	-153.85	126.3	45.8	243.8	236.9	6.94	35.157		
2,000.0	1,992.1	2,071.2	2,051.8	4.3	5.0	-157.12	100.9	41.0	230.7	223.3	7.34	31.439		
2,100.0	2,091.3	2,170.2	2,147.4	4.6	5.4	-160.63	75.3	36.7	217.4	209.6	7.76	28.008		
2,200.0	2,190.5	2,266.6	2,240.5	4.9	5.8	-164.36	50.8	32.8	205.4	197.2	8.22	24.986		
2,300.0	2,289.7	2,363.3	2,334.1	5.1	6.2	-168.58	27.1	28.4	195.3	186.6	8.73	22.366		
2,400.0	2,389.0	2,461.8	2,429.6	5.4	6.7	-173.17	3.4	24.1	187.0	177.6	9.32	20.059		
2,500.0	2,488.2	2,561.3	2,525.9	5.7	7.1	-178.40	-21.2	19.5	179.4	169.4	10.01	17.926		
2,600.0	2,587.4	2,658.7	2,620.1	6.0	7.6	-176.00	-45.7	14.9	173.2	162.5	10.79	16.058		
2,700.0	2,686.6	2,755.2	2,713.5	6.2	8.0	-170.15	-69.0	9.6	170.1	158.4	11.65	14.598		
2,800.0	2,785.8	2,854.5	2,810.0	6.5	8.4	-164.21	-92.4	4.4	169.1	156.6	12.58	13.443		
2,853.5	2,839.0	2,908.0	2,861.8	6.7	8.7	-161.01	-105.2	2.0	168.9	155.8	13.11	12.886 CC		
2,900.0	2,885.1	2,952.8	2,905.2	6.8	8.9	-158.21	-116.3	-0.3	169.3	155.7	13.58	12.463 ES		
3,000.0	2,984.3	3,050.9	2,999.9	7.1	9.4	-151.75	-141.1	-6.4	172.0	157.4	14.65	11.738		
3,100.0	3,083.5	3,149.7	3,095.2	7.3	9.8	-145.43	-166.6	-12.3	176.5	160.8	15.71	11.231		
3,200.0	3,182.7	3,245.4	3,187.7	7.6	10.3	-139.90	-190.4	-17.9	183.2	166.5	16.69	10.980		
3,300.0	3,282.0	3,343.1	3,282.1	7.9	10.7	-134.79	-214.2	-24.7	192.8	175.2	17.61	10.952 SF		
3,400.0	3,381.2	3,443.4	3,379.1	8.2	11.2	-129.83	-239.5	-31.2	203.3	184.8	18.51	10.979		
3,500.0	3,480.4	3,540.5	3,472.4	8.4	11.7	-125.15	-265.4	-37.1	214.6	195.3	19.34	11.096		
3,600.0	3,579.6	3,642.0	3,570.4	8.7	12.2	-121.02	-291.5	-42.8	226.8	206.7	20.10	11.284		
3,700.0	3,678.9	3,739.6	3,664.8	9.0	12.6	-117.77	-315.2	-47.7	239.2	218.5	20.78	11.514		
3,800.0	3,778.1	3,835.5	3,757.8	9.3	13.1	-114.93	-338.5	-53.1	253.0	231.6	21.43	11.808		
3,900.0	3,877.3	3,931.2	3,850.3	9.6	13.5	-112.30	-362.3	-59.3	268.3	246.2	22.04	12.170		
4,000.0	3,976.5	4,029.8	3,945.4	9.8	14.0	-109.79	-387.2	-66.0	284.4	261.8	22.65	12.557		
4,100.0	4,075.8	4,130.4	4,042.5	10.1	14.5	-107.50	-412.5	-72.2	300.5	277.3	23.24	12.931		
4,200.0	4,175.0	4,231.5	4,140.4	10.4	15.0	-105.48	-437.6	-77.7	316.2	292.3	23.80	13.281		
4,300.0	4,274.2	4,335.2	4,241.3	10.7	15.4	-104.04	-460.6	-82.8	330.8	306.4	24.35	13.586		
4,400.0	4,373.4	4,439.1	4,343.3	10.9	15.8	-103.33	-479.7	-87.6	344.0	319.1	24.89	13.822		
4,500.0	4,472.7	4,543.6	4,446.4	11.2	16.1	-102.98	-496.7	-91.6	355.9	330.4	25.44	13.991		
4,600.0	4,571.9	4,647.2	4,549.0	11.5	16.4	-102.97	-511.2	-94.9	366.3	340.3	25.98	14.101		
4,700.0	4,671.1	4,753.2	4,654.2	11.8	16.7	-103.33	-523.4	-97.7	375.5	349.0	26.52	14.161		
4,800.0	4,770.3	4,861.5	4,762.1	12.0	16.9	-104.11	-532.3	-99.5	382.6	355.6	27.06	14.140		
4,900.0	4,869.6	4,960.9	4,861.3	12.3	17.1	-104.98	-539.0	-100.3	388.7	361.1	27.58	14.094		

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 Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 29TD (EXISTING) - SYNERGY WELL - SUR													Offset Site Error:	0.0 ft
Survey Program: 1020-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		
5,000.0	4,968.8	5,058.5	4,958.6	12.6	17.2	105.90	-545.1	-101.7	395.1	367.1	28.08	14.070		
5,100.0	5,068.0	5,158.4	5,058.3	12.9	17.4	106.97	-550.4	-103.8	402.2	373.6	28.58	14.074		
5,200.0	5,167.2	5,269.0	5,168.9	13.2	17.5	108.53	-552.8	-104.6	407.3	378.2	29.06	14.014		
5,300.0	5,266.5	5,367.8	5,267.8	13.4	17.6	110.05	-553.6	-104.8	411.8	382.3	29.51	13.953		
5,400.0	5,365.7	5,466.2	5,366.1	13.7	17.7	111.56	-554.3	-105.2	416.7	386.8	29.94	13.917		
5,500.0	5,464.9	5,563.7	5,463.7	14.0	17.8	113.04	-554.8	-105.9	422.3	391.9	30.35	13.911		
5,600.0	5,564.1	5,662.0	5,561.9	14.3	17.9	114.51	-555.2	-107.0	428.5	397.7	30.75	13.932		
5,700.0	5,663.3	5,761.0	5,660.9	14.6	18.0	115.94	-555.8	-108.1	435.0	403.9	31.14	13.969		
5,800.0	5,762.6	5,860.7	5,760.6	14.8	18.1	117.32	-556.4	-109.3	441.9	410.4	31.52	14.020		
5,900.0	5,861.8	5,960.8	5,860.7	15.1	18.2	118.69	-556.9	-110.3	448.8	416.9	31.87	14.079		
6,000.0	5,961.0	6,060.2	5,960.1	15.4	18.3	120.05	-557.0	-111.1	455.8	423.6	32.21	14.149		
6,100.0	6,060.2	6,159.3	6,059.2	15.7	18.4	121.41	-556.7	-112.0	463.0	430.5	32.53	14.232		
6,200.0	6,159.5	6,258.5	6,158.4	15.9	18.5	122.77	-556.1	-112.9	470.5	437.7	32.84	14.329		
6,300.0	6,258.7	6,357.7	6,257.6	16.2	18.6	124.11	-555.3	-113.7	478.3	445.2	33.13	14.436		
6,400.0	6,357.9	6,459.8	6,359.7	16.5	18.7	125.51	-553.9	-114.2	486.0	452.6	33.39	14.556		
6,500.0	6,457.1	6,561.7	6,461.5	16.8	18.7	126.99	-551.6	-114.0	493.4	459.7	33.62	14.674		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 29XD (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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	15.67	276.5	77.6	287.3					
100.0	100.0	90.0	90.0	0.2	0.2	15.67	276.5	77.6	287.2	286.8	0.31	929.481		
200.0	200.0	190.0	190.0	0.3	0.3	15.67	276.5	77.6	287.2	286.5	0.66	436.416	CC, ES	
300.0	300.0	285.0	285.0	0.5	0.5	15.87	276.9	78.8	287.9	286.9	1.00	288.284		
400.0	400.0	379.2	379.1	0.7	0.7	16.57	278.4	82.8	290.7	289.3	1.34	216.909		
500.0	500.0	473.1	472.7	0.8	0.9	17.72	281.0	89.8	295.5	293.8	1.68	175.547		
600.0	600.0	566.4	565.4	1.0	1.1	-128.21	284.6	99.5	303.0	300.9	2.10	144.575		
700.0	700.0	658.9	657.0	1.2	1.4	-126.58	289.1	112.0	313.9	311.4	2.50	125.651		
800.0	799.9	750.6	747.2	1.4	1.7	-124.88	294.7	127.1	328.2	325.2	2.92	112.301		
900.0	899.7	841.1	835.8	1.6	2.1	-123.17	301.1	144.6	345.8	342.5	3.36	102.802		
1,000.0	999.4	936.3	928.5	1.8	2.5	-121.48	308.7	165.1	366.3	362.5	3.84	95.506		
1,100.0	1,098.9	1,033.7	1,023.2	2.0	2.9	-120.11	316.4	186.2	388.0	383.7	4.32	89.739		
1,200.0	1,198.3	1,130.9	1,117.8	2.2	3.3	-119.08	324.2	207.3	410.7	405.8	4.83	85.091		
1,300.0	1,297.5	1,228.1	1,212.3	2.5	3.7	-118.43	331.9	228.3	433.9	428.5	5.34	81.201		
1,400.0	1,396.7	1,325.2	1,306.9	2.7	4.2	-117.88	339.6	249.4	457.2	451.3	5.87	77.931		
1,500.0	1,495.9	1,422.4	1,401.4	3.0	4.6	-117.38	347.4	270.4	480.5	474.1	6.39	75.165	SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 33-29PD (EXISTING) - SYNERGY WELL - S												Offset Site Error: 0.0 ft	
Survey Program: 127-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	3.0	3.0	0.0	0.0	-5.13	339.9	-30.5	341.3				
100.0	100.0	102.5	102.5	0.2	0.2	-5.13	340.0	-30.5	341.3	341.0	0.31	1,092.391 ES	
200.0	200.0	199.3	199.3	0.3	0.3	-5.16	340.5	-30.7	341.9	341.2	0.65	524.380	
300.0	300.0	298.9	298.9	0.5	0.5	-5.28	341.6	-31.6	343.1	342.1	1.00	342.447	
400.0	400.0	400.1	400.1	0.7	0.7	-5.49	342.5	-32.9	344.1	342.8	1.35	254.046	
500.0	500.0	497.6	497.5	0.8	0.9	-5.76	343.5	-34.7	345.3	343.6	1.70	202.697	
600.0	600.0	596.9	596.8	1.0	1.0	-153.82	344.8	-38.3	347.8	345.7	2.06	169.108	
700.0	700.0	697.1	696.8	1.2	1.2	-154.82	345.9	-43.5	351.8	349.4	2.42	145.396	
800.0	799.9	793.7	793.2	1.4	1.4	-155.95	347.3	-49.2	358.0	355.2	2.78	128.827	
900.0	899.7	889.1	888.5	1.6	1.6	-156.98	349.6	-54.0	366.9	363.7	3.13	117.187	
1,000.0	999.4	983.6	982.8	1.8	1.8	-157.93	353.2	-58.3	378.6	375.1	3.48	108.827	
1,100.0	1,098.9	1,077.1	1,076.2	2.0	2.0	-158.85	357.9	-62.5	393.3	389.5	3.82	102.840	
1,200.0	1,198.3	1,167.4	1,166.1	2.2	2.2	-159.71	363.9	-66.6	411.3	407.1	4.16	98.760	
1,300.0	1,297.5	1,252.1	1,250.3	2.5	2.4	-160.71	371.3	-72.2	432.9	428.4	4.50	96.106	
1,400.0	1,396.7	1,335.0	1,332.4	2.7	2.6	-161.78	380.6	-79.4	457.6	452.7	4.84	94.491	
1,500.0	1,495.9	1,420.8	1,417.0	3.0	2.9	-162.89	392.1	-88.3	484.9	479.7	5.19	93.475 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 34-29D (EXISTING) - SYNERGY WELL - SU														Offset Site Error:	0.0 ft
Survey Program: 217-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	0.55	319.9	3.1	320.0						
100.0	100.0	91.1	91.0	0.2	0.2	0.64	319.7	3.6	319.7	319.4	0.32	1,010.280			
200.0	200.0	192.2	192.2	0.3	0.3	0.96	319.2	5.4	319.2	318.6	0.67	473.893			
300.0	300.0	294.6	294.6	0.5	0.5	1.30	318.1	7.2	318.2	317.2	1.03	309.658			
400.0	400.0	392.9	392.8	0.7	0.7	1.16	316.9	6.4	317.0	315.6	1.37	231.737			
500.0	500.0	493.4	493.3	0.8	0.9	0.67	316.0	3.7	316.0	314.3	1.71	184.467			
600.0	600.0	595.2	595.1	1.0	1.0	-147.55	314.6	-0.2	315.4	313.3	2.07	152.697			
605.8	605.8	600.9	600.7	1.0	1.1	-147.60	314.5	-0.4	315.4	313.3	2.09	151.217 CC, ES			
700.0	700.0	692.9	692.6	1.2	1.2	-148.47	313.4	-3.9	316.4	314.0	2.41	131.031			
800.0	799.9	792.6	792.3	1.4	1.4	-149.28	312.5	-6.2	319.3	316.5	2.77	115.391			
900.0	899.7	891.0	890.6	1.6	1.6	-150.12	312.0	-8.0	324.1	321.0	3.12	103.907			
1,000.0	999.4	990.9	990.5	1.8	1.7	-151.10	311.6	-9.9	330.6	327.2	3.48	95.119			
1,100.0	1,098.9	1,090.6	1,090.3	2.0	1.9	-152.23	310.9	-12.2	338.6	334.8	3.84	88.300			
1,200.0	1,198.3	1,189.7	1,189.3	2.2	2.1	-153.42	310.4	-14.4	348.4	344.2	4.19	83.064			
1,300.0	1,297.5	1,288.8	1,288.4	2.5	2.3	-154.68	309.8	-16.7	359.3	354.7	4.56	78.834			
1,400.0	1,396.7	1,389.4	1,389.0	2.7	2.5	-155.89	309.2	-19.1	370.3	365.4	4.92	75.249			
1,500.0	1,495.9	1,493.2	1,492.7	3.0	2.7	-157.06	307.6	-21.3	380.6	375.3	5.30	71.872			
1,600.0	1,595.2	1,594.1	1,593.4	3.3	2.9	-158.68	304.4	-27.0	390.0	384.4	5.67	68.744			
1,700.0	1,694.4	1,694.9	1,693.7	3.5	3.1	-160.76	300.1	-36.2	399.5	393.4	6.07	65.837			
1,800.0	1,793.6	1,793.3	1,791.2	3.8	3.3	-163.19	294.8	-48.6	409.2	402.7	6.48	63.174			
1,900.0	1,892.8	1,892.8	1,889.4	4.1	3.6	-165.86	288.4	-63.3	419.5	412.6	6.91	60.704			
2,000.0	1,992.1	1,995.9	1,990.8	4.3	3.9	-168.75	280.3	-80.2	429.8	422.4	7.38	58.238			
2,100.0	2,091.3	2,091.5	2,084.3	4.6	4.2	-171.56	271.7	-97.4	440.7	432.8	7.86	56.077			
2,200.0	2,190.5	2,183.6	2,174.1	4.9	4.6	-174.45	262.9	-116.4	453.3	445.0	8.36	54.197			
2,300.0	2,289.7	2,272.0	2,259.6	5.1	4.9	-177.33	254.4	-137.0	468.6	459.7	8.88	52.744			
2,400.0	2,389.0	2,374.4	2,358.4	5.4	5.4	179.41	244.2	-161.8	485.2	475.7	9.47	51.225 SF			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 41-29D (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											
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					
11,700.0	7,595.0	7,773.9	7,640.1	67.5	23.0	91.57	4,036.2	433.9	419.6	330.5	89.10	4.710						
11,800.0	7,595.0	7,775.7	7,641.9	69.2	23.1	92.12	4,036.2	433.8	333.0	242.2	90.79	3.668						
11,900.0	7,595.0	7,777.5	7,643.7	70.9	23.1	92.67	4,036.2	433.6	256.4	163.9	92.47	2.772						
12,000.0	7,595.0	7,779.3	7,645.5	72.6	23.1	93.22	4,036.3	433.5	201.3	107.2	94.15	2.138						
12,078.0	7,595.0	7,780.7	7,646.8	74.0	23.1	93.65	4,036.3	433.4	186.0	90.4	95.58	1.946	CC, ES, SF					
12,100.0	7,595.0	7,781.0	7,647.2	74.3	23.1	93.76	4,036.3	433.4	187.4	91.4	95.98	1.953						
12,200.0	7,595.0	7,782.7	7,648.9	76.1	23.1	94.24	4,036.3	433.3	221.5	123.7	97.84	2.264						
12,300.0	7,595.0	7,784.2	7,650.4	77.8	23.1	94.64	4,036.4	433.2	287.0	187.3	99.67	2.880						
12,400.0	7,595.0	7,785.7	7,651.9	79.5	23.1	95.02	4,036.4	433.1	367.5	266.1	101.42	3.624						
12,500.0	7,595.0	7,787.1	7,653.3	81.2	23.1	95.44	4,036.4	433.0	455.7	352.6	103.07	4.421						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 42-29D (EXISTING) - SYNERGY WELL - SU		Offset Site Error:		0.0 ft	
Survey Program:												125-MWD		Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor					
10,200.0	7,595.0	7,700.7	7,630.5	42.3	18.5	89.37	2,533.6	628.4	483.3	425.7	57.59	8.392					
10,300.0	7,595.0	7,700.6	7,630.5	44.0	18.5	89.36	2,533.6	628.4	412.7	353.4	59.25	6.966					
10,400.0	7,595.0	7,700.5	7,630.4	45.6	18.5	89.34	2,533.6	628.4	356.4	295.5	60.91	5.852					
10,500.0	7,595.0	7,700.4	7,630.3	47.3	18.5	89.32	2,533.6	628.4	322.2	259.6	62.58	5.148					
10,566.3	7,595.0	7,700.3	7,630.2	48.4	18.5	89.31	2,533.6	628.4	315.3	251.6	63.70	4.950 CC, ES					
10,600.0	7,595.0	7,700.3	7,630.2	48.9	18.5	89.31	2,533.6	628.4	317.1	252.8	64.26	4.934 SF					
10,700.0	7,595.0	7,700.2	7,630.1	50.6	18.5	89.29	2,533.6	628.4	342.5	276.5	65.94	5.193					
10,800.0	7,595.0	7,700.2	7,630.0	52.3	18.5	89.28	2,533.6	628.4	392.5	324.8	67.63	5.803					
10,900.0	7,595.0	7,700.1	7,630.0	53.9	18.5	89.27	2,533.6	628.4	459.1	389.8	69.33	6.623					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 43-29D (EXISTING) - SYNERGY WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 211-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	4.0	4.0	0.0	0.0	3.71	310.4	20.2	311.0					
100.0	100.0	103.9	103.9	0.2	0.2	3.77	310.4	20.5	311.1	310.7	0.32	963.568		
200.0	200.0	203.8	203.8	0.3	0.3	3.94	310.4	21.4	311.1	310.4	0.66	470.152		
300.0	300.0	299.5	299.5	0.5	0.5	4.21	310.9	22.9	311.8	310.8	1.00	310.827		
400.0	400.0	390.7	390.6	0.7	0.7	4.61	313.3	25.3	314.7	313.3	1.34	235.423		
500.0	500.0	483.0	482.8	0.8	0.9	5.14	318.1	28.6	320.1	318.4	1.67	191.536		
600.0	600.0	572.4	571.8	1.0	1.1	-141.72	325.1	32.7	329.0	326.9	2.03	162.121		
700.0	700.0	658.8	657.5	1.2	1.3	-141.18	334.6	37.7	342.7	340.3	2.37	144.652		
800.0	799.9	745.6	743.1	1.4	1.6	-140.65	347.3	44.0	361.3	358.5	2.72	133.061		
900.0	899.7	831.6	827.4	1.6	1.9	-140.11	362.2	51.6	384.2	381.1	3.07	125.159		
1,000.0	999.4	919.5	913.1	1.8	2.3	-139.52	379.7	61.1	411.2	407.7	3.44	119.610		
1,100.0	1,098.9	1,013.7	1,004.5	2.0	2.7	-138.97	399.4	72.2	440.6	436.8	3.83	115.044		
1,200.0	1,198.3	1,100.6	1,088.7	2.2	3.1	-138.50	417.8	83.3	471.6	467.4	4.22	111.820		
9,000.0	7,595.0	7,746.4	7,594.4	24.1	24.8	88.54	1,370.5	545.1	446.4	400.8	45.59	9.792		
9,100.0	7,595.0	7,746.6	7,594.6	25.5	24.8	88.61	1,370.5	545.1	357.3	310.3	47.01	7.602		
9,200.0	7,595.0	7,746.8	7,594.8	26.9	24.8	88.68	1,370.5	545.1	275.9	227.4	48.46	5.692		
9,300.0	7,595.0	7,747.1	7,595.0	28.3	24.8	88.74	1,370.5	545.1	211.0	161.1	49.96	4.224		
9,400.0	7,595.0	7,747.3	7,595.2	29.8	24.8	88.81	1,370.5	545.1	181.6	130.1	51.48	3.527		
9,407.9	7,595.0	7,747.3	7,595.3	29.9	24.8	88.82	1,370.5	545.1	181.4	129.8	51.60	3.515 CC, ES, SF		
9,500.0	7,595.0	7,747.5	7,595.5	31.3	24.8	88.88	1,370.5	545.1	203.5	150.4	53.03	3.837		
9,600.0	7,595.0	7,747.7	7,595.7	32.8	24.8	88.95	1,370.5	545.1	264.2	209.6	54.60	4.840		
9,700.0	7,595.0	7,747.9	7,595.9	34.4	24.8	89.01	1,370.5	545.2	343.9	287.7	56.19	6.120		
9,800.0	7,595.0	7,748.1	7,596.1	35.9	24.8	89.08	1,370.5	545.2	432.1	374.3	57.79	7.476		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 44-29D (EXISTING) - SYNERGY WELL - PL													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	23.62	256.1	112.0	279.7					
100.0	100.0	92.0	92.0	0.2	0.2	23.62	256.1	112.0	279.6	279.3	0.31	894.834		
200.0	200.0	192.0	192.0	0.3	0.3	23.62	256.1	112.0	279.6	278.9	0.66	422.648		
300.0	300.0	292.0	292.0	0.5	0.5	23.62	256.1	112.0	279.6	278.6	1.01	276.656		
400.0	400.0	392.0	392.0	0.7	0.7	23.62	256.1	112.0	279.6	278.2	1.36	205.627		
500.0	500.0	492.0	492.0	0.8	0.9	23.62	256.1	112.0	279.6	277.9	1.71	163.620		
600.0	600.0	592.0	592.0	1.0	1.0	-123.95	256.1	112.0	280.1	278.0	2.06	136.084		
700.0	700.0	692.0	692.0	1.2	1.2	-124.38	256.1	112.0	281.5	279.1	2.41	116.874		
800.0	799.9	791.9	791.9	1.4	1.4	-125.08	256.1	112.0	284.0	281.3	2.76	102.791		
900.0	899.7	891.7	891.7	1.6	1.6	-126.05	256.1	112.0	287.6	284.4	3.12	92.099		
1,000.0	999.4	991.4	991.4	1.8	1.7	-127.25	256.1	112.0	292.3	288.8	3.49	83.783		
1,100.0	1,098.9	1,093.7	1,093.7	2.0	1.9	-128.43	255.3	113.3	297.8	293.9	3.87	76.982		
1,200.0	1,198.3	1,196.6	1,196.4	2.2	2.1	-129.17	252.2	117.5	303.4	299.1	4.26	71.153		
1,300.0	1,297.5	1,299.7	1,299.2	2.5	2.3	-129.42	247.1	124.8	308.7	304.0	4.68	65.931		
1,400.0	1,396.7	1,402.9	1,401.6	2.7	2.5	-129.03	239.8	135.1	313.0	307.8	5.13	60.976		
1,500.0	1,495.9	1,506.0	1,503.3	3.0	2.8	-128.01	230.4	148.4	316.2	310.6	5.63	56.204		
1,600.0	1,595.2	1,607.1	1,602.7	3.3	3.1	-126.47	219.3	164.0	318.8	312.6	6.16	51.754		
1,700.0	1,694.4	1,706.7	1,700.4	3.5	3.4	-124.91	208.2	179.7	321.4	314.7	6.71	47.874		
1,800.0	1,793.6	1,806.3	1,798.1	3.8	3.7	-123.38	197.0	195.4	324.3	317.0	7.29	44.489		
1,900.0	1,892.8	1,905.9	1,895.8	4.1	4.0	-121.87	185.9	211.0	327.4	319.6	7.88	41.540		
2,000.0	1,992.1	2,005.4	1,993.5	4.3	4.4	-120.39	174.8	226.7	330.8	322.3	8.49	38.966		
2,100.0	2,091.3	2,105.0	2,091.2	4.6	4.7	-118.94	163.6	242.4	334.4	325.3	9.11	36.714		
2,200.0	2,190.5	2,204.6	2,188.9	4.9	5.1	-117.52	152.5	258.1	338.1	328.4	9.73	34.738		
2,300.0	2,289.7	2,304.2	2,286.6	5.1	5.4	-116.14	141.4	273.8	342.1	331.8	10.37	32.998		
2,400.0	2,389.0	2,403.8	2,384.3	5.4	5.8	-114.79	130.3	289.5	346.3	335.3	11.01	31.461		
2,500.0	2,488.2	2,503.3	2,482.0	5.7	6.2	-113.47	119.1	305.2	350.7	339.0	11.65	30.098		
2,600.0	2,587.4	2,602.9	2,579.7	6.0	6.5	-112.18	108.0	320.9	355.2	342.9	12.30	28.886		
2,700.0	2,686.6	2,702.5	2,677.4	6.2	6.9	-110.93	96.9	336.6	359.9	347.0	12.95	27.804		
2,800.0	2,785.8	2,802.1	2,775.1	6.5	7.3	-109.71	85.7	352.3	364.8	351.2	13.59	26.836		
2,900.0	2,885.1	2,901.7	2,872.8	6.8	7.6	-108.52	74.6	368.0	369.9	355.6	14.24	25.967		
3,000.0	2,984.3	3,001.2	2,970.5	7.1	8.0	-107.36	63.5	383.7	375.1	360.2	14.89	25.185		
3,100.0	3,083.5	3,100.8	3,068.2	7.3	8.4	-106.24	52.3	399.4	380.5	364.9	15.54	24.480		
3,200.0	3,182.7	3,200.4	3,165.9	7.6	8.7	-105.15	41.2	415.1	386.0	369.8	16.19	23.841		
3,300.0	3,282.0	3,300.0	3,263.6	7.9	9.1	-104.08	30.1	430.8	391.6	374.8	16.83	23.263		
3,400.0	3,381.2	3,399.6	3,361.3	8.2	9.5	-103.05	18.9	446.5	397.4	379.9	17.48	22.737		
3,500.0	3,480.4	3,499.1	3,459.0	8.4	9.9	-102.05	7.8	462.2	403.3	385.1	18.12	22.259		
3,600.0	3,579.6	3,598.7	3,556.7	8.7	10.2	-101.08	-3.3	477.9	409.3	390.5	18.75	21.822		
3,700.0	3,678.9	3,698.3	3,654.4	9.0	10.6	-100.13	-14.5	493.6	415.4	396.0	19.39	21.424		
3,800.0	3,778.1	3,797.9	3,752.1	9.3	11.0	-99.22	-25.6	509.3	421.6	401.6	20.02	21.059		
3,900.0	3,877.3	3,897.5	3,849.9	9.6	11.4	-98.33	-36.7	525.0	428.0	407.3	20.65	20.725		
4,000.0	3,976.5	3,997.0	3,947.6	9.8	11.7	-97.46	-47.9	540.7	434.4	413.1	21.28	20.418		
4,100.0	4,075.8	4,096.6	4,045.3	10.1	12.1	-96.63	-59.0	556.3	441.0	419.1	21.90	20.136		
4,200.0	4,175.0	4,196.2	4,143.0	10.4	12.5	-95.81	-70.1	572.0	447.6	425.1	22.52	19.877		
4,300.0	4,274.2	4,295.8	4,240.7	10.7	12.9	-95.02	-81.3	587.7	454.3	431.2	23.13	19.638		
4,400.0	4,373.4	4,395.4	4,338.4	10.9	13.2	-94.25	-92.4	603.4	461.1	437.4	23.75	19.418		
4,500.0	4,472.7	4,495.0	4,436.1	11.2	13.6	-93.51	-103.5	619.1	468.0	443.6	24.36	19.215		
4,600.0	4,571.9	4,599.6	4,539.0	11.5	14.0	-92.93	-114.4	634.4	474.5	449.5	24.95	19.020		
4,700.0	4,671.1	4,705.2	4,643.6	11.8	14.3	-92.79	-123.1	646.7	479.8	454.3	25.50	18.815		
4,800.0	4,770.3	4,810.9	4,748.6	12.0	14.5	-93.09	-129.6	655.8	483.9	457.9	26.03	18.593		
4,900.0	4,869.6	4,916.3	4,853.8	12.3	14.7	-93.82	-133.8	661.8	486.9	460.4	26.52	18.360		
5,000.0	4,968.8	5,021.3	4,958.7	12.6	14.8	-94.97	-135.8	664.6	488.8	461.9	26.98	18.120		
5,100.0	5,068.0	5,122.6	5,060.0	12.9	14.9	-96.40	-136.0	664.8	490.2	462.8	27.41	17.881		

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 Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 44-29D (EXISTING) - SYNERGY WELL - PL												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	5,167.2	5,221.8	5,159.2	13.2	15.0	-97.83	-136.0	664.8	491.7	463.9	27.83	17.665	
5,300.0	5,266.5	5,321.0	5,258.5	13.4	15.1	-99.25	-136.0	664.8	493.6	465.3	28.25	17.474	
5,400.0	5,365.7	5,420.3	5,357.7	13.7	15.3	-100.66	-136.0	664.8	495.7	467.1	28.65	17.305	
5,500.0	5,464.9	5,519.5	5,456.9	14.0	15.4	-102.05	-136.0	664.8	498.2	469.2	29.04	17.157	
7,400.0	7,334.4	7,389.0	7,326.4	17.7	17.6	30.38	-136.0	664.8	479.4	447.7	31.68	15.134	
7,500.0	7,413.0	7,467.6	7,405.0	17.3	17.7	40.11	-136.0	664.8	425.4	394.7	30.72	13.847	
7,600.0	7,479.7	7,534.3	7,471.7	16.8	17.8	53.39	-136.0	664.8	364.7	334.5	30.17	12.087	
7,700.0	7,532.6	7,587.2	7,524.6	16.4	17.8	69.20	-136.0	664.8	304.0	274.1	29.91	10.166	
7,800.0	7,570.0	7,624.5	7,562.0	16.0	17.9	82.93	-136.0	664.8	255.2	225.7	29.50	8.652	
7,899.3	7,590.6	7,645.2	7,582.6	15.8	17.9	90.00	-136.0	664.8	235.5	206.4	29.16	8.077 CC, ES, SF	
7,900.0	7,590.7	7,645.3	7,582.7	15.8	17.9	90.02	-136.0	664.8	235.5	206.4	29.16	8.078	
8,000.0	7,595.0	7,649.6	7,587.0	15.8	17.9	90.00	-136.0	664.8	256.5	227.4	29.18	8.791	
8,100.0	7,595.0	7,649.6	7,587.0	16.0	17.9	90.00	-136.0	664.8	310.3	280.9	29.37	10.564	
8,200.0	7,595.0	7,649.6	7,587.0	16.3	17.9	90.00	-136.0	664.8	383.1	353.3	29.78	12.866	
8,300.0	7,595.0	7,649.6	7,587.0	16.9	17.9	90.00	-136.0	664.8	466.1	435.7	30.37	15.346	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 H PELTIER 1 (EXISTING) - VESSELS WELL - N		Offset Site Error:		0.0 ft	
Survey Program:													8517-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						
16,400.0	7,595.0	7,592.0	7,592.0	149.1	13.3	-90.00	8,628.6	-32.5	437.4	275.1	162.28	2.695	CC, ES, SF					
16,500.0	7,595.0	7,592.0	7,592.0	150.8	13.3	-90.00	8,628.6	-32.5	383.4	219.3	164.03	2.337						
16,600.0	7,595.0	7,592.0	7,592.0	152.6	13.3	-90.00	8,628.6	-32.5	350.2	184.4	165.77	2.112						
16,671.8	7,595.0	7,592.0	7,592.0	153.8	13.3	-90.00	8,628.6	-32.5	342.7	175.7	167.03	2.052						
16,700.0	7,595.0	7,592.0	7,592.0	154.3	13.3	-90.00	8,628.6	-32.5	343.9	176.4	167.52	2.053						
16,800.0	7,595.0	7,592.0	7,592.0	156.0	13.3	-90.00	8,628.6	-32.5	365.9	196.6	169.27	2.162						
16,900.0	7,595.0	7,592.0	7,592.0	157.8	13.3	-90.00	8,628.6	-32.5	411.7	240.7	171.01	2.408						
17,000.0	7,595.0	7,592.0	7,592.0	159.5	13.3	-90.00	8,628.6	-32.5	474.5	301.7	172.76	2.747						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Pratt 4F-29H-P168
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5189.0ft (Original Well Elev)
Reference Site:	S29-T1N-R68W (Pratt/Waste Connections)	MD Reference:	WELL @ 5189.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Pratt 4F-29H-P168	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 1A-20H (EXISTING) - ENCANA WELL		Offset Site Error:		0.0 ft	
Survey Program: 911-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					
16,600.0	7,595.0	8,406.2	7,709.8	152.6	20.9	-148.32	9,004.4	236.4	476.3	381.6	94.71	5.029						
16,700.0	7,595.0	8,386.2	7,710.3	154.3	20.5	-155.20	9,007.4	256.2	382.4	302.2	80.13	4.772						
16,800.0	7,595.0	8,367.7	7,710.6	156.0	20.2	-162.23	9,010.0	274.5	291.4	226.6	64.81	4.497						
16,900.0	7,595.0	8,350.6	7,710.7	157.8	19.9	-169.27	9,012.3	291.5	207.7	157.3	50.34	4.126						
17,000.0	7,595.0	8,334.6	7,710.8	159.5	19.6	-176.14	9,014.4	307.3	144.3	104.2	40.19	3.592						
17,064.0	7,595.0	8,324.9	7,710.7	160.7	19.4	179.62	9,015.6	317.0	129.7	91.3	38.44	3.374	CC, ES, SF					
17,082.5	7,595.0	8,322.1	7,710.7	161.0	19.4	178.43	9,015.9	319.7	131.0	92.2	38.79	3.377						

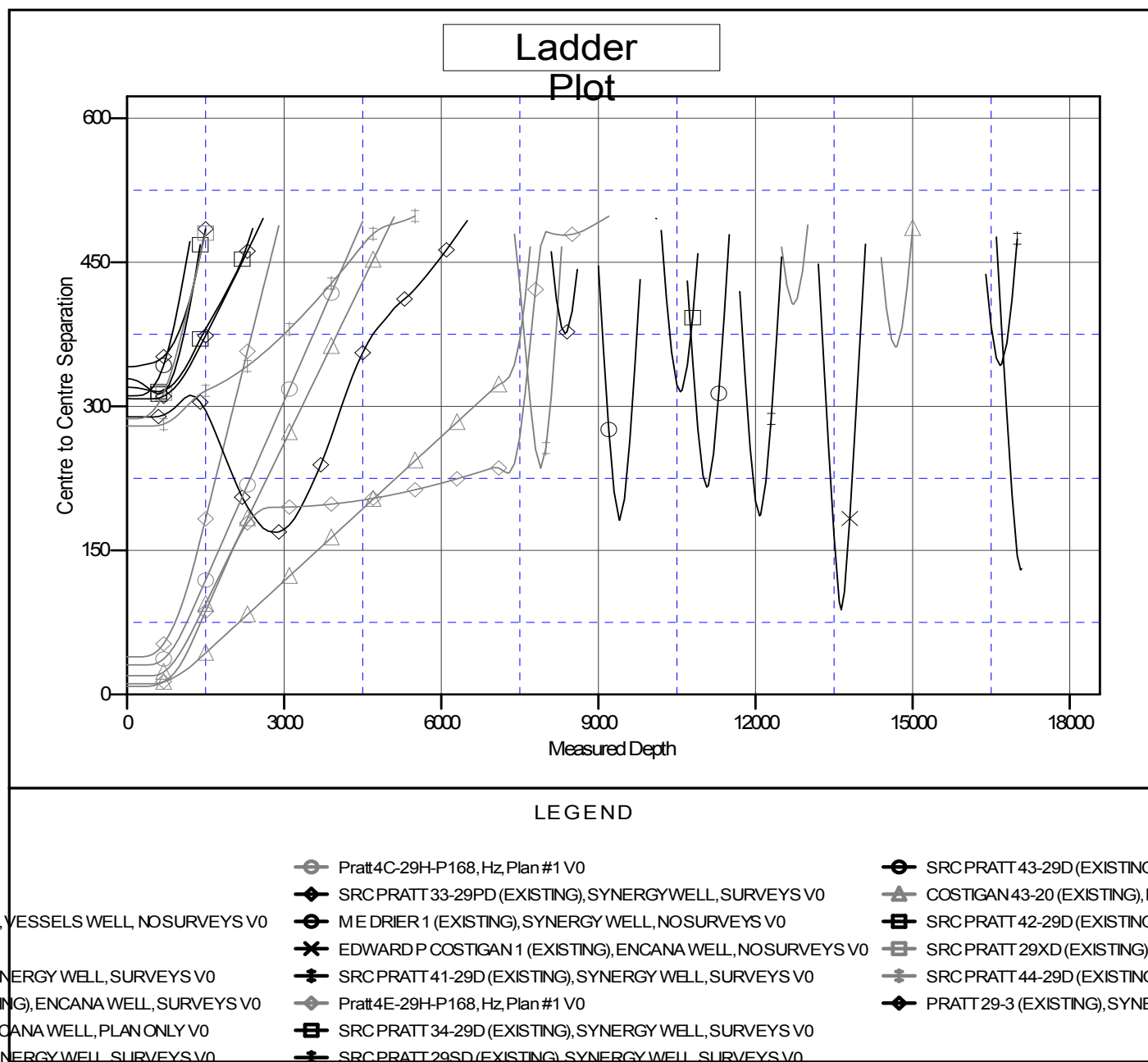
Anticollision Report

Company: EnCana Oil & Gas (USA) Inc
Project: DJ Wattenberg
Reference Site: S29-T1N-R68W (Pratt/Waste Connections)
Site Error: 0.0ft
Reference Well: Pratt 4F-29H-P168
Well Error: 0.0ft
Reference Wellbore: Hz
Reference Design: Plan #1

Local Co-ordinate Reference: Well Pratt 4F-29H-P168
TVD Reference: WELL @ 5189.0ft (Original Well Elev)
MD Reference: WELL @ 5189.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: USA EDM 5000 Multi Users DB
Offset TVD Reference: Offset Datum

Reference Depths are relative to WELL @ 5189.0ft (Original Well Elev)
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °

Coordinates are relative to: Pratt 4F-29H-P168
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.31°



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