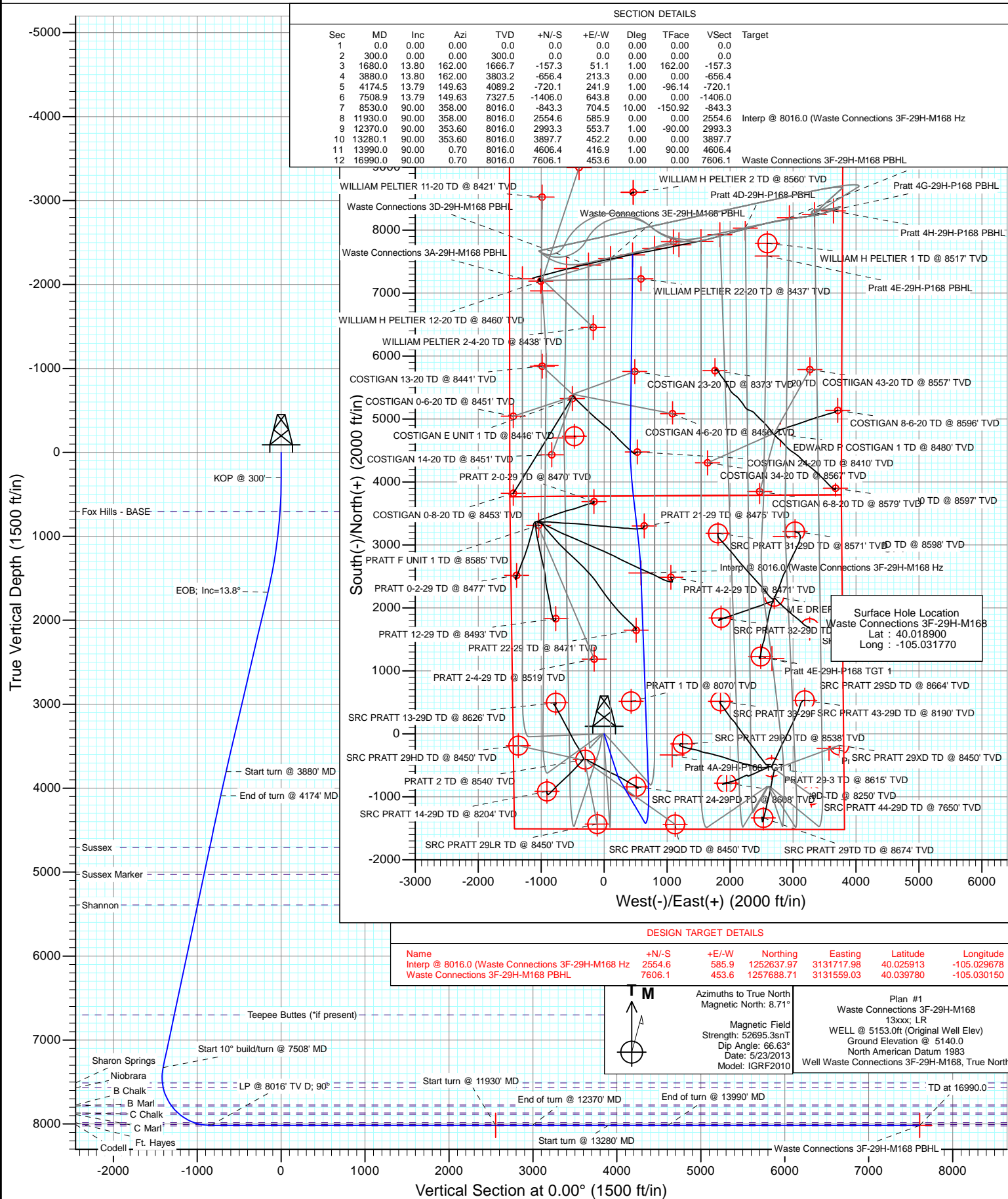




Project: DJ Wattenberg
Site: S29-T1N-R68W (Pratt/Waste Connections)
Well: Waste Connections 3F-29H-M168
Wellbore: Hz
Design: Plan #1



Planning Report

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

Project	DJ Wattenberg		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		S29-T1N-R68W (Pratt/Waste Connections)			
Site Position:		Northing:	1,249,256.24 ft	Latitude:	40.016600
From:	Lat/Long	Easting:	3,133,726.79 ft	Longitude:	-105.022570
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.31 °

Well	Waste Connections 3F-29H-M168					
Well Position	+N/-S	0.0 ft	Northing:	1,250,080.29 ft	Latitude:	40.018900
	+E/-W	0.0 ft	Easting:	3,131,145.62 ft	Longitude:	-105.031770
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,140.0 ft

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

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	0.00

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,680.0	13.80	162.00	1,666.7	-157.3	51.1	1.00	1.00	0.00	162.00	
3,880.0	13.80	162.00	3,803.2	-656.4	213.3	0.00	0.00	0.00	0.00	
4,174.5	13.79	149.63	4,089.2	-720.1	241.9	1.00	0.00	-4.20	-96.14	
7,508.9	13.79	149.63	7,327.5	-1,406.0	643.8	0.00	0.00	0.00	0.00	
8,530.0	90.00	358.00	8,016.0	-843.3	704.5	10.00	7.46	-14.85	-150.92	
11,930.0	90.00	358.00	8,016.0	2,554.6	585.9	0.00	0.00	0.00	0.00	Interp @ 8016.0 (Was
12,370.0	90.00	353.60	8,016.0	2,993.3	553.7	1.00	0.00	-1.00	-90.00	
13,280.1	90.00	353.60	8,016.0	3,897.7	452.2	0.00	0.00	0.00	0.00	
13,990.0	90.00	0.70	8,016.0	4,606.4	416.9	1.00	0.00	1.00	90.00	
16,990.0	90.00	0.70	8,016.0	7,606.1	453.6	0.00	0.00	0.00	0.00	Waste Connections 3I

Planning Report

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

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	KOP @ 300'
400.0	1.00	162.00	400.0	-0.8	0.3	-0.8	1.00	1.00	
500.0	2.00	162.00	500.0	-3.3	1.1	-3.3	1.00	1.00	
600.0	3.00	162.00	599.9	-7.5	2.4	-7.5	1.00	1.00	
700.0	4.00	162.00	699.7	-13.3	4.3	-13.3	1.00	1.00	
703.3	4.03	162.00	703.0	-13.5	4.4	-13.5	1.00	1.00	Fox Hills - BASE
800.0	5.00	162.00	799.4	-20.7	6.7	-20.7	1.00	1.00	
900.0	6.00	162.00	898.9	-29.9	9.7	-29.9	1.00	1.00	
1,000.0	7.00	162.00	998.3	-40.6	13.2	-40.6	1.00	1.00	
1,100.0	8.00	162.00	1,097.4	-53.0	17.2	-53.0	1.00	1.00	
1,200.0	9.00	162.00	1,196.3	-67.1	21.8	-67.1	1.00	1.00	
1,300.0	10.00	162.00	1,294.9	-82.8	26.9	-82.8	1.00	1.00	
1,400.0	11.00	162.00	1,393.3	-100.1	32.5	-100.1	1.00	1.00	
1,500.0	12.00	162.00	1,491.2	-119.1	38.7	-119.1	1.00	1.00	
1,600.0	13.00	162.00	1,588.9	-139.7	45.4	-139.7	1.00	1.00	
1,680.0	13.80	162.00	1,666.7	-157.3	51.1	-157.3	1.00	1.00	EOB; Inc=13.8°
1,700.0	13.80	162.00	1,686.1	-161.8	52.6	-161.8	0.00	0.00	
1,800.0	13.80	162.00	1,783.2	-184.5	60.0	-184.5	0.00	0.00	
1,900.0	13.80	162.00	1,880.3	-207.2	67.3	-207.2	0.00	0.00	
2,000.0	13.80	162.00	1,977.5	-229.9	74.7	-229.9	0.00	0.00	
2,100.0	13.80	162.00	2,074.6	-252.6	82.1	-252.6	0.00	0.00	
2,200.0	13.80	162.00	2,171.7	-275.3	89.4	-275.3	0.00	0.00	
2,300.0	13.80	162.00	2,268.8	-297.9	96.8	-297.9	0.00	0.00	
2,400.0	13.80	162.00	2,365.9	-320.6	104.2	-320.6	0.00	0.00	
2,500.0	13.80	162.00	2,463.0	-343.3	111.6	-343.3	0.00	0.00	
2,600.0	13.80	162.00	2,560.1	-366.0	118.9	-366.0	0.00	0.00	
2,700.0	13.80	162.00	2,657.3	-388.7	126.3	-388.7	0.00	0.00	
2,800.0	13.80	162.00	2,754.4	-411.4	133.7	-411.4	0.00	0.00	
2,900.0	13.80	162.00	2,851.5	-434.1	141.0	-434.1	0.00	0.00	
3,000.0	13.80	162.00	2,948.6	-456.7	148.4	-456.7	0.00	0.00	
3,100.0	13.80	162.00	3,045.7	-479.4	155.8	-479.4	0.00	0.00	
3,200.0	13.80	162.00	3,142.8	-502.1	163.1	-502.1	0.00	0.00	
3,300.0	13.80	162.00	3,239.9	-524.8	170.5	-524.8	0.00	0.00	
3,400.0	13.80	162.00	3,337.0	-547.5	177.9	-547.5	0.00	0.00	
3,500.0	13.80	162.00	3,434.2	-570.2	185.3	-570.2	0.00	0.00	
3,600.0	13.80	162.00	3,531.3	-592.9	192.6	-592.9	0.00	0.00	
3,700.0	13.80	162.00	3,628.4	-615.5	200.0	-615.5	0.00	0.00	
3,800.0	13.80	162.00	3,725.5	-638.2	207.4	-638.2	0.00	0.00	
3,880.0	13.80	162.00	3,803.2	-656.4	213.3	-656.4	0.00	0.00	Start turn @ 3880' MD
3,900.0	13.78	161.17	3,822.6	-660.9	214.8	-660.9	1.00	-0.10	
4,000.0	13.72	156.96	3,919.8	-683.1	223.3	-683.1	1.00	-0.06	
4,100.0	13.74	152.75	4,016.9	-704.6	233.3	-704.6	1.00	0.01	
4,174.5	13.79	149.63	4,089.2	-720.1	241.9	-720.1	1.00	0.08	End of turn @ 4174' MD
4,200.0	13.79	149.63	4,114.0	-725.3	245.0	-725.3	0.00	0.00	
4,300.0	13.79	149.63	4,211.1	-745.9	257.0	-745.9	0.00	0.00	
4,400.0	13.79	149.63	4,308.3	-766.5	269.1	-766.5	0.00	0.00	
4,500.0	13.79	149.63	4,405.4	-787.0	281.1	-787.0	0.00	0.00	
4,600.0	13.79	149.63	4,502.5	-807.6	293.2	-807.6	0.00	0.00	
4,700.0	13.79	149.63	4,599.6	-828.2	305.2	-828.2	0.00	0.00	

Planning Report

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

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,800.0	13.79	149.63	4,696.7	-848.8	317.3	-848.8	0.00	0.00	
4,809.6	13.79	149.63	4,706.0	-850.7	318.4	-850.7	0.00	0.00	Sussex
4,900.0	13.79	149.63	4,793.8	-869.3	329.3	-869.3	0.00	0.00	
5,000.0	13.79	149.63	4,891.0	-889.9	341.4	-889.9	0.00	0.00	
5,100.0	13.79	149.63	4,988.1	-910.5	353.4	-910.5	0.00	0.00	
5,141.1	13.79	149.63	5,028.0	-918.9	358.4	-918.9	0.00	0.00	Sussex Marker
5,200.0	13.79	149.63	5,085.2	-931.0	365.5	-931.0	0.00	0.00	
5,300.0	13.79	149.63	5,182.3	-951.6	377.5	-951.6	0.00	0.00	
5,400.0	13.79	149.63	5,279.4	-972.2	389.6	-972.2	0.00	0.00	
5,500.0	13.79	149.63	5,376.5	-992.7	401.7	-992.7	0.00	0.00	
5,514.9	13.79	149.63	5,391.0	-995.8	403.5	-995.8	0.00	0.00	Shannon
5,600.0	13.79	149.63	5,473.7	-1,013.3	413.7	-1,013.3	0.00	0.00	
5,700.0	13.79	149.63	5,570.8	-1,033.9	425.8	-1,033.9	0.00	0.00	
5,800.0	13.79	149.63	5,667.9	-1,054.5	437.8	-1,054.5	0.00	0.00	
5,900.0	13.79	149.63	5,765.0	-1,075.0	449.9	-1,075.0	0.00	0.00	
6,000.0	13.79	149.63	5,862.1	-1,095.6	461.9	-1,095.6	0.00	0.00	
6,100.0	13.79	149.63	5,959.2	-1,116.2	474.0	-1,116.2	0.00	0.00	
6,200.0	13.79	149.63	6,056.3	-1,136.7	486.0	-1,136.7	0.00	0.00	
6,300.0	13.79	149.63	6,153.5	-1,157.3	498.1	-1,157.3	0.00	0.00	
6,400.0	13.79	149.63	6,250.6	-1,177.9	510.1	-1,177.9	0.00	0.00	
6,500.0	13.79	149.63	6,347.7	-1,198.4	522.2	-1,198.4	0.00	0.00	
6,600.0	13.79	149.63	6,444.8	-1,219.0	534.3	-1,219.0	0.00	0.00	
6,700.0	13.79	149.63	6,541.9	-1,239.6	546.3	-1,239.6	0.00	0.00	
6,800.0	13.79	149.63	6,639.0	-1,260.2	558.4	-1,260.2	0.00	0.00	
6,862.8	13.79	149.63	6,700.0	-1,273.1	565.9	-1,273.1	0.00	0.00	Teepee Buttes (*if present)
6,900.0	13.79	149.63	6,736.2	-1,280.7	570.4	-1,280.7	0.00	0.00	
7,000.0	13.79	149.63	6,833.3	-1,301.3	582.5	-1,301.3	0.00	0.00	
7,100.0	13.79	149.63	6,930.4	-1,321.9	594.5	-1,321.9	0.00	0.00	
7,200.0	13.79	149.63	7,027.5	-1,342.4	606.6	-1,342.4	0.00	0.00	
7,300.0	13.79	149.63	7,124.6	-1,363.0	618.6	-1,363.0	0.00	0.00	
7,400.0	13.79	149.63	7,221.7	-1,383.6	630.7	-1,383.6	0.00	0.00	
7,500.0	13.79	149.63	7,318.9	-1,404.1	642.7	-1,404.1	0.00	0.00	
7,508.9	13.79	149.63	7,327.5	-1,406.0	643.8	-1,406.0	0.00	0.00	Start 10° build/turn @ 7508' MD
7,600.0	7.30	112.34	7,417.1	-1,417.6	654.7	-1,417.6	10.00	-7.13	
7,693.7	9.20	44.08	7,510.0	-1,414.4	665.4	-1,414.4	10.00	2.03	Sharon Springs
7,700.0	9.65	41.34	7,516.3	-1,413.7	666.1	-1,413.7	10.00	7.06	
7,752.9	13.95	26.01	7,568.0	-1,404.6	671.8	-1,404.6	10.00	8.14	Niobrara
7,800.0	18.22	18.76	7,613.3	-1,392.5	676.7	-1,392.5	10.00	9.06	
7,900.0	27.75	10.81	7,705.3	-1,354.8	686.1	-1,354.8	10.00	9.53	
7,979.6	35.51	7.41	7,773.0	-1,313.6	692.6	-1,313.6	10.00	9.75	B Chalk
7,993.2	36.84	6.96	7,784.0	-1,305.6	693.6	-1,305.6	10.00	9.81	B Marl
8,000.0	37.51	6.74	7,789.4	-1,301.5	694.1	-1,301.5	10.00	9.81	
8,100.0	47.36	4.17	7,863.1	-1,234.5	700.3	-1,234.5	10.00	9.85	
8,107.3	48.08	4.01	7,868.0	-1,229.1	700.7	-1,229.1	10.00	9.88	C Chalk
8,136.5	50.97	3.43	7,887.0	-1,206.9	702.2	-1,206.9	10.00	9.88	C Marl
8,200.0	57.25	2.30	7,924.2	-1,155.6	704.7	-1,155.6	10.00	9.90	
8,300.0	67.16	0.82	7,970.8	-1,067.2	707.1	-1,067.2	10.00	9.91	
8,337.0	70.83	0.32	7,984.0	-1,032.7	707.4	-1,032.7	10.00	9.92	Ft. Hayes
8,400.0	77.09	359.53	8,001.4	-972.2	707.3	-972.2	10.00	9.93	
8,422.4	79.32	359.26	8,006.0	-950.2	707.1	-950.2	10.00	9.93	Codell
8,500.0	87.02	358.35	8,015.2	-873.3	705.5	-873.3	10.00	9.93	
8,530.0	90.00	358.00	8,016.0	-843.3	704.5	-843.3	10.00	9.93	LP @ 8016' TV D; 90°

Planning Report

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

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
8,600.0	90.00	358.00	8,016.0	-773.4	702.1	-773.4	0.00	0.00	
8,700.0	90.00	358.00	8,016.0	-673.4	698.6	-673.4	0.00	0.00	
8,800.0	90.00	358.00	8,016.0	-573.5	695.1	-573.5	0.00	0.00	
8,900.0	90.00	358.00	8,016.0	-473.5	691.6	-473.5	0.00	0.00	
9,000.0	90.00	358.00	8,016.0	-373.6	688.1	-373.6	0.00	0.00	
9,100.0	90.00	358.00	8,016.0	-273.7	684.6	-273.7	0.00	0.00	
9,200.0	90.00	358.00	8,016.0	-173.7	681.1	-173.7	0.00	0.00	
9,300.0	90.00	358.00	8,016.0	-73.8	677.6	-73.8	0.00	0.00	
9,400.0	90.00	358.00	8,016.0	26.2	674.2	26.2	0.00	0.00	
9,500.0	90.00	358.00	8,016.0	126.1	670.7	126.1	0.00	0.00	
9,600.0	90.00	358.00	8,016.0	226.0	667.2	226.0	0.00	0.00	
9,700.0	90.00	358.00	8,016.0	326.0	663.7	326.0	0.00	0.00	
9,800.0	90.00	358.00	8,016.0	425.9	660.2	425.9	0.00	0.00	
9,900.0	90.00	358.00	8,016.0	525.9	656.7	525.9	0.00	0.00	
10,000.0	90.00	358.00	8,016.0	625.8	653.2	625.8	0.00	0.00	
10,100.0	90.00	358.00	8,016.0	725.7	649.7	725.7	0.00	0.00	
10,200.0	90.00	358.00	8,016.0	825.7	646.2	825.7	0.00	0.00	
10,300.0	90.00	358.00	8,016.0	925.6	642.7	925.6	0.00	0.00	
10,400.0	90.00	358.00	8,016.0	1,025.5	639.3	1,025.5	0.00	0.00	
10,500.0	90.00	358.00	8,016.0	1,125.5	635.8	1,125.5	0.00	0.00	
10,600.0	90.00	358.00	8,016.0	1,225.4	632.3	1,225.4	0.00	0.00	
10,700.0	90.00	358.00	8,016.0	1,325.4	628.8	1,325.4	0.00	0.00	
10,800.0	90.00	358.00	8,016.0	1,425.3	625.3	1,425.3	0.00	0.00	
10,900.0	90.00	358.00	8,016.0	1,525.2	621.8	1,525.2	0.00	0.00	
11,000.0	90.00	358.00	8,016.0	1,625.2	618.3	1,625.2	0.00	0.00	
11,100.0	90.00	358.00	8,016.0	1,725.1	614.8	1,725.1	0.00	0.00	
11,200.0	90.00	358.00	8,016.0	1,825.1	611.3	1,825.1	0.00	0.00	
11,300.0	90.00	358.00	8,016.0	1,925.0	607.9	1,925.0	0.00	0.00	
11,400.0	90.00	358.00	8,016.0	2,024.9	604.4	2,024.9	0.00	0.00	
11,500.0	90.00	358.00	8,016.0	2,124.9	600.9	2,124.9	0.00	0.00	
11,600.0	90.00	358.00	8,016.0	2,224.8	597.4	2,224.8	0.00	0.00	
11,700.0	90.00	358.00	8,016.0	2,324.8	593.9	2,324.8	0.00	0.00	
11,800.0	90.00	358.00	8,016.0	2,424.7	590.4	2,424.7	0.00	0.00	
11,900.0	90.00	358.00	8,016.0	2,524.6	586.9	2,524.6	0.00	0.00	
11,930.0	90.00	358.00	8,016.0	2,554.6	585.9	2,554.6	0.00	0.00	Start turn @ 11930' MD - Interp @ 8016.0 (Was
12,000.0	90.00	357.30	8,016.0	2,624.6	583.0	2,624.6	1.00	0.00	
12,100.0	90.00	356.30	8,016.0	2,724.4	577.4	2,724.4	1.00	0.00	
12,200.0	90.00	355.30	8,016.0	2,824.1	570.1	2,824.1	1.00	0.00	
12,300.0	90.00	354.30	8,016.0	2,923.7	561.0	2,923.7	1.00	0.00	
12,370.0	90.00	353.60	8,016.0	2,993.3	553.7	2,993.3	1.00	0.00	End of turn @ 12370' MD
12,400.0	90.00	353.60	8,016.0	3,023.1	550.3	3,023.1	0.00	0.00	
12,500.0	90.00	353.60	8,016.0	3,122.5	539.2	3,122.5	0.00	0.00	
12,600.0	90.00	353.60	8,016.0	3,221.9	528.0	3,221.9	0.00	0.00	
12,700.0	90.00	353.60	8,016.0	3,321.3	516.9	3,321.3	0.00	0.00	
12,800.0	90.00	353.60	8,016.0	3,420.6	505.7	3,420.6	0.00	0.00	
12,900.0	90.00	353.60	8,016.0	3,520.0	494.6	3,520.0	0.00	0.00	
13,000.0	90.00	353.60	8,016.0	3,619.4	483.4	3,619.4	0.00	0.00	
13,100.0	90.00	353.60	8,016.0	3,718.8	472.3	3,718.8	0.00	0.00	
13,200.0	90.00	353.60	8,016.0	3,818.2	461.1	3,818.2	0.00	0.00	
13,280.1	90.00	353.60	8,016.0	3,897.7	452.2	3,897.7	0.00	0.00	Start turn @ 13280' MD
13,300.0	90.00	353.80	8,016.0	3,917.5	450.0	3,917.5	1.00	0.00	
13,400.0	90.00	354.80	8,016.0	4,017.0	440.1	4,017.0	1.00	0.00	

Planning Report

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

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
13,500.0	90.00	355.80	8,016.0	4,116.7	431.9	4,116.7	1.00	0.00	
13,600.0	90.00	356.80	8,016.0	4,216.5	425.4	4,216.5	1.00	0.00	
13,700.0	90.00	357.80	8,016.0	4,316.4	420.7	4,316.4	1.00	0.00	
13,800.0	90.00	358.80	8,016.0	4,416.3	417.8	4,416.3	1.00	0.00	
13,900.0	90.00	359.80	8,016.0	4,516.3	416.5	4,516.3	1.00	0.00	
13,990.0	90.00	0.70	8,016.0	4,606.4	416.9	4,606.4	1.00	0.00	End of turn @ 13990' MD
14,000.0	90.00	0.70	8,016.0	4,616.3	417.1	4,616.3	0.00	0.00	
14,100.0	90.00	0.70	8,016.0	4,716.3	418.3	4,716.3	0.00	0.00	
14,200.0	90.00	0.70	8,016.0	4,816.3	419.5	4,816.3	0.00	0.00	
14,300.0	90.00	0.70	8,016.0	4,916.3	420.7	4,916.3	0.00	0.00	
14,400.0	90.00	0.70	8,016.0	5,016.3	421.9	5,016.3	0.00	0.00	
14,500.0	90.00	0.70	8,016.0	5,116.3	423.2	5,116.3	0.00	0.00	
14,600.0	90.00	0.70	8,016.0	5,216.3	424.4	5,216.3	0.00	0.00	
14,700.0	90.00	0.70	8,016.0	5,316.3	425.6	5,316.3	0.00	0.00	
14,800.0	90.00	0.70	8,016.0	5,416.3	426.8	5,416.3	0.00	0.00	
14,900.0	90.00	0.70	8,016.0	5,516.3	428.1	5,516.3	0.00	0.00	
15,000.0	90.00	0.70	8,016.0	5,616.2	429.3	5,616.2	0.00	0.00	
15,100.0	90.00	0.70	8,016.0	5,716.2	430.5	5,716.2	0.00	0.00	
15,200.0	90.00	0.70	8,016.0	5,816.2	431.7	5,816.2	0.00	0.00	
15,300.0	90.00	0.70	8,016.0	5,916.2	432.9	5,916.2	0.00	0.00	
15,400.0	90.00	0.70	8,016.0	6,016.2	434.2	6,016.2	0.00	0.00	
15,500.0	90.00	0.70	8,016.0	6,116.2	435.4	6,116.2	0.00	0.00	
15,600.0	90.00	0.70	8,016.0	6,216.2	436.6	6,216.2	0.00	0.00	
15,700.0	90.00	0.70	8,016.0	6,316.2	437.8	6,316.2	0.00	0.00	
15,800.0	90.00	0.70	8,016.0	6,416.2	439.0	6,416.2	0.00	0.00	
15,900.0	90.00	0.70	8,016.0	6,516.2	440.3	6,516.2	0.00	0.00	
16,000.0	90.00	0.70	8,016.0	6,616.2	441.5	6,616.2	0.00	0.00	
16,100.0	90.00	0.70	8,016.0	6,716.2	442.7	6,716.2	0.00	0.00	
16,200.0	90.00	0.70	8,016.0	6,816.2	443.9	6,816.2	0.00	0.00	
16,300.0	90.00	0.70	8,016.0	6,916.1	445.2	6,916.1	0.00	0.00	
16,400.0	90.00	0.70	8,016.0	7,016.1	446.4	7,016.1	0.00	0.00	
16,500.0	90.00	0.70	8,016.0	7,116.1	447.6	7,116.1	0.00	0.00	
16,600.0	90.00	0.70	8,016.0	7,216.1	448.8	7,216.1	0.00	0.00	
16,700.0	90.00	0.70	8,016.0	7,316.1	450.0	7,316.1	0.00	0.00	
16,800.0	90.00	0.70	8,016.0	7,416.1	451.3	7,416.1	0.00	0.00	
16,900.0	90.00	0.70	8,016.0	7,516.1	452.5	7,516.1	0.00	0.00	
16,990.0	90.00	0.70	8,016.0	7,606.1	453.6	7,606.1	0.00	0.00	TD at 16990.0 - Waste Connections 3F-29H-M1

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Waste Connections 3F-2	0.00	0.00	8,016.0	7,606.1	453.6	1,257,688.71	3,131,559.03	40.039780	-105.030150
- plan hits target center									
- Point									
Interp @ 8016.0 (Waste	0.00	0.00	8,016.0	2,554.6	585.9	1,252,637.97	3,131,717.98	40.025913	-105.029678
- plan hits target center									
- Point									

Planning Report

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

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
703.3	703.0	Fox Hills - BASE			
4,809.6	4,706.0	Sussex			
5,141.1	5,028.0	Sussex Marker			
5,514.9	5,391.0	Shannon			
6,862.8	6,700.0	Teepee Buttes (*if present)			
7,693.7	7,510.0	Sharon Springs			
7,752.9	7,568.0	Niobrara			
7,979.6	7,773.0	B Chalk			
7,993.2	7,784.0	B Marl			
8,107.3	7,868.0	C Chalk			
8,136.5	7,887.0	C Marl			
8,337.0	7,984.0	Ft. Hayes			
8,422.4	8,006.0	Codell			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
300.0	300.0	0.0	0.0	KOP @ 300'
1,680.0	1,666.7	-157.3	51.1	EOB; Inc=13.8°
3,880.0	3,803.2	-656.4	213.3	Start turn @ 3880' MD
4,174.5	4,089.2	-720.1	241.9	End of turn @ 4174' MD
7,508.9	7,327.5	-1,406.0	643.8	Start 10° build/turn @ 7508' MD
8,530.0	8,016.0	-843.3	704.5	LP @ 8016' TV D; 90°
11,930.0	8,016.0	2,554.6	585.9	Start turn @ 11930' MD
12,370.0	8,016.0	2,993.3	553.7	End of turn @ 12370' MD
13,280.1	8,016.0	3,897.7	452.2	Start turn @ 13280' MD
13,990.0	8,016.0	4,606.4	416.9	End of turn @ 13990' MD
16,990.0	8,016.0	7,606.1	453.6	TD at 16990.0

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S29-T1N-R68W (Pratt/Waste Connections)

Waste Connections 3F-29H-M168

Hz

Plan #1

Anticollision Report

30 May, 2013

Anticollision Report

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

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 500.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	5/30/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	16,990.0	Plan #1 (Hz)	MWD	Geolink MWD	

Anticollision Report

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

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S29-T1N-R68W (Pratt/Waste Connections)						
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	15,140.0	8,041.5	56.2	-63.6	0.469	Level 1, CC, ES, SF
COSTIGAN 24-20 (EXISTING) - ENCANA WELL - ENCA	13,855.5	8,177.6	103.1	-0.3	0.997	Level 1, CC, ES, SF
COSTIGAN 33-20 (EXISTING) - ENCANA WELL - ENCA						Out of range
COSTIGAN 34-20 (EXISTING) - ENCANA WELL - PLAN						Out of range
COSTIGAN 43-20 (EXISTING) - ENCANA WELL - PLAN						Out of range
COSTIGAN 4-6-20 (EXISTING) - ENCANA WELL - PLAN						Out of range
COSTIGAN 6-8-20 (EXISTING) - ENCANA WELL - PLAN						Out of range
COSTIGAN 8-6-20 (EXISTING) - ENCANA WELL - SUR						Out of range
COSTIGAN 8-8-20 (EXISTING) - ENCANA WELL - SUR						Out of range
COSTIGAN E UNIT 1 (EXISTING) - ENCANA WELL - NO						Out of range
COSTIGAN H UNIT 1 (EXISTING) - VESSELS WELL - N						Out of range
EDWARD P COSTIGAN 1 (EXISTING) - ENCANA WELL						Out of range
M E DRIER 1 (EXISTING) - SYNERGY WELL - NO SUR						Out of range
PRATT 0-2-29 (EXISTING) - ENCANA WELL - SURVEY						Out of range
PRATT 1 (EXISTING) - SYNERGY WELL - NO SURVEY	9,898.7	8,005.0	228.1	194.6	6.811	CC
PRATT 1 (EXISTING) - SYNERGY WELL - NO SURVEY	9,900.0	8,005.0	228.1	194.6	6.809	ES, SF
PRATT 12-29 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
PRATT 2 (EXISTING) - SYNERGY WELL - NO SURVEY	2,224.9	2,183.9	411.1	400.7	39.428	CC
PRATT 2 (EXISTING) - SYNERGY WELL - NO SURVEY	2,300.0	2,256.8	411.5	400.6	37.818	ES
PRATT 2 (EXISTING) - SYNERGY WELL - NO SURVEY	3,200.0	3,130.8	472.3	456.9	30.647	SF
PRATT 2-0-29 (EXISTING) - ENCANA WELL - SURVEY						Out of range
PRATT 21-29 (EXISTING) - ENCANA WELL - SURVEYS	12,662.4	8,242.3	112.9	37.4	1.495	Level 3, CC, ES, SF
PRATT 22-29 (EXISTING) - ENCANA WELL - SURVEYS	11,038.3	8,577.5	120.0	49.7	1.707	CC, ES, SF
PRATT 2-4-29 (EXISTING) - ENCANA WELL - PLAN ON						Out of range
PRATT 29-3 (EXISTING) - SYNERGY WELL - NO SURV						Out of range
PRATT 4-2-29 (EXISTING) - ENCANA WELL - SURVEY	11,834.9	8,529.9	473.9	402.9	6.673	CC, ES
PRATT 4-2-29 (EXISTING) - ENCANA WELL - SURVEY	11,900.0	8,531.1	478.3	406.3	6.635	SF
Pratt 4B-29H-P168 - Hz - Plan #1						Out of range
Pratt 4C-29H-P168 - Hz - Plan #1						Out of range
Pratt 4D-29H-P168 - Hz - Plan #1						Out of range
Pratt 4E-29H-P168 - Hz - Plan #1						Out of range
Pratt 4F-29H-P168 - Hz - Plan #1						Out of range
Pratt 4G-29H-P168 - Hz - Plan #1						Out of range
PRATT F UNIT 1 (EXISTING) - ENCANA WELL - NO SU						Out of range
SRC PRATT 13-29D (EXISTING) - SYNERGY WELL - S	1,271.0	1,277.9	451.9	445.4	69.214	CC
SRC PRATT 13-29D (EXISTING) - SYNERGY WELL - S	1,300.0	1,303.0	452.1	445.3	67.160	ES
SRC PRATT 13-29D (EXISTING) - SYNERGY WELL - S	1,700.0	1,654.4	494.1	484.7	52.260	SF
SRC PRATT 14-29D (EXISTING) - SYNERGY WELL - S						Out of range
SRC PRATT 24-29 PD (EXISTING) - SYNERGY WELL -	5,307.5	5,298.7	187.0	149.9	5.040	CC, ES
SRC PRATT 24-29 PD (EXISTING) - SYNERGY WELL -	5,400.0	5,389.0	188.1	150.1	4.955	SF
SRC PRATT 29HD (EXISTING) - SYNERGY WELL - PL						Out of range
SRC PRATT 29LD (EXISTING) - SYNERGY WELL - PLA	1,577.2	1,513.0	472.8	466.4	73.813	CC
SRC PRATT 29LD (EXISTING) - SYNERGY WELL - PLA	1,600.0	1,534.0	472.9	466.3	72.229	ES
SRC PRATT 29LD (EXISTING) - SYNERGY WELL - PLA	2,600.0	2,517.6	500.0	485.9	35.501	SF
SRC PRATT 29PD (EXISTING) - SYNERGY WELL - SU						Out of range
SRC PRATT 29QD (EXISTING) - SYNERGY WELL - PL	2,367.3	2,304.2	442.4	430.1	36.000	CC
SRC PRATT 29QD (EXISTING) - SYNERGY WELL - PL	7,700.0	7,794.4	462.6	413.6	9.431	SF
SRC PRATT 29QD (EXISTING) - SYNERGY WELL - PL	7,900.0	7,983.4	449.6	405.1	10.104	ES
SRC PRATT 29SD (EXISTING) - SYNERGY WELL - SU						Out of range

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

Anticollision Report

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

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
S29-T1N-R68W (Pratt/Waste Connections)						
SRC PRATT 29TD (EXISTING) - SYNERGY WELL - SU						Out of range
SRC PRATT 29XD (EXISTING) - SYNERGY WELL - PLA						Out of range
SRC PRATT 31-29D (EXISTING) - SYNERGY WELL - S						Out of range
SRC PRATT 32-29D (EXISTING) - SYNERGY WELL - S						Out of range
SRC PRATT 33-29PD (EXISTING) - SYNERGY WELL -						Out of range
SRC PRATT 34-29D (EXISTING) - SYNERGY WELL - S						Out of range
SRC PRATT 41-29D (EXISTING) - SYNERGY WELL - S						Out of range
SRC PRATT 42-29D (EXISTING) - SYNERGY WELL - S						Out of range
SRC PRATT 43-29D (EXISTING) - SYNERGY WELL - S						Out of range
SRC PRATT 44-29D (EXISTING) - SYNERGY WELL - P						Out of range
Waste Connections 3A-29H-M168 - Hz - Plan #1	200.0	200.0	47.6	47.0	72.942	CC, ES
Waste Connections 3A-29H-M168 - Hz - Plan #1	700.0	694.0	74.5	72.1	30.794	SF
Waste Connections 3B-29H-M168 - Hz - Plan #1	300.0	300.0	39.2	38.2	39.140	CC, ES
Waste Connections 3B-29H-M168 - Hz - Plan #1	700.0	697.1	55.0	52.6	22.530	SF
Waste Connections 3C-29H-M168 - Hz - Plan #1	300.0	300.0	28.0	27.0	27.957	CC
Waste Connections 3C-29H-M168 - Hz - Plan #1	400.0	400.0	28.3	26.9	20.933	ES
Waste Connections 3C-29H-M168 - Hz - Plan #1	1,100.0	1,099.4	53.8	49.6	12.821	SF
Waste Connections 3D-29H-M168 - Hz - Plan #1	300.0	300.0	19.6	18.6	19.570	CC
Waste Connections 3D-29H-M168 - Hz - Plan #1	400.0	400.0	19.9	18.5	14.720	ES
Waste Connections 3D-29H-M168 - Hz - Plan #1	600.0	599.7	23.6	21.6	11.476	SF
Waste Connections 3E-29H-M168 - Hz - Plan #1	300.0	300.0	8.4	7.4	8.387	CC
Waste Connections 3E-29H-M168 - Hz - Plan #1	400.0	400.0	8.7	7.4	6.447	ES
Waste Connections 3E-29H-M168 - Hz - Plan #1	16,900.0	16,711.9	416.8	189.0	1.830	SF
Waste Connections 3G-29H-M168 - Hz - Plan #1	166.3	167.3	11.2	10.7	20.864	CC
Waste Connections 3G-29H-M168 - Hz - Plan #1	200.0	201.0	11.2	10.5	17.117	ES
Waste Connections 3G-29H-M168 - Hz - Plan #1	16,990.0	16,051.2	418.2	188.0	1.816	SF
WILLIAM H PELTIER 1 (EXISTING) - VESSELS WELL -						Out of range
WILLIAM H PELTIER 2 (EXISTING) - ENCANA WELL - P						Out of range
WILLIAM H PELTIER 2 (EXISTING) - ENCANA WELL - S						Out of range
WILLIAM PELTIER 11-20 (EXISTING) - ENCANA WELL						Out of range
WILLIAM PELTIER 12-20 (EXISTING) - ENCANA WELL						Out of range
WILLIAM PELTIER 12-20 (EXISTING) - ENCANA WELL						Out of range
WILLIAM PELTIER 1A-20H (EXISTING) - ENCANA WEL	16,990.0	11,114.8	495.3	434.5	8.138	CC, ES, SF
WILLIAM PELTIER 1A-20H (EXISTING) - ENCANA WEL	16,990.0	11,342.5	495.3	434.0	8.075	CC, ES, SF
WILLIAM PELTIER 1A-20H (EXISTING) - ENCANA WEL						Out of range
WILLIAM PELTIER 1A-20H (EXISTING) - ENCANA WEL	16,990.0	10,881.5	278.0	233.5	6.241	CC, ES, SF
WILLIAM PELTIER 1A-20H (EXISTING) - ENCANA WEL						Out of range
WILLIAM PELTIER 1A-20H (EXISTING) - ENCANA WEL						Out of range
WILLIAM PELTIER 1A-20H (EXISTING) - ENCANA WEL	16,990.0	10,879.5	359.6	315.3	8.127	CC, ES, SF
WILLIAM PELTIER 2-0-20 (EXISTING) - ENCANA WELL						Out of range
WILLIAM PELTIER 22-20 (EXISTING) - ENCANA WELL	16,612.9	8,155.7	136.3	-7.8	0.946	Level 1, CC, ES, SF
WILLIAM PELTIER 2-4-20 (EXISTING) - ENCANA WELL						Out of range
WILLIAM PELTIER 4-2-20 (EXISTING) - ENCANA WELL						Out of range

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - COSTIGAN 23-20 (EXISTING) - ENCANA WELL - PLAN O													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (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		
14,700.0	8,016.0	8,041.5	7,951.0	96.9	23.1	90.00	5,755.6	487.2	443.6	331.5	112.16	3.955		
14,800.0	8,016.0	8,041.5	7,951.0	98.7	23.1	90.00	5,755.6	487.2	344.7	230.8	113.89	3.026		
14,900.0	8,016.0	8,041.5	7,951.0	100.4	23.1	90.00	5,755.6	487.2	246.5	130.9	115.62	2.132		
15,000.0	8,016.0	8,041.5	7,951.0	102.1	23.1	90.00	5,755.6	487.2	150.9	33.6	117.35	1.286	Level 3	
15,100.0	8,016.0	8,041.5	7,951.0	103.8	23.1	90.00	5,755.6	487.2	69.0	-50.1	119.08	0.579	Level 1	
15,140.0	8,016.0	8,041.5	7,951.0	104.5	23.1	90.00	5,755.6	487.2	56.2	-63.6	119.77	0.469	Level 1, CC, ES, SF	
15,200.0	8,016.0	8,041.5	7,951.0	105.6	23.1	90.00	5,755.6	487.2	82.2	-38.6	120.81	0.680	Level 1	
15,300.0	8,016.0	8,041.5	7,951.0	107.3	23.1	90.00	5,755.6	487.2	169.5	47.0	122.55	1.384	Level 3	
15,400.0	8,016.0	8,041.5	7,951.0	109.0	23.1	90.00	5,755.6	487.2	266.0	141.7	124.28	2.140		
15,500.0	8,016.0	8,041.5	7,951.0	110.8	23.1	90.00	5,755.6	487.2	364.3	238.3	126.01	2.891		
15,600.0	8,016.0	8,041.5	7,951.0	112.5	23.1	90.00	5,755.6	487.2	463.4	335.6	127.75	3.627		

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - COSTIGAN 24-20 (EXISTING) - ENCANA WELL - ENCAN													Offset Site Error:	0.0 ft
Survey Program: 1173-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		
13,400.0	8,016.0	8,174.4	7,947.1	74.7	28.0	87.66	4,473.0	519.9	462.9	367.1	95.73	4.835		
13,500.0	8,016.0	8,175.1	7,947.7	76.4	28.0	87.84	4,473.0	519.9	367.0	269.5	97.45	3.766		
13,600.0	8,016.0	8,175.7	7,948.4	78.1	28.0	88.10	4,473.0	519.9	273.3	174.2	99.14	2.757		
13,700.0	8,016.0	8,176.5	7,949.1	79.8	28.0	88.42	4,473.0	519.9	185.4	84.6	100.82	1.839		
13,800.0	8,016.0	8,177.2	7,949.8	81.5	28.0	88.80	4,473.0	519.9	116.8	14.3	102.48	1.140 Level 2		
13,855.5	8,016.0	8,177.6	7,950.3	82.4	28.0	89.04	4,473.0	519.9	103.1	-0.3	103.38	0.997 Level 1, CC, ES, SF		
13,900.0	8,016.0	8,178.0	7,950.6	83.2	28.0	89.23	4,473.0	519.9	112.1	8.0	104.10	1.077 Level 2		
14,000.0	8,016.0	8,178.8	7,951.4	84.9	28.0	89.68	4,473.0	519.9	176.4	70.7	105.72	1.669		
14,100.0	8,016.0	8,179.6	7,952.2	86.6	28.0	90.12	4,473.0	520.0	263.7	156.3	107.43	2.455		
14,200.0	8,016.0	8,180.4	7,953.0	88.3	28.0	90.57	4,473.0	520.0	357.7	248.6	109.14	3.277		
14,300.0	8,016.0	8,181.2	7,953.8	90.0	28.0	91.01	4,473.0	520.0	454.3	343.4	110.85	4.098		

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - PRATT 1 (EXISTING) - SYNERGY WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8070-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		
9,500.0	8,016.0	8,005.0	8,005.0	20.5	14.0	-90.00	516.6	428.8	459.3	428.6	30.70	14.960		
9,600.0	8,016.0	8,005.0	8,005.0	20.9	14.0	-90.00	516.6	428.8	375.8	344.7	31.18	12.054		
9,700.0	8,016.0	8,005.0	8,005.0	21.4	14.0	-90.00	516.6	428.8	302.5	270.7	31.81	9.509		
9,800.0	8,016.0	8,005.0	8,005.0	22.1	14.0	-90.00	516.6	428.8	248.5	215.9	32.59	7.625		
9,898.7	8,016.0	8,005.0	8,005.0	22.8	14.0	-90.00	516.6	428.8	228.1	194.6	33.49	6.811 CC		
9,900.0	8,016.0	8,005.0	8,005.0	22.8	14.0	-90.00	516.6	428.8	228.1	194.6	33.50	6.809 ES, SF		
10,000.0	8,016.0	8,005.0	8,005.0	23.7	14.0	-90.00	516.6	428.8	249.6	215.1	34.52	7.231		
10,100.0	8,016.0	8,005.0	8,005.0	24.7	14.0	-90.00	516.6	428.8	304.2	268.6	35.63	8.539		
10,200.0	8,016.0	8,005.0	8,005.0	25.7	14.0	-90.00	516.6	428.8	377.9	341.1	36.82	10.263		
10,300.0	8,016.0	8,005.0	8,005.0	26.9	14.0	-90.00	516.6	428.8	461.6	423.5	38.08	12.121		

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - PRATT 2 (EXISTING) - SYNERGY WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8540-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		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)						
700.0	699.7	687.7	687.7	1.2	1.2	55.67	-407.9	-299.7	498.2	495.8	2.42	205.468		
800.0	799.4	787.4	787.4	1.4	1.4	56.46	-407.9	-299.7	493.8	491.0	2.80	176.467		
900.0	898.9	886.9	886.9	1.7	1.5	57.44	-407.9	-299.7	488.5	485.4	3.18	153.390		
1,000.0	998.3	986.3	986.3	1.9	1.7	58.61	-407.9	-299.7	482.5	478.9	3.59	134.472		
1,100.0	1,097.4	1,085.4	1,085.4	2.2	1.9	60.01	-407.9	-299.7	475.8	471.8	4.01	118.612		
1,200.0	1,196.3	1,184.3	1,184.3	2.5	2.1	61.62	-407.9	-299.7	468.5	464.1	4.46	105.094		
1,300.0	1,294.9	1,282.9	1,282.9	2.8	2.2	63.48	-407.9	-299.7	460.9	455.9	4.93	93.436		
1,400.0	1,393.3	1,381.3	1,381.3	3.1	2.4	65.58	-407.9	-299.7	452.9	447.5	5.44	83.303		
1,500.0	1,491.2	1,479.2	1,479.2	3.5	2.6	67.96	-407.9	-299.7	444.9	438.9	5.98	74.462		
1,600.0	1,588.9	1,576.9	1,576.9	3.9	2.8	70.61	-407.9	-299.7	437.1	430.5	6.55	66.742		
1,700.0	1,686.1	1,674.1	1,674.1	4.3	2.9	73.52	-407.9	-299.7	429.7	422.6	7.16	60.056		
1,800.0	1,783.2	1,771.2	1,771.2	4.8	3.1	76.53	-407.9	-299.7	423.4	415.6	7.77	54.459		
1,900.0	1,880.3	1,868.3	1,868.3	5.2	3.3	79.62	-407.9	-299.7	418.3	409.9	8.40	49.796		
2,000.0	1,977.5	1,965.5	1,965.5	5.6	3.4	82.78	-407.9	-299.7	414.6	405.5	9.03	45.914		
2,100.0	2,074.6	2,062.6	2,062.6	6.1	3.6	85.97	-407.9	-299.7	412.2	402.5	9.66	42.689		
2,200.0	2,171.7	2,159.7	2,159.7	6.5	3.8	89.20	-407.9	-299.7	411.1	400.9	10.27	40.018		
2,224.9	2,195.9	2,183.9	2,183.9	6.6	3.8	90.00	-407.9	-299.7	411.1	400.7	10.43	39.428 CC		
2,300.0	2,268.8	2,256.8	2,256.8	6.9	3.9	92.42	-407.9	-299.7	411.5	400.6	10.88	37.818 ES		
2,400.0	2,365.9	2,353.9	2,353.9	7.4	4.1	95.63	-407.9	-299.7	413.2	401.7	11.47	36.019		
2,500.0	2,463.0	2,451.0	2,451.0	7.8	4.3	98.81	-407.9	-299.7	416.3	404.2	12.04	34.564		
2,600.0	2,560.1	2,548.1	2,548.1	8.3	4.4	101.93	-407.9	-299.7	420.7	408.1	12.60	33.402		
2,700.0	2,657.3	2,645.3	2,645.3	8.7	4.6	104.99	-407.9	-299.7	426.4	413.3	13.12	32.493		
2,800.0	2,754.4	2,742.4	2,742.4	9.2	4.8	107.96	-407.9	-299.7	433.4	419.7	13.63	31.801		
2,900.0	2,851.5	2,839.5	2,839.5	9.6	5.0	110.83	-407.9	-299.7	441.5	427.4	14.11	31.295		
3,000.0	2,948.6	2,936.6	2,936.6	10.1	5.1	113.59	-407.9	-299.7	450.7	436.2	14.56	30.948		
3,100.0	3,045.7	3,033.7	3,033.7	10.5	5.3	116.25	-407.9	-299.7	461.0	446.0	15.00	30.739		
3,200.0	3,142.8	3,130.8	3,130.8	11.0	5.5	118.79	-407.9	-299.7	472.3	456.9	15.41	30.647 SF		
3,300.0	3,239.9	3,227.9	3,227.9	11.4	5.6	121.21	-407.9	-299.7	484.5	468.7	15.80	30.656		
3,400.0	3,337.0	3,325.0	3,325.0	11.9	5.8	123.51	-407.9	-299.7	497.5	481.4	16.18	30.749		

Anticollision Report

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

Offset Design		S29-T1N-R68W (Pratt/Waste Connections) - PRATT 21-29 (EXISTING) - ENCANA WELL - SURVEYS											Offset Site Error:		0.0 ft
Survey Program:		163-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			
12,200.0	8,016.0	8,235.7	7,971.2	54.9	33.7	85.59	3,296.4	633.2	476.5	408.6	67.85	7.023			
12,300.0	8,016.0	8,237.1	7,972.6	56.5	33.7	86.65	3,296.4	633.2	379.6	310.2	69.46	5.465			
12,400.0	8,016.0	8,238.5	7,974.1	58.1	33.7	87.49	3,296.4	633.2	285.6	214.5	71.09	4.017			
12,500.0	8,016.0	8,240.0	7,975.5	59.8	33.7	88.21	3,296.4	633.2	197.7	125.0	72.78	2.717			
12,600.0	8,016.0	8,241.4	7,976.9	61.4	33.7	88.93	3,296.4	633.2	129.0	54.5	74.46	1.732			
12,662.4	8,016.0	8,242.3	7,977.8	62.4	33.7	89.38	3,296.5	633.2	112.9	37.4	75.51	1.495	Level 3, CC, ES, SF		
12,700.0	8,016.0	8,242.8	7,978.3	63.0	33.7	89.65	3,296.5	633.2	119.0	42.8	76.14	1.563			
12,800.0	8,016.0	8,244.2	7,979.7	64.7	33.7	90.37	3,296.5	633.2	178.0	100.2	77.81	2.287			
12,900.0	8,016.0	8,245.6	7,981.1	66.3	33.7	91.09	3,296.5	633.2	263.0	183.6	79.48	3.310			
13,000.0	8,016.0	8,247.0	7,982.6	68.0	33.7	91.80	3,296.5	633.3	356.0	274.8	81.13	4.387			
13,100.0	8,016.0	8,248.4	7,984.0	69.6	33.7	92.51	3,296.6	633.3	451.9	369.1	82.78	5.459			

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - PRATT 22-29 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 132-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		
10,600.0	8,016.0	8,593.5	8,010.2	30.6	44.9	-98.63	1,658.7	497.4	454.2	390.9	63.31	7.174		
10,700.0	8,016.0	8,589.9	8,006.5	31.9	44.9	-96.92	1,658.9	497.3	358.8	293.9	64.93	5.526		
10,800.0	8,016.0	8,586.2	8,002.9	33.3	44.9	-95.20	1,659.0	497.2	266.7	200.2	66.54	4.009		
10,900.0	8,016.0	8,582.6	7,999.3	34.7	44.9	-93.47	1,659.1	497.2	183.1	114.9	68.13	2.687		
11,000.0	8,016.0	8,578.9	7,995.6	36.2	44.9	-91.72	1,659.3	497.1	126.0	56.3	69.70	1.808		
11,038.3	8,016.0	8,577.5	7,994.2	36.7	44.9	-91.06	1,659.3	497.1	120.0	49.7	70.30	1.707 CC, ES, SF		
11,100.0	8,016.0	8,575.3	7,992.0	37.7	44.9	-89.98	1,659.4	497.0	134.9	63.7	71.24	1.894		
11,200.0	8,016.0	8,571.6	7,988.3	39.1	44.9	-88.23	1,659.5	496.9	201.3	128.5	72.75	2.767		
11,300.0	8,016.0	8,567.9	7,984.6	40.7	44.9	-86.49	1,659.7	496.9	287.7	213.5	74.20	3.877		
11,400.0	8,016.0	8,564.3	7,981.0	42.2	44.8	-84.75	1,659.8	496.8	380.8	305.2	75.61	5.037		
11,500.0	8,016.0	8,560.6	7,977.3	43.7	44.8	-83.02	1,659.9	496.7	476.7	399.7	76.96	6.194		

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - PRATT 4-2-29 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 193-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 Factor			
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis			
11,700.0	8,016.0	8,527.3	7,988.8	46.9	45.6	89.61	2,476.0	1,062.8	492.7	423.9	68.81	7.161		
11,800.0	8,016.0	8,529.2	7,990.7	48.5	45.6	89.84	2,476.1	1,062.8	475.2	404.7	70.45	6.745		
11,834.9	8,016.0	8,529.9	7,991.4	49.0	45.6	89.92	2,476.1	1,062.8	473.9	402.9	71.02	6.673 CC, ES		
11,900.0	8,016.0	8,531.1	7,992.6	50.1	45.6	90.07	2,476.1	1,062.8	478.3	406.3	72.09	6.635 SF		

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - SRC PRATT 13-29D (EXISTING) - SYNERGY WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 248-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
700.0	699.7	739.8	736.9	1.2	1.6	61.79	-371.3	-335.2	494.6	491.9	2.79	177.452		
800.0	799.4	841.1	836.1	1.4	2.0	64.97	-352.4	-343.5	483.6	480.2	3.36	143.813		
900.0	898.9	934.7	927.4	1.7	2.3	68.44	-333.7	-352.6	473.6	469.6	3.97	119.391		
1,000.0	998.3	1,033.5	1,023.5	1.9	2.7	72.51	-312.9	-362.2	464.3	459.7	4.64	100.140		
1,100.0	1,097.4	1,123.5	1,110.9	2.2	3.1	76.58	-293.4	-371.3	457.1	451.7	5.31	86.036		
1,200.0	1,196.3	1,214.1	1,198.7	2.5	3.5	80.97	-273.7	-381.1	452.8	446.8	6.02	75.243		
1,271.0	1,266.3	1,277.9	1,260.6	2.7	3.8	84.19	-259.9	-388.3	451.9	445.4	6.53	69.214 CC		
1,300.0	1,294.9	1,303.0	1,285.0	2.8	3.9	85.48	-254.5	-391.1	452.1	445.3	6.73	67.160 ES		
1,400.0	1,393.3	1,389.0	1,368.4	3.1	4.3	89.94	-236.2	-401.4	455.6	448.2	7.43	61.285		
1,500.0	1,491.2	1,473.9	1,450.6	3.5	4.7	94.38	-218.3	-412.6	464.1	455.9	8.13	57.105		
1,600.0	1,588.9	1,563.8	1,537.7	3.9	5.1	99.06	-199.5	-425.1	477.2	468.4	8.81	54.148		
1,700.0	1,686.1	1,654.4	1,625.3	4.3	5.6	103.68	-180.5	-437.2	494.1	484.7	9.46	52.260 SF		

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - SRC PRATT 24-29 PD (EXISTING) - SYNERGY WELL - S														Offset Site Error:	0.0 ft
Survey Program: 248-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				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	2.0	2.0	0.0	0.0	-146.22	-409.0	-273.6	492.1						
100.0	100.0	104.5	104.5	0.2	0.2	-146.19	-408.7	-273.7	491.9	491.5	0.33	1,507.789			
200.0	200.0	207.0	207.0	0.3	0.3	-146.12	-407.7	-273.8	491.1	490.4	0.67	731.138			
300.0	300.0	309.7	309.7	0.5	0.5	-146.11	-406.5	-273.1	489.8	488.8	1.02	479.881			
400.0	400.0	400.7	400.6	0.7	0.7	51.56	-407.7	-269.6	488.3	486.9	1.36	359.026			
500.0	500.0	492.0	491.6	0.9	0.9	50.93	-412.8	-264.3	488.1	486.3	1.73	282.747			
600.0	599.9	591.1	590.0	1.0	1.1	49.97	-421.0	-255.9	487.7	485.6	2.15	226.695			
700.0	699.7	699.5	697.1	1.2	1.4	48.69	-431.1	-243.2	485.7	483.0	2.65	183.198			
800.0	799.4	808.2	804.3	1.4	1.8	47.26	-440.5	-227.2	480.5	477.3	3.19	150.417			
900.0	898.9	907.5	901.8	1.7	2.1	45.89	-449.0	-210.6	473.5	469.7	3.75	126.274			
1,000.0	998.3	1,007.3	999.7	1.9	2.5	44.55	-457.7	-193.3	465.4	461.1	4.31	107.941			
1,100.0	1,097.4	1,104.1	1,094.8	2.2	2.8	43.42	-466.1	-177.1	456.5	451.6	4.87	93.687			
1,200.0	1,196.3	1,206.6	1,195.2	2.5	3.3	42.14	-475.5	-158.6	446.5	441.0	5.51	81.096			
1,300.0	1,294.9	1,304.0	1,289.8	2.8	3.7	40.61	-485.1	-138.0	434.9	428.7	6.16	70.601			
1,400.0	1,393.3	1,397.0	1,379.9	3.1	4.1	38.99	-495.6	-117.1	423.2	416.4	6.81	62.136			
1,500.0	1,491.2	1,491.0	1,470.7	3.5	4.6	37.34	-507.9	-96.2	412.2	404.7	7.46	55.230			
1,600.0	1,588.9	1,587.2	1,563.8	3.9	5.0	35.81	-520.9	-75.8	401.0	392.9	8.10	49.488			
1,700.0	1,686.1	1,691.0	1,664.6	4.3	5.5	34.41	-534.0	-54.9	388.1	379.3	8.75	44.333			
1,800.0	1,783.2	1,794.1	1,765.0	4.8	5.9	33.04	-545.7	-34.7	373.9	364.5	9.39	39.807			
1,900.0	1,880.3	1,898.1	1,866.2	5.2	6.4	31.41	-555.7	-13.1	358.0	348.0	10.03	35.682			
2,000.0	1,977.5	1,990.7	1,956.0	5.6	6.8	29.56	-565.3	7.6	342.9	332.3	10.61	32.310			
2,100.0	2,074.6	2,086.4	2,048.4	6.1	7.3	27.32	-576.9	29.6	329.7	318.6	11.16	29.547			
2,200.0	2,171.7	2,186.0	2,144.7	6.5	7.8	24.85	-588.4	52.4	316.7	305.0	11.67	27.140			
2,300.0	2,268.8	2,283.6	2,239.0	6.9	8.3	22.24	-600.1	74.6	304.6	292.5	12.11	25.159			
2,400.0	2,365.9	2,382.5	2,334.9	7.4	8.7	19.65	-611.5	95.8	292.9	280.3	12.52	23.396			
2,500.0	2,463.0	2,482.2	2,431.2	7.8	9.2	16.48	-623.1	118.9	281.9	269.0	12.85	21.938			
2,600.0	2,560.1	2,580.6	2,526.5	8.3	9.7	13.23	-633.7	141.0	271.0	257.9	13.11	20.673			
2,700.0	2,657.3	2,682.9	2,625.9	8.7	10.1	9.87	-644.8	162.8	260.8	247.5	13.33	19.570			
2,800.0	2,754.4	2,783.9	2,724.3	9.2	10.6	6.38	-653.9	183.5	249.7	236.2	13.48	18.526			
2,900.0	2,851.5	2,882.4	2,820.6	9.6	11.0	3.13	-662.9	201.7	239.0	225.4	13.63	17.537			
3,000.0	2,948.6	2,974.2	2,910.2	10.1	11.4	-0.36	-672.0	219.9	230.4	216.7	13.76	16.745			
3,100.0	3,045.7	3,071.7	3,004.5	10.5	11.9	-4.83	-682.9	241.8	225.1	211.2	13.87	16.231			
3,200.0	3,142.8	3,168.2	3,097.8	11.0	12.3	-9.56	-693.7	264.1	221.5	207.6	13.97	15.858			
3,300.0	3,239.9	3,265.0	3,191.6	11.4	12.8	-13.78	-706.3	284.7	220.2	206.1	14.14	15.570			
3,315.3	3,254.8	3,279.8	3,205.9	11.5	12.9	-14.39	-708.4	287.7	220.2	206.0	14.18	15.529			
3,400.0	3,337.0	3,361.5	3,284.9	11.9	13.3	-17.97	-719.6	305.5	221.0	206.6	14.40	15.341			
3,500.0	3,434.2	3,455.0	3,374.7	12.3	13.8	-22.37	-732.6	327.8	224.6	209.9	14.73	15.245			
3,600.0	3,531.3	3,555.2	3,470.8	12.8	14.3	-27.09	-746.5	352.7	230.5	215.3	15.17	15.191			
3,700.0	3,628.4	3,655.7	3,567.4	13.2	14.8	-31.43	-760.2	376.5	236.7	221.0	15.71	15.064			
3,800.0	3,725.5	3,751.7	3,659.8	13.7	15.3	-35.13	-774.1	398.9	244.4	228.0	16.35	14.950			
3,900.0	3,822.6	3,855.0	3,759.2	14.1	15.8	-38.10	-788.7	422.6	252.6	235.5	17.12	14.753			
4,000.0	3,919.8	3,963.7	3,864.7	14.5	16.3	-37.89	-801.2	445.6	258.1	240.1	18.04	14.311			
4,100.0	4,016.9	4,069.7	3,968.5	15.0	16.7	-37.48	-809.9	465.3	259.7	240.6	19.06	13.625			
4,200.0	4,114.0	4,170.8	4,067.7	15.4	17.1	-37.36	-818.8	482.4	259.7	239.6	20.06	12.946			
4,300.0	4,211.1	4,272.9	4,168.1	15.9	17.5	-40.05	-828.3	498.5	259.1	238.0	21.11	12.275			
4,400.0	4,308.3	4,383.3	4,277.1	16.3	17.8	-43.04	-837.5	513.6	256.8	234.5	22.32	11.504			
4,500.0	4,405.4	4,491.2	4,384.2	16.8	18.0	-46.25	-844.4	524.0	250.6	227.0	23.65	10.599			
4,600.0	4,502.5	4,596.1	4,488.7	17.2	18.2	-49.63	-850.2	531.3	242.5	217.4	25.07	9.671			
4,700.0	4,599.6	4,703.3	4,595.8	17.7	18.4	-53.84	-853.6	535.3	231.6	204.9	26.73	8.664			
4,800.0	4,696.7	4,802.6	4,695.0	18.1	18.5	-58.44	-855.5	537.3	220.1	191.7	28.48	7.729			
4,900.0	4,793.8	4,901.4	4,793.9	18.6	18.6	-63.61	-856.8	538.6	209.6	179.3	30.34	6.909			
5,000.0	4,891.0	4,999.9	4,892.3	19.0	18.7	-69.32	-858.0	539.3	200.5	168.3	32.23	6.221			

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

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - SRC PRATT 24-29 PD (EXISTING) - SYNERGY WELL - S													Offset Site Error:	0.0 ft
Survey Program: 248-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		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)						
5,100.0	4,988.1	5,097.5	4,990.0	19.5	18.7	-75.50	-858.9	539.6	193.2	159.2	34.04	5.675		
5,200.0	5,085.2	5,194.3	5,086.7	19.9	18.8	-82.08	-859.6	540.0	188.6	152.9	35.67	5.287		
5,300.0	5,182.3	5,291.4	5,183.9	20.3	18.9	-88.95	-860.0	540.6	187.0	150.0	37.01	5.052		
5,307.5	5,189.5	5,298.7	5,191.1	20.4	18.9	-89.47	-860.1	540.6	187.0	149.9	37.09	5.040 CC, ES		
5,400.0	5,279.4	5,389.0	5,281.4	20.8	19.0	-95.87	-860.5	541.0	188.1	150.1	37.97	4.955 SF		
5,500.0	5,376.5	5,486.9	5,379.3	21.2	19.1	-102.63	-861.1	541.3	191.9	153.4	38.51	4.983		
5,600.0	5,473.7	5,584.8	5,477.2	21.7	19.2	-109.15	-861.8	541.1	198.0	159.4	38.65	5.123		
5,700.0	5,570.8	5,682.0	5,574.4	22.1	19.3	-115.26	-862.4	540.6	206.4	168.0	38.45	5.368		
5,800.0	5,667.9	5,778.7	5,671.1	22.6	19.4	-120.88	-862.8	540.0	217.2	179.2	38.01	5.714		
5,900.0	5,765.0	5,875.5	5,767.9	23.0	19.4	-125.99	-863.0	539.4	230.1	192.7	37.41	6.153		
6,000.0	5,862.1	5,972.1	5,864.5	23.5	19.5	-130.60	-863.0	538.5	244.9	208.2	36.71	6.671		
6,100.0	5,959.2	6,069.0	5,961.4	23.9	19.6	-134.74	-862.8	537.4	261.2	225.2	35.99	7.258		
6,200.0	6,056.3	6,165.9	6,058.2	24.4	19.7	-138.45	-862.5	536.1	278.8	243.5	35.28	7.902		
6,300.0	6,153.5	6,262.7	6,155.1	24.8	19.7	-141.76	-862.2	534.6	297.4	262.8	34.61	8.593		
6,400.0	6,250.6	6,359.6	6,251.9	25.3	19.8	-144.72	-861.9	532.8	316.8	282.8	34.00	9.319		
6,500.0	6,347.7	6,456.1	6,348.4	25.7	19.9	-147.30	-861.5	531.3	337.1	303.6	33.50	10.063		
6,600.0	6,444.8	6,552.7	6,445.0	26.2	20.0	-149.47	-861.0	530.5	358.0	324.9	33.12	10.810		
6,700.0	6,541.9	6,648.9	6,541.2	26.6	20.0	-151.36	-860.5	529.9	379.5	346.6	32.82	11.563		
6,800.0	6,639.0	6,745.0	6,637.3	27.1	20.1	-153.07	-859.7	529.2	401.5	368.9	32.57	12.327		
6,900.0	6,736.2	6,839.2	6,731.5	27.5	20.2	-154.62	-858.7	528.1	424.2	391.9	32.37	13.106		
7,000.0	6,833.3	6,933.3	6,825.6	28.0	20.3	-156.05	-857.0	526.7	447.9	415.7	32.21	13.906		
7,100.0	6,930.4	7,032.0	6,924.3	28.4	20.3	-157.45	-855.3	524.8	471.8	439.7	32.05	14.719		
7,200.0	7,027.5	7,130.7	7,022.9	28.9	20.4	-158.77	-854.2	522.6	495.5	463.5	31.93	15.519		
8,000.0	7,789.4	7,896.1	7,788.0	29.3	21.0	-35.49	-851.9	504.1	488.1	462.4	25.66	19.023		
8,100.0	7,863.1	7,970.1	7,862.1	28.5	21.1	-41.70	-851.5	503.8	430.4	404.7	25.71	16.744		
8,200.0	7,924.2	8,031.8	7,923.8	27.5	21.2	-52.71	-851.1	503.7	364.8	335.9	28.94	12.607		
8,300.0	7,970.8	8,079.2	7,971.1	26.5	21.2	-67.75	-850.7	503.8	297.0	262.8	34.27	8.669		
8,400.0	8,001.4	8,110.8	8,002.8	25.5	21.3	-82.06	-850.3	503.9	237.2	199.6	37.53	6.320		
8,500.0	8,015.2	8,125.7	8,017.7	24.5	21.3	-89.71	-850.2	503.9	202.9	165.2	37.67	5.386		
8,529.4	8,016.5	8,127.4	8,019.4	24.2	21.3	-90.24	-850.1	503.9	200.8	163.4	37.40	5.369		
8,600.0	8,016.0	8,127.7	8,019.6	23.5	21.3	-90.47	-850.1	503.9	212.5	175.8	36.69	5.792		
8,700.0	8,016.0	8,128.8	8,020.8	22.7	21.3	-90.79	-850.1	503.9	262.9	227.2	35.71	7.363		
8,800.0	8,016.0	8,130.0	8,021.9	21.9	21.3	-91.12	-850.1	503.9	336.3	301.4	34.84	9.653		
8,900.0	8,016.0	8,131.1	8,023.1	21.3	21.3	-91.46	-850.1	503.9	420.8	386.7	34.10	12.340		

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - SRC PRATT 29LD (EXISTING) - SYNERGY WELL - PLAN														Offset Site Error:	0.0 ft
Survey Program: 0-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
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		
900.0	898.9	886.9	886.9	1.7	1.5	58.48	-408.3	-311.7	496.6	493.4	3.19	155.814			
1,000.0	998.3	986.3	986.3	1.9	1.7	59.65	-408.3	-311.7	490.7	487.1	3.59	136.641			
1,100.0	1,097.4	1,077.7	1,077.7	2.2	1.9	60.82	-409.4	-311.5	484.9	480.9	4.00	121.167			
1,200.0	1,196.3	1,168.2	1,168.1	2.5	2.0	61.89	-413.2	-310.8	480.3	475.8	4.44	108.275			
1,300.0	1,294.9	1,259.2	1,258.9	2.8	2.2	62.85	-419.8	-309.5	476.8	471.9	4.90	97.297			
1,400.0	1,393.3	1,350.5	1,349.7	3.1	2.4	63.69	-429.4	-307.6	474.4	469.0	5.40	87.814			
1,500.0	1,491.2	1,442.1	1,440.4	3.5	2.6	64.41	-441.8	-305.1	473.1	467.2	5.95	79.527			
1,577.2	1,566.6	1,513.0	1,510.2	3.8	2.8	64.88	-453.3	-302.9	472.8	466.4	6.41	73.813 CC			
1,600.0	1,588.9	1,534.0	1,530.9	3.9	2.9	65.00	-457.0	-302.1	472.9	466.3	6.55	72.229 ES			
1,700.0	1,686.1	1,626.0	1,621.0	4.3	3.2	65.46	-475.2	-298.5	473.6	466.4	7.20	65.806			
1,800.0	1,783.2	1,718.8	1,711.3	4.8	3.5	65.66	-496.3	-294.3	475.8	467.9	7.88	60.351			
1,900.0	1,880.3	1,817.9	1,807.3	5.2	3.9	65.72	-520.5	-289.6	478.8	470.2	8.61	55.582			
2,000.0	1,977.5	1,917.9	1,904.1	5.6	4.3	65.77	-544.8	-284.7	481.8	472.5	9.37	51.449			
2,100.0	2,074.6	2,017.9	2,001.0	6.1	4.7	65.82	-569.2	-279.9	484.9	474.7	10.13	47.863			
2,200.0	2,171.7	2,117.8	2,097.8	6.5	5.1	65.88	-593.5	-275.1	487.9	477.0	10.91	44.736			
2,300.0	2,268.8	2,217.8	2,194.6	6.9	5.5	65.93	-617.9	-270.3	490.9	479.2	11.69	41.991			
2,400.0	2,365.9	2,317.7	2,291.4	7.4	6.0	65.98	-642.2	-265.5	493.9	481.5	12.48	39.569			
2,500.0	2,463.0	2,417.7	2,388.3	7.8	6.4	66.03	-666.6	-260.7	497.0	483.7	13.28	37.420			
2,600.0	2,560.1	2,517.6	2,485.1	8.3	6.8	66.08	-690.9	-255.9	500.0	485.9	14.08	35.501 SF			

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - SRC PRATT 29QD (EXISTING) - SYNERGY WELL - PLA														Offset Site Error: 0.0 ft	
Survey Program: 0-MWD														Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance				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)					
0.0	0.0	0.0	0.0	0.0	0.0	-146.35	-408.7	-272.0	491.0						
100.0	100.0	89.0	89.0	0.2	0.2	-146.35	-408.7	-272.0	490.9	490.6	0.31	1,597.958			
200.0	200.0	189.0	189.0	0.3	0.3	-146.35	-408.7	-272.0	490.9	490.2	0.66	748.034			
300.0	300.0	279.2	279.2	0.5	0.5	-146.44	-409.7	-271.8	491.8	490.8	0.99	496.633			
400.0	400.0	368.0	367.9	0.7	0.7	51.30	-413.5	-271.1	494.4	493.0	1.33	372.816			
500.0	500.0	457.7	457.4	0.9	0.8	50.96	-420.1	-270.0	498.1	496.5	1.67	297.680			
1,000.0	998.3	966.6	959.2	1.9	2.5	45.76	-482.1	-219.8	499.9	495.8	4.16	120.280			
1,100.0	1,097.4	1,066.2	1,055.7	2.2	2.9	43.98	-498.3	-200.4	496.5	491.7	4.81	103.275			
1,200.0	1,196.3	1,164.9	1,150.2	2.5	3.4	41.95	-515.6	-178.2	492.3	486.8	5.50	89.433			
1,300.0	1,294.9	1,262.4	1,242.7	2.8	4.0	39.65	-533.9	-153.2	487.5	481.3	6.24	78.137			
1,400.0	1,393.3	1,359.5	1,333.8	3.1	4.6	37.13	-553.2	-126.0	482.4	475.5	6.97	69.181			
1,500.0	1,491.2	1,456.9	1,425.2	3.5	5.2	34.62	-572.6	-98.4	477.0	469.3	7.69	62.006			
1,600.0	1,588.9	1,554.5	1,516.8	3.9	5.8	32.16	-592.1	-70.8	471.1	462.7	8.39	56.157			
1,700.0	1,686.1	1,652.2	1,608.4	4.3	6.4	29.74	-611.6	-43.1	464.6	455.6	9.06	51.307			
1,800.0	1,783.2	1,749.9	1,700.1	4.8	7.1	27.26	-631.1	-15.4	458.6	448.9	9.69	47.334			
1,900.0	1,880.3	1,847.6	1,791.7	5.2	7.7	24.72	-650.5	12.2	453.4	443.2	10.27	44.150			
2,000.0	1,977.5	1,945.3	1,883.4	5.6	8.3	22.12	-670.0	39.9	449.3	438.5	10.80	41.597			
2,100.0	2,074.6	2,043.0	1,975.0	6.1	8.9	19.49	-689.5	67.6	446.1	434.8	11.28	39.557			
2,200.0	2,171.7	2,140.7	2,066.7	6.5	9.6	16.83	-709.0	95.3	443.8	432.1	11.70	37.942			
2,300.0	2,268.8	2,238.4	2,158.4	6.9	10.2	14.15	-728.5	122.9	442.6	430.6	12.07	36.680			
2,367.3	2,334.2	2,304.2	2,220.1	7.2	10.6	12.34	-741.6	141.6	442.4	430.1	12.29	36.000 CC			
2,400.0	2,365.9	2,336.2	2,250.0	7.4	10.8	11.46	-748.0	150.6	442.5	430.1	12.39	35.713			
2,500.0	2,463.0	2,433.9	2,341.7	7.8	11.5	8.77	-767.5	178.3	443.3	430.6	12.67	34.993			
2,600.0	2,560.1	2,531.6	2,433.4	8.3	12.1	6.10	-787.0	206.0	445.2	432.3	12.91	34.479			
2,700.0	2,657.3	2,629.3	2,525.0	8.7	12.7	3.46	-806.4	233.6	448.0	434.9	13.13	34.134			
2,800.0	2,754.4	2,727.0	2,616.7	9.2	13.4	0.85	-825.9	261.3	451.9	438.6	13.32	33.924			
2,900.0	2,851.5	2,824.7	2,708.4	9.6	14.0	-1.71	-845.4	289.0	456.7	443.2	13.50	33.823			
3,000.0	2,948.6	2,922.4	2,800.0	10.1	14.6	-4.21	-864.9	316.7	462.4	448.7	13.68	33.802			
3,100.0	3,045.7	3,020.2	2,891.7	10.5	15.3	-6.65	-884.4	344.3	469.0	455.2	13.86	33.840			
3,200.0	3,142.8	3,117.9	2,983.3	11.0	15.9	-9.02	-903.9	372.0	476.5	462.5	14.05	33.916			
3,300.0	3,239.9	3,215.6	3,075.0	11.4	16.5	-11.32	-923.4	399.7	484.8	470.6	14.25	34.014			
3,400.0	3,337.0	3,313.3	3,166.7	11.9	17.2	-13.54	-942.9	427.4	493.9	479.4	14.48	34.119			
7,500.0	7,318.9	7,597.0	7,307.9	30.3	34.0	-56.61	-1,436.4	1,128.2	486.5	437.2	49.30	9.868			
7,600.0	7,417.1	7,695.2	7,406.1	30.5	34.1	-20.22	-1,436.4	1,128.2	473.9	424.1	49.84	9.508			
7,700.0	7,516.3	7,794.4	7,505.3	30.6	34.2	51.87	-1,436.4	1,128.2	462.6	413.6	49.05	9.431 SF			
7,800.0	7,613.3	7,891.4	7,602.3	30.4	34.2	77.43	-1,436.4	1,128.2	453.6	406.5	47.12	9.627			
7,900.0	7,705.3	7,983.4	7,694.3	29.9	34.3	89.69	-1,436.4	1,128.2	449.6	405.1	44.49	10.104 ES			
7,903.1	7,708.0	7,986.2	7,697.0	29.9	34.3	90.00	-1,436.4	1,128.2	449.5	405.1	44.40	10.124			
8,000.0	7,789.4	8,067.5	7,778.4	29.3	34.4	98.37	-1,436.4	1,128.2	454.6	412.7	41.88	10.855			
8,100.0	7,863.1	8,141.2	7,852.1	28.5	34.4	104.65	-1,436.4	1,128.2	473.1	433.1	39.99	11.830			

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

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - Waste Connections 3A-29H-M168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.95	0.0	-47.6	47.6					
100.0	100.0	100.0	100.0	0.2	0.2	-89.95	0.0	-47.6	47.6	47.3	0.30	156.783		
200.0	200.0	200.0	200.0	0.3	0.3	-89.95	0.0	-47.6	47.6	47.0	0.65	72.942 CC, ES		
300.0	300.0	299.2	299.2	0.5	0.5	-89.99	0.0	-48.5	48.5	47.5	1.00	48.455		
400.0	400.0	398.3	398.2	0.7	0.7	108.79	-0.1	-51.0	51.3	50.0	1.35	38.077		
500.0	500.0	497.2	497.0	0.9	0.9	110.99	-0.3	-55.3	56.5	54.8	1.70	33.278		
600.0	599.9	595.8	595.5	1.0	1.1	114.03	-0.5	-61.3	64.2	62.2	2.06	31.244		
700.0	699.7	694.0	693.4	1.2	1.3	117.31	-0.8	-68.9	74.5	72.1	2.42	30.794 SF		
800.0	799.4	791.7	790.7	1.4	1.5	120.46	-1.2	-78.1	87.5	84.7	2.79	31.319		
900.0	898.9	888.8	887.1	1.7	1.7	123.26	-1.6	-88.9	103.3	100.1	3.18	32.463		
1,000.0	998.3	985.2	982.7	1.9	2.0	125.66	-2.1	-101.3	121.8	118.2	3.58	33.996		
1,100.0	1,097.4	1,080.7	1,077.2	2.2	2.3	127.67	-2.6	-115.1	143.0	139.0	4.00	35.766		
1,200.0	1,196.3	1,175.3	1,170.6	2.5	2.6	129.33	-3.2	-130.4	167.0	162.6	4.43	37.667		
1,300.0	1,294.9	1,271.0	1,264.9	2.8	2.9	130.78	-3.9	-146.9	193.2	188.3	4.89	39.540		
1,400.0	1,393.3	1,367.0	1,359.4	3.1	3.2	132.18	-4.6	-163.6	220.8	215.4	5.36	41.210		
1,500.0	1,491.2	1,462.5	1,453.5	3.5	3.6	133.51	-5.2	-180.1	249.6	243.7	5.84	42.727		
1,600.0	1,588.9	1,557.7	1,547.2	3.9	3.9	134.79	-5.9	-196.7	279.7	273.3	6.34	44.128		
1,700.0	1,686.1	1,652.3	1,640.4	4.3	4.2	136.04	-6.5	-213.1	311.1	304.3	6.85	45.444		
1,800.0	1,783.2	1,746.9	1,733.5	4.8	4.5	137.28	-7.2	-229.5	343.1	335.7	7.36	46.592		
1,900.0	1,880.3	1,841.4	1,826.5	5.2	4.9	138.31	-7.8	-245.9	375.2	367.3	7.88	47.595		
2,000.0	1,977.5	1,935.9	1,919.6	5.6	5.2	139.18	-8.5	-262.3	407.3	398.9	8.40	48.479		
2,100.0	2,074.6	2,030.4	2,012.7	6.1	5.5	139.92	-9.1	-278.7	439.6	430.7	8.92	49.263		
2,200.0	2,171.7	2,124.9	2,105.8	6.5	5.8	140.56	-9.8	-295.1	471.9	462.4	9.44	49.962		

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - Waste Connections 3B-29H-M168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)				Between Centres (ft)	Between Ellipses (ft)	
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	129.115		
200.0	200.0	200.0	200.0	0.3	0.3	-89.95	0.0	-39.2	39.2	38.6	0.65	60.070		
300.0	300.0	300.0	300.0	0.5	0.5	-89.95	0.0	-39.2	39.2	38.2	1.00	39.140 CC, ES		
400.0	400.0	399.4	399.4	0.7	0.7	108.49	-0.5	-39.9	40.2	38.8	1.35	29.750		
500.0	500.0	498.8	498.8	0.9	0.9	109.71	-2.0	-42.0	43.1	41.4	1.70	25.306		
600.0	599.9	598.1	597.9	1.0	1.0	111.39	-4.5	-45.5	48.0	46.0	2.07	23.258		
700.0	699.7	697.1	696.8	1.2	1.2	113.23	-8.0	-50.4	55.0	52.6	2.44	22.530 SF		
800.0	799.4	796.0	795.3	1.4	1.4	115.00	-12.5	-56.6	64.0	61.1	2.83	22.579		
900.0	898.9	894.5	893.4	1.7	1.7	116.57	-18.0	-64.2	75.0	71.8	3.25	23.096		
1,000.0	998.3	992.6	990.9	1.9	1.9	117.89	-24.5	-73.1	88.1	84.4	3.69	23.888		
1,100.0	1,097.4	1,090.3	1,087.8	2.2	2.2	118.99	-31.9	-83.3	103.2	99.0	4.15	24.833		
1,200.0	1,196.3	1,187.6	1,184.0	2.5	2.4	119.88	-40.2	-94.8	120.3	115.6	4.65	25.848		
1,300.0	1,294.9	1,285.5	1,280.7	2.8	2.7	120.77	-49.2	-107.3	139.0	133.8	5.18	26.847		
1,400.0	1,393.3	1,383.5	1,377.5	3.1	3.0	121.95	-58.3	-119.7	158.7	153.0	5.73	27.719		
1,500.0	1,491.2	1,481.2	1,474.0	3.5	3.3	123.30	-67.3	-132.2	179.4	173.1	6.29	28.506		
1,600.0	1,588.9	1,578.7	1,570.3	3.9	3.7	124.74	-76.3	-144.6	201.2	194.3	6.88	29.244		
1,700.0	1,686.1	1,675.8	1,666.2	4.3	4.0	126.26	-85.3	-157.0	224.0	216.6	7.48	29.962		
1,800.0	1,783.2	1,772.9	1,762.1	4.8	4.3	127.73	-94.2	-169.4	247.4	239.3	8.08	30.611		
1,900.0	1,880.3	1,870.0	1,857.9	5.2	4.6	128.94	-103.2	-181.8	270.9	262.2	8.69	31.181		
2,000.0	1,977.5	1,967.0	1,953.7	5.6	4.9	129.96	-112.1	-194.2	294.5	285.2	9.29	31.685		
2,100.0	2,074.6	2,064.1	2,049.6	6.1	5.2	130.83	-121.1	-206.5	318.1	308.2	9.90	32.133		
2,200.0	2,171.7	2,161.1	2,145.4	6.5	5.5	131.58	-130.1	-218.9	341.8	331.3	10.51	32.533		
2,300.0	2,268.8	2,258.2	2,241.3	6.9	5.8	132.23	-139.0	-231.3	365.6	354.5	11.11	32.893		
2,400.0	2,365.9	2,355.2	2,337.1	7.4	6.1	132.81	-148.0	-243.7	389.4	377.7	11.72	33.218		
2,500.0	2,463.0	2,452.3	2,433.0	7.8	6.4	133.31	-156.9	-256.0	413.2	400.9	12.33	33.514		
2,600.0	2,560.1	2,549.4	2,528.8	8.3	6.8	133.76	-165.9	-268.4	437.1	424.2	12.94	33.783		
2,700.0	2,657.3	2,646.4	2,624.7	8.7	7.1	134.17	-174.9	-280.8	461.0	447.4	13.55	34.029		
2,800.0	2,754.4	2,743.5	2,720.5	9.2	7.4	134.53	-183.8	-293.2	484.9	470.7	14.16	34.255		

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - Waste Connections 3C-29H-M168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.95	0.0	-28.0	28.0					
100.0	100.0	100.0	100.0	0.2	0.2	-89.95	0.0	-28.0	28.0	27.7	0.30	92.225		
200.0	200.0	200.0	200.0	0.3	0.3	-89.95	0.0	-28.0	28.0	27.4	0.65	42.907		
300.0	300.0	300.0	300.0	0.5	0.5	-89.95	0.0	-28.0	28.0	27.0	1.00	27.957 CC		
400.0	400.0	400.0	400.0	0.7	0.7	109.73	0.0	-28.0	28.3	26.9	1.35	20.933 ES		
500.0	500.0	499.9	499.9	0.9	0.9	112.85	-0.8	-28.2	29.3	27.6	1.70	17.216		
600.0	599.9	599.9	599.8	1.0	1.0	115.42	-3.4	-28.6	31.3	29.2	2.07	15.154		
700.0	699.7	699.8	699.7	1.2	1.2	117.34	-7.7	-29.4	34.1	31.7	2.44	13.986		
800.0	799.4	799.7	799.4	1.4	1.4	118.63	-13.7	-30.4	37.8	35.0	2.84	13.337		
900.0	898.9	899.6	899.0	1.7	1.6	119.37	-21.4	-31.8	42.3	39.1	3.26	13.000		
1,000.0	998.3	999.5	998.4	1.9	1.8	119.68	-30.8	-33.4	47.7	44.0	3.71	12.853		
1,100.0	1,097.4	1,099.4	1,097.6	2.2	2.1	119.67	-42.0	-35.4	53.8	49.6	4.20	12.821 SF		
1,200.0	1,196.3	1,199.1	1,196.6	2.5	2.3	119.43	-54.8	-37.7	60.7	56.0	4.72	12.854		
1,300.0	1,294.9	1,298.9	1,295.2	2.8	2.6	119.04	-69.3	-40.2	68.5	63.2	5.30	12.924		
1,400.0	1,393.3	1,398.5	1,393.5	3.1	2.9	118.56	-85.4	-43.1	77.0	71.1	5.92	13.011		
1,500.0	1,491.2	1,498.1	1,491.4	3.5	3.3	118.02	-103.3	-46.2	86.4	79.8	6.59	13.104		
1,600.0	1,588.9	1,597.6	1,588.9	3.9	3.6	117.46	-122.8	-49.7	96.5	89.2	7.32	13.196		
1,700.0	1,686.1	1,697.0	1,685.9	4.3	4.0	116.89	-143.9	-53.4	107.5	99.4	8.09	13.286		
1,800.0	1,783.2	1,796.3	1,782.5	4.8	4.4	115.89	-166.7	-57.4	118.7	109.8	8.91	13.323		
1,900.0	1,880.3	1,895.6	1,878.8	5.2	4.9	114.48	-190.7	-61.6	130.0	120.3	9.76	13.322		
2,000.0	1,977.5	1,994.9	1,975.0	5.6	5.3	113.25	-214.9	-65.9	141.4	130.8	10.62	13.318		
2,100.0	2,074.6	2,092.5	2,069.6	6.1	5.7	112.25	-238.5	-70.4	153.2	141.7	11.47	13.355		
2,200.0	2,171.7	2,189.0	2,163.1	6.5	6.2	111.48	-261.5	-76.4	166.6	154.3	12.32	13.526		
2,300.0	2,268.8	2,286.5	2,257.6	6.9	6.6	110.90	-284.4	-83.8	181.4	168.3	13.17	13.778		
2,400.0	2,365.9	2,385.4	2,353.4	7.4	7.0	110.42	-307.6	-91.4	196.5	182.4	14.03	14.007		
2,500.0	2,463.0	2,484.2	2,449.2	7.8	7.5	110.00	-330.8	-99.1	211.5	196.6	14.88	14.209		
2,600.0	2,560.1	2,583.1	2,545.0	8.3	7.9	109.63	-354.0	-106.8	226.5	210.8	15.74	14.388		
2,700.0	2,657.3	2,681.9	2,640.8	8.7	8.4	109.31	-377.1	-114.4	241.6	225.0	16.60	14.548		
2,800.0	2,754.4	2,780.8	2,736.6	9.2	8.8	109.03	-400.3	-122.1	256.6	239.1	17.47	14.692		
2,900.0	2,851.5	2,879.7	2,832.4	9.6	9.3	108.78	-423.5	-129.7	271.7	253.3	18.33	14.823		
3,000.0	2,948.6	2,978.5	2,928.2	10.1	9.7	108.56	-446.7	-137.4	286.7	267.5	19.19	14.941		
3,100.0	3,045.7	3,077.4	3,024.0	10.5	10.2	108.36	-469.8	-145.1	301.8	281.7	20.05	15.048		
3,200.0	3,142.8	3,176.2	3,119.8	11.0	10.6	108.18	-493.0	-152.7	316.8	295.9	20.92	15.147		
3,300.0	3,239.9	3,275.1	3,215.6	11.4	11.1	108.01	-516.2	-160.4	331.9	310.1	21.78	15.237		
3,400.0	3,337.0	3,373.9	3,311.4	11.9	11.6	107.86	-539.4	-168.0	347.0	324.3	22.65	15.321		
3,500.0	3,434.2	3,472.8	3,407.1	12.3	12.0	107.72	-562.5	-175.7	362.1	338.5	23.51	15.398		
3,600.0	3,531.3	3,571.6	3,502.9	12.8	12.5	107.59	-585.7	-183.4	377.1	352.8	24.38	15.469		
3,700.0	3,628.4	3,670.5	3,598.7	13.2	12.9	107.48	-608.9	-191.0	392.2	367.0	25.25	15.536		
3,800.0	3,725.5	3,769.3	3,694.5	13.7	13.4	107.37	-632.0	-198.7	407.3	381.2	26.11	15.597		
3,900.0	3,822.6	3,868.2	3,790.3	14.1	13.8	108.09	-655.2	-206.4	422.4	395.4	26.97	15.660		
4,000.0	3,919.8	3,966.9	3,885.9	14.5	14.3	112.07	-678.4	-214.0	438.6	410.8	27.80	15.779		
4,100.0	4,016.9	4,065.2	3,981.3	15.0	14.7	116.01	-701.4	-221.6	456.4	427.8	28.60	15.958		
4,200.0	4,114.0	4,163.3	4,076.3	15.4	15.2	118.80	-724.4	-229.2	475.7	446.3	29.40	16.181		
4,300.0	4,211.1	4,261.3	4,171.3	15.9	15.7	118.50	-747.4	-236.8	495.4	465.2	30.23	16.388		

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - Waste Connections 3D-29H-M168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-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	64.558		
200.0	200.0	200.0	200.0	0.3	0.3	-89.95	0.0	-19.6	19.6	19.0	0.65	30.035		
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 CC		
400.0	400.0	400.0	400.0	0.7	0.7	110.44	0.0	-19.6	19.9	18.5	1.35	14.720 ES		
500.0	500.0	500.0	500.0	0.9	0.8	117.15	0.0	-19.6	21.0	19.2	1.70	12.298		
600.0	599.9	599.7	599.7	1.0	1.0	124.78	-0.6	-20.2	23.6	21.6	2.06	11.476 SF		
700.0	699.7	699.4	699.3	1.2	1.2	130.13	-2.5	-22.0	28.4	26.0	2.42	11.721		
800.0	799.4	799.0	798.9	1.4	1.4	133.45	-5.6	-24.8	35.0	32.2	2.79	12.525		
900.0	898.9	898.7	898.4	1.7	1.6	136.90	-8.9	-27.9	43.0	39.8	3.17	13.564		
1,000.0	998.3	998.2	997.9	1.9	1.8	140.49	-12.3	-30.9	52.4	48.9	3.55	14.778		
1,100.0	1,097.4	1,097.5	1,097.1	2.2	1.9	143.90	-15.6	-34.0	63.4	59.5	3.93	16.148		
1,200.0	1,196.3	1,196.6	1,196.1	2.5	2.1	147.01	-18.9	-37.0	76.0	71.7	4.31	17.654		
1,300.0	1,294.9	1,295.5	1,294.9	2.8	2.3	149.78	-22.2	-40.0	90.3	85.6	4.68	19.278		
1,400.0	1,393.3	1,394.2	1,393.4	3.1	2.5	152.22	-25.5	-43.1	106.2	101.2	5.06	21.003		
1,500.0	1,491.2	1,492.5	1,491.7	3.5	2.7	154.35	-28.8	-46.1	123.9	118.4	5.43	22.814		
1,600.0	1,588.9	1,590.5	1,589.6	3.9	2.9	156.22	-32.0	-49.1	143.2	137.4	5.80	24.699		
1,700.0	1,686.1	1,688.2	1,687.1	4.3	3.1	157.86	-35.3	-52.1	164.2	158.1	6.16	26.638		
1,800.0	1,783.2	1,785.7	1,784.6	4.8	3.2	159.25	-38.5	-55.1	185.9	179.3	6.54	28.431		
1,900.0	1,880.3	1,883.3	1,882.0	5.2	3.4	160.35	-41.8	-58.1	207.6	200.7	6.91	30.043		
2,000.0	1,977.5	1,980.8	1,979.5	5.6	3.6	161.24	-45.0	-61.0	229.3	222.1	7.28	31.498		
2,100.0	2,074.6	2,078.3	2,076.9	6.1	3.8	161.98	-48.3	-64.0	251.2	243.5	7.65	32.817		
2,200.0	2,171.7	2,175.9	2,174.3	6.5	4.0	162.60	-51.5	-67.0	273.0	265.0	8.03	34.017		
2,300.0	2,268.8	2,273.4	2,271.8	6.9	4.2	163.13	-54.8	-70.0	294.9	286.5	8.40	35.114		
2,400.0	2,365.9	2,371.0	2,369.2	7.4	4.4	163.58	-58.0	-73.0	316.8	308.0	8.77	36.120		
2,500.0	2,463.0	2,468.5	2,466.7	7.8	4.5	163.98	-61.3	-76.0	338.7	329.6	9.14	37.046		
2,600.0	2,560.1	2,566.1	2,564.1	8.3	4.7	164.32	-64.6	-79.0	360.6	351.1	9.52	37.900		
2,700.0	2,657.3	2,663.6	2,661.6	8.7	4.9	164.63	-67.8	-82.0	382.6	372.7	9.89	38.691		
2,800.0	2,754.4	2,761.2	2,759.0	9.2	5.1	164.90	-71.1	-85.0	404.5	394.3	10.26	39.426		
2,900.0	2,851.5	2,858.7	2,856.5	9.6	5.3	165.15	-74.3	-88.0	426.5	415.9	10.63	40.109		
3,000.0	2,948.6	2,956.2	2,953.9	10.1	5.5	165.37	-77.6	-91.0	448.4	437.4	11.01	40.747		
3,100.0	3,045.7	3,053.8	3,051.3	10.5	5.7	165.57	-80.8	-94.0	470.4	459.0	11.38	41.344		
3,200.0	3,142.8	3,151.3	3,148.8	11.0	5.8	165.76	-84.1	-96.9	492.4	480.6	11.75	41.903		

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - Waste Connections 3E-29H-M168 - Hz - Plan #1														Offset Site Error:	0.0 ft
Survey Program: 0-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				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	-89.94	0.0	-8.4	8.4						
100.0	100.0	100.0	100.0	0.2	0.2	-89.94	0.0	-8.4	8.4	8.1	0.30	27.668			
200.0	200.0	200.0	200.0	0.3	0.3	-89.94	0.0	-8.4	8.4	7.7	0.65	12.872			
300.0	300.0	300.0	300.0	0.5	0.5	-89.94	0.0	-8.4	8.4	7.4	1.00	8.387 CC			
400.0	400.0	400.0	400.0	0.7	0.7	113.52	0.0	-8.4	8.7	7.4	1.35	6.447 ES			
500.0	500.0	500.0	500.0	0.9	0.9	122.61	-0.9	-8.3	9.7	8.0	1.70	5.715			
600.0	599.9	600.1	600.0	1.0	1.0	128.65	-3.5	-8.2	11.3	9.3	2.06	5.490			
700.0	699.7	700.1	700.0	1.2	1.2	132.08	-7.8	-7.9	13.3	10.9	2.43	5.493			
800.0	799.4	800.2	799.9	1.4	1.4	133.64	-13.9	-7.4	15.7	12.9	2.81	5.602			
900.0	898.9	900.3	899.7	1.7	1.6	133.96	-21.8	-6.9	18.5	15.3	3.21	5.759			
1,000.0	998.3	1,000.5	999.4	1.9	1.8	133.51	-31.4	-6.3	21.6	17.9	3.64	5.932			
1,100.0	1,097.4	1,100.6	1,098.9	2.2	2.1	132.58	-42.7	-5.5	25.0	20.9	4.10	6.105			
1,200.0	1,196.3	1,200.8	1,198.2	2.5	2.3	131.38	-55.7	-4.6	28.8	24.2	4.60	6.265			
1,300.0	1,294.9	1,300.9	1,297.2	2.8	2.6	130.03	-70.5	-3.6	32.9	27.8	5.14	6.409			
1,400.0	1,393.3	1,401.1	1,396.0	3.1	2.9	128.64	-87.0	-2.5	37.5	31.7	5.73	6.533			
1,500.0	1,491.2	1,501.2	1,494.5	3.5	3.3	127.24	-105.2	-1.2	42.3	36.0	6.38	6.636			
1,600.0	1,588.9	1,601.4	1,592.6	3.9	3.6	125.87	-125.2	0.2	47.6	40.5	7.09	6.722			
1,700.0	1,686.1	1,701.5	1,690.4	4.3	4.0	124.52	-146.8	1.6	53.3	45.4	7.85	6.790			
1,800.0	1,783.2	1,801.6	1,787.7	4.8	4.5	122.36	-170.1	3.2	58.7	50.0	8.68	6.761			
1,900.0	1,880.3	1,901.5	1,884.7	5.2	4.9	120.13	-193.9	4.8	64.0	54.5	9.54	6.708			
2,000.0	1,977.5	2,001.3	1,981.6	5.6	5.3	118.25	-217.6	6.5	69.4	59.0	10.42	6.666			
2,100.0	2,074.6	2,101.1	2,078.6	6.1	5.7	116.64	-241.3	8.1	74.9	63.6	11.30	6.632			
2,200.0	2,171.7	2,200.9	2,175.5	6.5	6.2	115.25	-265.0	9.7	80.5	68.3	12.18	6.605			
2,300.0	2,268.8	2,300.8	2,272.5	6.9	6.6	114.04	-288.8	11.3	86.0	73.0	13.07	6.583			
2,400.0	2,365.9	2,400.6	2,369.4	7.4	7.0	112.98	-312.5	13.0	91.7	77.7	13.96	6.565			
2,500.0	2,463.0	2,500.4	2,466.4	7.8	7.5	112.04	-336.2	14.6	97.3	82.4	14.85	6.550			
2,600.0	2,560.1	2,600.3	2,563.3	8.3	7.9	111.20	-360.0	16.2	102.9	87.2	15.75	6.538			
2,700.0	2,657.3	2,700.1	2,660.3	8.7	8.4	110.46	-383.7	17.8	108.6	92.0	16.64	6.528			
2,800.0	2,754.4	2,799.9	2,757.2	9.2	8.8	109.78	-407.4	19.4	114.3	96.8	17.53	6.520			
2,900.0	2,851.5	2,899.7	2,854.2	9.6	9.2	109.17	-431.1	21.1	120.0	101.6	18.43	6.513			
3,000.0	2,948.6	2,999.6	2,951.2	10.1	9.7	108.62	-454.9	22.7	125.8	106.4	19.33	6.507			
3,100.0	3,045.7	3,099.4	3,048.1	10.5	10.1	108.11	-478.6	24.3	131.5	111.3	20.22	6.503			
3,200.0	3,142.8	3,199.2	3,145.1	11.0	10.6	107.64	-502.3	25.9	137.2	116.1	21.12	6.499			
3,300.0	3,239.9	3,299.1	3,242.0	11.4	11.0	107.22	-526.0	27.6	143.0	121.0	22.01	6.495			
3,400.0	3,337.0	3,398.9	3,339.0	11.9	11.5	106.82	-549.8	29.2	148.7	125.8	22.91	6.492			
3,500.0	3,434.2	3,498.7	3,435.9	12.3	11.9	106.46	-573.5	30.8	154.5	130.7	23.81	6.490			
3,600.0	3,531.3	3,598.5	3,532.9	12.8	12.4	106.12	-597.2	32.4	160.3	135.6	24.70	6.488			
3,700.0	3,628.4	3,698.4	3,629.8	13.2	12.8	105.81	-621.0	34.0	166.1	140.5	25.60	6.486			
3,800.0	3,725.5	3,798.2	3,726.8	13.7	13.2	105.51	-644.7	35.7	171.8	145.3	26.50	6.485			
3,900.0	3,822.6	3,898.0	3,823.7	14.1	13.7	105.05	-668.4	37.3	177.7	150.3	27.39	6.486			
4,000.0	3,919.8	3,997.8	3,920.6	14.5	14.1	104.76	-692.1	38.9	184.6	156.3	28.27	6.530			
4,100.0	4,016.9	4,097.4	4,017.4	15.0	14.6	113.34	-715.8	40.5	193.1	164.0	29.13	6.630			
4,200.0	4,114.0	4,196.9	4,114.0	15.4	15.0	115.73	-739.4	42.1	203.3	173.3	30.00	6.777			
4,300.0	4,211.1	4,296.3	4,210.5	15.9	15.5	115.08	-763.1	43.8	213.9	183.1	30.89	6.926			
4,400.0	4,308.3	4,395.7	4,307.0	16.3	15.9	114.50	-786.7	45.4	224.6	192.8	31.78	7.068			
4,500.0	4,405.4	4,495.1	4,403.6	16.8	16.4	113.97	-810.3	47.0	235.3	202.6	32.67	7.203			
4,600.0	4,502.5	4,594.5	4,500.1	17.2	16.8	113.48	-833.9	48.6	246.0	212.4	33.55	7.332			
4,700.0	4,599.6	4,693.9	4,596.7	17.7	17.3	113.04	-857.6	50.2	256.7	222.3	34.44	7.455			
4,800.0	4,696.7	4,793.3	4,693.2	18.1	17.7	112.63	-881.2	51.8	267.4	232.1	35.32	7.572			
4,900.0	4,793.8	4,892.7	4,789.8	18.6	18.2	112.25	-904.8	53.4	278.2	242.0	36.20	7.684			
5,000.0	4,891.0	4,992.1	4,886.3	19.0	18.6	111.91	-928.4	55.1	289.0	251.9	37.09	7.791			
5,100.0	4,988.1	5,091.5	4,982.9	19.5	19.1	111.58	-952.1	56.7	299.7	261.7	37.97	7.894			

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

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - Waste Connections 3E-29H-M168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,085.2	5,190.9	5,079.4	19.9	19.5	111.28	-975.7	58.3	310.5	271.6	38.85	7.992		
5,300.0	5,182.3	5,290.3	5,175.9	20.3	19.9	111.00	-999.3	59.9	321.3	281.5	39.73	8.086		
5,400.0	5,279.4	5,389.7	5,272.5	20.8	20.4	110.74	-1,023.0	61.5	332.1	291.5	40.61	8.176		
5,500.0	5,376.5	5,489.1	5,369.0	21.2	20.8	110.49	-1,046.6	63.1	342.9	301.4	41.49	8.263		
5,600.0	5,473.7	5,588.5	5,465.6	21.7	21.3	110.26	-1,070.2	64.7	353.7	311.3	42.37	8.346		
5,700.0	5,570.8	5,687.9	5,562.1	22.1	21.7	110.04	-1,093.8	66.4	364.5	321.2	43.25	8.426		
5,800.0	5,667.9	5,787.3	5,658.7	22.6	22.2	109.84	-1,117.5	68.0	375.3	331.2	44.13	8.503		
5,900.0	5,765.0	5,886.7	5,755.2	23.0	22.6	109.64	-1,141.1	69.6	386.1	341.1	45.01	8.577		
6,000.0	5,862.1	5,986.1	5,851.7	23.5	23.1	109.46	-1,164.7	71.2	396.9	351.0	45.89	8.649		
6,100.0	5,959.2	6,085.6	5,948.3	23.9	23.5	109.29	-1,188.3	72.8	407.7	361.0	46.77	8.717		
6,200.0	6,056.3	6,185.0	6,044.8	24.4	24.0	109.12	-1,212.0	74.4	418.6	370.9	47.65	8.784		
6,300.0	6,153.5	6,284.4	6,141.4	24.8	24.4	108.97	-1,235.6	76.1	429.4	380.9	48.53	8.848		
6,400.0	6,250.6	6,383.8	6,237.9	25.3	24.9	108.82	-1,259.2	77.7	440.2	390.8	49.41	8.909		
6,500.0	6,347.7	6,483.2	6,334.5	25.7	25.3	108.68	-1,282.9	79.3	451.1	400.8	50.29	8.969		
6,600.0	6,444.8	6,582.6	6,431.0	26.2	25.8	108.54	-1,306.5	80.9	461.9	410.7	51.17	9.027		
6,700.0	6,541.9	6,682.0	6,527.5	26.6	26.2	108.41	-1,330.1	82.5	472.8	420.7	52.05	9.083		
6,800.0	6,639.0	6,781.4	6,624.1	27.1	26.7	108.29	-1,353.7	84.1	483.6	430.7	52.93	9.136		
6,900.0	6,736.2	6,880.8	6,720.6	27.5	27.1	108.17	-1,377.4	85.7	494.5	440.6	53.81	9.189		
12,500.0	8,016.0	12,318.3	7,788.0	59.8	58.9	-62.22	3,122.5	103.6	491.6	387.6	104.01	4.727		
12,600.0	8,016.0	12,417.7	7,788.0	61.4	60.6	-61.61	3,221.9	103.6	481.8	375.3	106.43	4.527		
12,700.0	8,016.0	12,517.0	7,788.0	63.0	62.3	-60.96	3,321.3	103.6	472.0	363.2	108.80	4.338		
12,800.0	8,016.0	12,616.4	7,788.0	64.7	64.0	-60.29	3,420.6	103.6	462.3	351.2	111.09	4.161		
12,900.0	8,016.0	12,715.8	7,788.0	66.3	65.7	-59.60	3,520.0	103.6	452.6	339.3	113.31	3.994		
13,000.0	8,016.0	12,815.2	7,788.0	68.0	67.3	-58.87	3,619.4	103.6	443.0	327.6	115.45	3.837		
13,100.0	8,016.0	12,914.5	7,788.0	69.6	69.0	-58.11	3,718.8	103.6	433.5	316.0	117.50	3.689		
13,200.0	8,016.0	13,013.9	7,788.0	71.3	70.7	-57.31	3,818.2	103.6	424.0	304.6	119.44	3.550		
13,300.0	8,016.0	13,113.3	7,788.0	73.0	72.4	-56.49	3,917.5	103.6	414.7	293.4	121.36	3.417		
13,400.0	8,016.0	13,212.8	7,788.0	74.7	74.1	-55.77	4,017.0	103.6	406.5	282.9	123.60	3.289		
13,500.0	8,016.0	13,312.5	7,788.0	76.4	75.8	-55.15	4,116.7	103.6	399.7	273.8	125.88	3.175		
13,600.0	8,016.0	13,412.3	7,788.0	78.1	77.6	-54.64	4,216.5	103.6	394.4	266.2	128.25	3.075		
13,700.0	8,016.0	13,512.1	7,788.0	79.8	79.3	-54.27	4,316.4	103.6	390.6	259.9	130.73	2.988		
13,800.0	8,016.0	13,612.1	7,788.0	81.5	81.0	-54.02	4,416.3	103.6	388.2	254.8	133.35	2.911		
13,900.0	8,016.0	13,712.1	7,788.0	83.2	82.7	-53.92	4,516.3	103.6	387.2	251.0	136.14	2.844		
13,922.3	8,016.0	13,734.4	7,788.0	83.6	83.1	-53.92	4,538.6	103.6	387.2	250.4	136.79	2.830		
14,000.0	8,016.0	13,812.1	7,788.0	84.9	84.4	-53.97	4,616.3	103.6	387.6	248.5	139.11	2.786		
14,100.0	8,016.0	13,912.1	7,788.0	86.6	86.2	-54.07	4,716.3	103.6	388.6	246.5	142.07	2.735		
14,200.0	8,016.0	14,012.1	7,788.0	88.3	87.9	-54.18	4,816.3	103.6	389.6	244.6	145.03	2.686		
14,300.0	8,016.0	14,112.1	7,788.0	90.0	89.6	-54.28	4,916.3	103.6	390.6	242.6	148.01	2.639		
14,400.0	8,016.0	14,212.1	7,788.0	91.8	91.3	-54.39	5,016.3	103.6	391.6	240.6	150.99	2.593		
14,500.0	8,016.0	14,312.0	7,788.0	93.5	93.1	-54.49	5,116.3	103.6	392.6	238.6	153.98	2.549		
14,600.0	8,016.0	14,412.0	7,788.0	95.2	94.8	-54.59	5,216.3	103.6	393.6	236.6	156.98	2.507		
14,700.0	8,016.0	14,512.0	7,788.0	96.9	96.5	-54.70	5,316.3	103.6	394.6	234.6	159.98	2.466		
14,800.0	8,016.0	14,612.0	7,788.0	98.7	98.2	-54.80	5,416.3	103.6	395.6	232.6	162.99	2.427		
14,900.0	8,016.0	14,712.0	7,788.0	100.4	100.0	-54.90	5,516.3	103.6	396.6	230.5	166.01	2.389		
15,000.0	8,016.0	14,812.0	7,788.0	102.1	101.7	-55.00	5,616.2	103.6	397.6	228.5	169.04	2.352		
15,100.0	8,016.0	14,912.0	7,788.0	103.8	103.4	-55.10	5,716.2	103.6	398.6	226.5	172.08	2.316		
15,200.0	8,016.0	15,012.0	7,788.0	105.6	105.2	-55.20	5,816.2	103.6	399.6	224.4	175.12	2.282		
15,300.0	8,016.0	15,112.0	7,788.0	107.3	106.9	-55.30	5,916.2	103.6	400.6	222.4	178.16	2.248		
15,400.0	8,016.0	15,212.0	7,788.0	109.0	108.6	-55.40	6,016.2	103.6	401.6	220.3	181.22	2.216		
15,500.0	8,016.0	15,312.0	7,788.0	110.8	110.4	-55.50	6,116.2	103.6	402.6	218.3	184.28	2.185		
15,600.0	8,016.0	15,412.0	7,788.0	112.5	112.1	-55.60	6,216.2	103.6	403.6	216.2	187.35	2.154		
15,700.0	8,016.0	15,512.0	7,788.0	114.2	113.8	-55.70	6,316.2	103.6	404.6	214.2	190.42	2.125		

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

Anticollision Report

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

Offset Design		S29-T1N-R68W (Pratt/Waste Connections) - Waste Connections 3E-29H-M168 - Hz - Plan #1										Offset Site Error:		0.0 ft			
Survey Program:		0-MWD												Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor					
15,800.0	8,016.0	15,612.0	7,788.0	116.0	115.6	-55.79	6,416.2	103.6	405.6	212.1	193.50	2.096					
15,900.0	8,016.0	15,711.9	7,788.0	117.7	117.3	-55.89	6,516.2	103.6	406.6	210.0	196.59	2.068					
16,000.0	8,016.0	15,811.9	7,788.0	119.4	119.1	-55.99	6,616.2	103.6	407.6	207.9	199.68	2.041					
16,100.0	8,016.0	15,911.9	7,788.0	121.2	120.8	-56.08	6,716.2	103.6	408.6	205.9	202.78	2.015					
16,200.0	8,016.0	16,011.9	7,788.0	122.9	122.5	-56.18	6,816.2	103.6	409.6	203.8	205.88	1.990					
16,300.0	8,016.0	16,111.9	7,788.0	124.6	124.3	-56.27	6,916.1	103.6	410.7	201.7	208.99	1.965					
16,400.0	8,016.0	16,211.9	7,788.0	126.4	126.0	-56.37	7,016.1	103.6	411.7	199.6	212.10	1.941					
16,500.0	8,016.0	16,311.9	7,788.0	128.1	127.8	-56.46	7,116.1	103.6	412.7	197.5	215.22	1.918					
16,600.0	8,016.0	16,411.9	7,788.0	129.9	129.5	-56.56	7,216.1	103.6	413.7	195.4	218.35	1.895					
16,700.0	8,016.0	16,511.9	7,788.0	131.6	131.2	-56.65	7,316.1	103.6	414.7	193.3	221.48	1.873					
16,800.0	8,016.0	16,611.9	7,788.0	133.3	133.0	-56.74	7,416.1	103.6	415.8	191.1	224.61	1.851					
16,900.0	8,016.0	16,711.9	7,788.0	135.1	134.7	-56.83	7,516.1	103.6	416.8	189.0	227.76	1.830 SF					
16,990.0	8,016.0	16,747.3	7,788.0	136.6	135.3	-56.87	7,551.5	103.6	421.3	191.6	229.67	1.834					

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - Waste Connections 3G-29H-M168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	1.0	1.0	0.0	0.0	90.04	0.0	11.2	11.2					
100.0	100.0	101.0	101.0	0.2	0.2	90.04	0.0	11.2	11.2	10.9	0.31	36.679		
166.3	166.3	167.3	167.3	0.3	0.3	90.04	0.0	11.2	11.2	10.7	0.54	20.864 CC		
200.0	200.0	201.0	201.0	0.3	0.3	90.04	0.0	11.2	11.2	10.5	0.65	17.117 ES		
300.0	300.0	300.9	300.9	0.5	0.5	93.25	-0.7	11.8	11.8	10.8	1.00	11.773		
400.0	400.0	400.7	400.6	0.7	0.7	-64.26	-2.6	13.5	13.4	12.0	1.36	9.888		
500.0	500.0	500.5	500.3	0.9	0.9	-62.48	-5.9	16.5	15.6	13.9	1.71	9.110		
600.0	599.9	600.2	599.9	1.0	1.1	-62.60	-10.4	20.5	18.4	16.3	2.08	8.825		
700.0	699.7	700.0	699.4	1.2	1.3	-63.89	-16.3	25.7	21.7	19.2	2.46	8.792		
800.0	799.4	799.5	798.4	1.4	1.5	-65.79	-23.4	32.1	25.6	22.7	2.87	8.896		
900.0	898.9	899.0	897.3	1.7	1.8	-67.96	-31.8	39.6	30.1	26.7	3.31	9.070		
1,000.0	998.3	998.5	995.9	1.9	2.0	-70.18	-41.4	48.2	35.2	31.4	3.79	9.276		
1,100.0	1,097.4	1,097.9	1,094.2	2.2	2.3	-72.32	-52.4	58.0	41.0	36.7	4.32	9.490		
1,200.0	1,196.3	1,197.4	1,192.4	2.5	2.6	-74.52	-64.4	68.8	47.3	42.4	4.89	9.677		
1,300.0	1,294.9	1,297.2	1,290.8	2.8	3.0	-77.81	-76.7	79.7	53.4	47.9	5.52	9.686		
1,400.0	1,393.3	1,396.9	1,389.2	3.1	3.3	-82.07	-88.9	90.7	59.4	53.2	6.20	9.581		
1,500.0	1,491.2	1,496.6	1,487.5	3.5	3.6	-87.03	-101.2	101.6	65.6	58.7	6.94	9.452		
1,600.0	1,588.9	1,596.1	1,585.7	3.9	3.9	-92.48	-113.4	112.6	72.3	64.6	7.71	9.370		
1,700.0	1,686.1	1,695.5	1,683.7	4.3	4.3	-98.18	-125.7	123.5	79.7	71.2	8.49	9.389		
1,800.0	1,783.2	1,794.9	1,781.7	4.8	4.6	-103.29	-137.9	134.4	87.9	78.7	9.23	9.523		
1,900.0	1,880.3	1,894.3	1,879.8	5.2	4.9	-107.49	-150.1	145.4	96.7	86.8	9.94	9.726		
2,000.0	1,977.5	1,993.7	1,977.8	5.6	5.3	-110.98	-162.3	156.3	105.9	95.3	10.63	9.964		
2,100.0	2,074.6	2,093.1	2,075.8	6.1	5.6	-113.91	-174.5	167.2	115.5	104.2	11.30	10.220		
2,200.0	2,171.7	2,192.5	2,173.8	6.5	5.9	-116.39	-186.8	178.1	125.3	113.3	11.96	10.480		
2,300.0	2,268.8	2,291.8	2,271.9	6.9	6.3	-118.50	-199.0	189.0	135.3	122.7	12.60	10.737		
2,400.0	2,365.9	2,391.2	2,369.9	7.4	6.6	-120.32	-211.2	200.0	145.5	132.2	13.24	10.988		
2,500.0	2,463.0	2,490.6	2,467.9	7.8	6.9	-121.90	-223.4	210.9	155.8	141.9	13.87	11.230		
2,600.0	2,560.1	2,590.0	2,565.9	8.3	7.2	-123.29	-235.6	221.8	166.1	151.6	14.50	11.461		
2,700.0	2,657.3	2,689.4	2,664.0	8.7	7.6	-124.51	-247.8	232.7	176.6	161.5	15.12	11.681		
2,800.0	2,754.4	2,788.8	2,762.0	9.2	7.9	-125.59	-260.1	243.6	187.2	171.4	15.74	11.891		
2,900.0	2,851.5	2,888.1	2,860.0	9.6	8.2	-126.56	-272.3	254.6	197.8	181.4	16.36	12.090		
3,000.0	2,948.6	2,987.5	2,958.0	10.1	8.6	-127.43	-284.5	265.5	208.4	191.5	16.98	12.279		
3,100.0	3,045.7	3,086.9	3,056.0	10.5	8.9	-128.22	-296.7	276.4	219.1	201.5	17.59	12.458		
3,200.0	3,142.8	3,186.3	3,154.1	11.0	9.3	-128.93	-308.9	287.3	229.9	211.7	18.20	12.628		
3,300.0	3,239.9	3,285.7	3,252.1	11.4	9.6	-129.58	-321.2	298.2	240.6	221.8	18.82	12.789		
3,400.0	3,337.0	3,385.1	3,350.1	11.9	9.9	-130.17	-333.4	309.2	251.4	232.0	19.43	12.941		
3,500.0	3,434.2	3,484.4	3,448.1	12.3	10.3	-130.71	-345.6	320.1	262.3	242.2	20.04	13.086		
3,600.0	3,531.3	3,583.8	3,546.2	12.8	10.6	-131.21	-357.8	331.0	273.1	252.5	20.65	13.224		
3,700.0	3,628.4	3,683.2	3,644.2	13.2	10.9	-131.68	-370.0	341.9	284.0	262.7	21.26	13.355		
3,800.0	3,725.5	3,782.6	3,742.2	13.7	11.3	-132.11	-382.2	352.8	294.9	273.0	21.87	13.480		
3,900.0	3,822.6	3,882.0	3,840.2	14.1	11.6	-131.68	-394.5	363.8	305.7	283.2	22.49	13.595		
4,000.0	3,919.8	3,981.4	3,938.3	14.5	11.9	-128.05	-406.7	374.7	315.7	292.5	23.12	13.655		
4,100.0	4,016.9	4,081.0	4,036.5	15.0	12.3	-124.56	-418.9	385.6	324.2	300.5	23.72	13.669		
4,200.0	4,114.0	4,180.6	4,134.8	15.4	12.6	-122.30	-431.2	396.6	331.5	307.2	24.29	13.646		
4,300.0	4,211.1	4,280.3	4,233.1	15.9	12.9	-123.13	-443.4	407.5	338.5	313.7	24.85	13.624		
4,400.0	4,308.3	4,379.9	4,331.3	16.3	13.3	-123.91	-455.7	418.5	345.6	320.2	25.39	13.608		
4,500.0	4,405.4	4,479.5	4,429.6	16.8	13.6	-124.67	-467.9	429.4	352.7	326.7	25.94	13.597		
4,600.0	4,502.5	4,579.2	4,527.9	17.2	13.9	-125.40	-480.2	440.4	359.8	333.4	26.48	13.591		
4,700.0	4,599.6	4,678.8	4,626.2	17.7	14.3	-126.10	-492.4	451.3	367.1	340.0	27.01	13.588		
4,800.0	4,696.7	4,778.5	4,724.5	18.1	14.6	-126.77	-504.7	462.3	374.3	346.8	27.55	13.590		
4,900.0	4,793.8	4,878.1	4,822.7	18.6	15.0	-127.42	-516.9	473.2	381.7	353.6	28.08	13.594		
5,000.0	4,891.0	4,977.7	4,921.0	19.0	15.3	-128.04	-529.2	484.2	389.0	360.4	28.60	13.602		

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

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - Waste Connections 3G-29H-M168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		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			
5,100.0	4,988.1	5,077.4	5,019.3	19.5	15.6	-128.64	-541.4	495.1	396.5	367.3	29.13	13.612		
5,200.0	5,085.2	5,177.0	5,117.6	19.9	16.0	-129.21	-553.7	506.1	403.9	374.3	29.65	13.624		
5,300.0	5,182.3	5,276.7	5,215.8	20.3	16.3	-129.77	-565.9	517.0	411.4	381.2	30.17	13.638		
5,400.0	5,279.4	5,376.3	5,314.1	20.8	16.6	-130.31	-578.2	528.0	418.9	388.3	30.68	13.654		
5,500.0	5,376.5	5,476.0	5,412.4	21.2	17.0	-130.82	-590.4	538.9	426.5	395.3	31.20	13.671		
5,600.0	5,473.7	5,575.6	5,510.7	21.7	17.3	-131.32	-602.7	549.9	434.1	402.4	31.71	13.690		
5,700.0	5,570.8	5,675.2	5,608.9	22.1	17.6	-131.80	-614.9	560.8	441.8	409.5	32.22	13.710		
5,800.0	5,667.9	5,774.9	5,707.2	22.6	18.0	-132.27	-627.2	571.8	449.4	416.7	32.73	13.731		
5,900.0	5,765.0	5,874.5	5,805.5	23.0	18.3	-132.72	-639.4	582.7	457.1	423.9	33.24	13.753		
6,000.0	5,862.1	5,974.2	5,903.8	23.5	18.7	-133.15	-651.7	593.7	464.8	431.1	33.74	13.776		
6,100.0	5,959.2	6,073.8	6,002.0	23.9	19.0	-133.57	-663.9	604.6	472.6	438.3	34.25	13.799		
6,200.0	6,056.3	6,173.4	6,100.3	24.4	19.3	-133.98	-676.2	615.6	480.4	445.6	34.75	13.823		
6,300.0	6,153.5	6,273.1	6,198.6	24.8	19.7	-134.38	-688.4	626.5	488.1	452.9	35.25	13.848		
6,400.0	6,250.6	6,372.7	6,296.9	25.3	20.0	-134.76	-700.7	637.5	496.0	460.2	35.75	13.873		
8,500.0	8,015.2	7,818.5	7,662.1	24.5	21.9	14.04	-597.5	789.6	456.6	436.3	20.32	22.471		
8,600.0	8,016.0	7,865.5	7,689.9	23.5	21.7	16.67	-559.7	792.6	401.0	380.2	20.83	19.255		
8,700.0	8,016.0	7,918.0	7,717.2	22.7	21.4	18.88	-515.0	795.7	352.8	331.2	21.51	16.399		
8,800.0	8,016.0	7,976.5	7,742.6	21.9	21.1	21.34	-462.4	798.5	313.6	291.4	22.21	14.120		
8,900.0	8,016.0	8,040.6	7,764.2	21.3	20.9	23.85	-402.1	800.9	284.5	261.7	22.87	12.443		
9,000.0	8,016.0	8,109.3	7,779.8	20.8	20.6	26.02	-335.3	802.7	266.2	242.8	23.42	11.367		
9,100.0	8,016.0	8,181.1	7,787.4	20.5	20.4	27.43	-264.0	803.5	258.7	234.9	23.82	10.863		
9,124.4	8,016.0	8,200.0	7,788.0	20.4	20.4	27.62	-245.1	803.6	258.5	234.6	23.89	10.820		
9,200.0	8,016.0	8,271.3	7,788.0	20.2	20.2	28.12	-173.7	803.6	259.7	235.5	24.15	10.754		
9,300.0	8,016.0	8,371.3	7,788.0	20.2	20.2	28.79	-73.8	803.6	261.3	236.8	24.57	10.634		
9,400.0	8,016.0	8,471.2	7,788.0	20.3	20.3	29.46	26.2	803.6	263.0	237.9	25.11	10.475		
9,500.0	8,016.0	8,571.1	7,788.0	20.5	20.6	30.11	126.1	803.6	264.8	239.0	25.75	10.282		
9,600.0	8,016.0	8,671.1	7,788.0	20.9	21.0	30.76	226.0	803.6	266.5	240.0	26.51	10.054		
9,700.0	8,016.0	8,771.0	7,788.0	21.4	21.5	31.40	326.0	803.6	268.3	241.0	27.39	9.798		
9,800.0	8,016.0	8,871.0	7,788.0	22.1	22.2	32.03	425.9	803.6	270.2	241.8	28.39	9.518		
9,900.0	8,016.0	8,970.9	7,788.0	22.8	23.0	32.66	525.9	803.6	272.0	242.5	29.51	9.220		
10,000.0	8,016.0	9,070.8	7,788.0	23.7	23.9	33.27	625.8	803.6	273.9	243.2	30.75	8.910		
10,100.0	8,016.0	9,170.8	7,788.0	24.7	24.9	33.88	725.7	803.6	275.9	243.8	32.10	8.595		
10,200.0	8,016.0	9,270.7	7,788.0	25.7	25.9	34.47	825.7	803.6	277.8	244.3	33.56	8.278		
10,300.0	8,016.0	9,370.7	7,788.0	26.9	27.1	35.06	925.6	803.6	279.8	244.7	35.14	7.964		
10,400.0	8,016.0	9,470.6	7,788.0	28.1	28.3	35.64	1,025.5	803.6	281.9	245.0	36.81	7.656		
10,500.0	8,016.0	9,570.5	7,788.0	29.3	29.5	36.22	1,125.5	803.6	283.9	245.3	38.58	7.358		
10,600.0	8,016.0	9,670.5	7,788.0	30.6	30.8	36.78	1,225.4	803.6	286.0	245.5	40.45	7.070		
10,700.0	8,016.0	9,770.4	7,788.0	31.9	32.2	37.34	1,325.4	803.6	288.1	245.7	42.40	6.794		
10,800.0	8,016.0	9,870.4	7,788.0	33.3	33.6	37.88	1,425.3	803.6	290.2	245.8	44.43	6.531		
10,900.0	8,016.0	9,970.3	7,788.0	34.7	35.0	38.42	1,525.2	803.6	292.4	245.8	46.54	6.281		
11,000.0	8,016.0	10,070.2	7,788.0	36.2	36.4	38.95	1,625.2	803.6	294.5	245.8	48.73	6.045		
11,100.0	8,016.0	10,170.2	7,788.0	37.7	37.9	39.48	1,725.1	803.6	296.8	245.8	50.98	5.821		
11,200.0	8,016.0	10,270.1	7,788.0	39.1	39.4	39.99	1,825.1	803.6	299.0	245.7	53.30	5.609		
11,300.0	8,016.0	10,370.0	7,788.0	40.7	40.9	40.50	1,925.0	803.6	301.2	245.6	55.68	5.410		
11,400.0	8,016.0	10,470.0	7,788.0	42.2	42.4	41.00	2,024.9	803.6	303.5	245.4	58.12	5.222		
11,500.0	8,016.0	10,569.9	7,788.0	43.7	44.0	41.50	2,124.9	803.6	305.8	245.2	60.61	5.045		
11,600.0	8,016.0	10,669.9	7,788.0	45.3	45.6	41.98	2,224.8	803.6	308.1	245.0	63.16	4.879		
11,700.0	8,016.0	10,769.8	7,788.0	46.9	47.1	42.46	2,324.8	803.6	310.5	244.7	65.76	4.722		
11,800.0	8,016.0	10,869.7	7,788.0	48.5	48.7	42.93	2,424.7	803.6	312.9	244.5	68.40	4.574		
11,900.0	8,016.0	10,969.7	7,788.0	50.1	50.3	43.40	2,524.6	803.6	315.3	244.2	71.08	4.435		
12,000.0	8,016.0	11,069.6	7,788.0	51.7	51.9	43.90	2,624.6	803.6	318.0	244.3	73.66	4.316		
12,100.0	8,016.0	11,169.4	7,788.0	53.3	53.6	44.58	2,724.4	803.6	321.9	245.5	76.39	4.213		

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

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - Waste Connections 3G-29H-M168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				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		
12,200.0	8,016.0	11,269.2	7,788.0	54.9	55.2	45.46	2,824.1	803.6	327.0	247.7	79.34	4.122		
12,300.0	8,016.0	11,368.8	7,788.0	56.5	56.8	46.50	2,923.7	803.6	333.6	251.1	82.52	4.043		
12,400.0	8,016.0	11,468.2	7,788.0	58.1	58.5	47.70	3,023.1	803.6	341.4	255.4	86.01	3.970		
12,500.0	8,016.0	11,567.6	7,788.0	59.8	60.1	48.93	3,122.5	803.6	349.8	259.9	89.86	3.892		
12,600.0	8,016.0	11,666.9	7,788.0	61.4	61.7	50.10	3,221.9	803.6	358.3	264.6	93.73	3.823		
12,700.0	8,016.0	11,766.3	7,788.0	63.0	63.4	51.21	3,321.3	803.6	366.9	269.3	97.60	3.760		
12,800.0	8,016.0	11,865.7	7,788.0	64.7	65.0	52.27	3,420.6	803.6	375.7	274.2	101.47	3.703		
12,900.0	8,016.0	11,965.1	7,788.0	66.3	66.7	53.29	3,520.0	803.6	384.6	279.3	105.34	3.651		
13,000.0	8,016.0	12,064.4	7,788.0	68.0	68.4	54.25	3,619.4	803.6	393.6	284.4	109.21	3.604		
13,100.0	8,016.0	12,163.8	7,788.0	69.6	70.0	55.18	3,718.8	803.6	402.7	289.7	113.07	3.562		
13,200.0	8,016.0	12,263.2	7,788.0	71.3	71.7	56.06	3,818.2	803.6	412.0	295.0	116.93	3.523		
13,300.0	8,016.0	12,362.6	7,788.0	73.0	73.4	56.91	3,917.5	803.6	421.2	300.3	120.89	3.485		
13,400.0	8,016.0	12,462.1	7,788.0	74.7	75.1	57.68	4,017.0	803.6	429.6	304.4	125.16	3.432		
13,500.0	8,016.0	12,561.8	7,788.0	76.4	76.7	58.29	4,116.7	803.6	436.6	307.3	129.26	3.377		
13,600.0	8,016.0	12,661.5	7,788.0	78.1	78.4	58.76	4,216.5	803.6	442.1	308.9	133.18	3.319		
13,700.0	8,016.0	12,761.4	7,788.0	79.8	80.1	59.10	4,316.4	803.6	446.1	309.2	136.94	3.258		
13,800.0	8,016.0	12,861.4	7,788.0	81.5	81.8	59.30	4,416.3	803.6	448.7	308.1	140.51	3.193		
13,900.0	8,016.0	12,961.4	7,788.0	83.2	83.5	59.39	4,516.3	803.6	449.7	305.8	143.90	3.125		
14,000.0	8,016.0	13,061.4	7,788.0	84.9	85.2	59.35	4,616.3	803.6	449.3	302.2	147.06	3.055		
14,100.0	8,016.0	13,161.4	7,788.0	86.6	86.9	59.27	4,716.3	803.6	448.2	298.3	149.92	2.990		
14,200.0	8,016.0	13,261.4	7,788.0	88.3	88.6	59.19	4,816.3	803.6	447.2	294.4	152.77	2.927		
14,300.0	8,016.0	13,361.3	7,788.0	90.0	90.3	59.11	4,916.3	803.6	446.1	290.5	155.61	2.867		
14,400.0	8,016.0	13,461.3	7,788.0	91.8	92.1	59.03	5,016.3	803.6	445.1	286.6	158.45	2.809		
14,500.0	8,016.0	13,561.3	7,788.0	93.5	93.8	58.95	5,116.3	803.6	444.0	282.7	161.29	2.753		
14,600.0	8,016.0	13,661.3	7,788.0	95.2	95.5	58.87	5,216.3	803.6	443.0	278.8	164.12	2.699		
14,700.0	8,016.0	13,761.3	7,788.0	96.9	97.2	58.79	5,316.3	803.6	441.9	275.0	166.95	2.647		
14,800.0	8,016.0	13,861.3	7,788.0	98.7	98.9	58.71	5,416.3	803.6	440.9	271.1	169.78	2.597		
14,900.0	8,016.0	13,961.3	7,788.0	100.4	100.6	58.62	5,516.3	803.6	439.8	267.2	172.60	2.548		
15,000.0	8,016.0	14,061.3	7,788.0	102.1	102.4	58.54	5,616.2	803.6	438.8	263.4	175.41	2.502		
15,100.0	8,016.0	14,161.3	7,788.0	103.8	104.1	58.46	5,716.2	803.6	437.8	259.5	178.22	2.456		
15,200.0	8,016.0	14,261.3	7,788.0	105.6	105.8	58.37	5,816.2	803.6	436.7	255.7	181.03	2.412		
15,300.0	8,016.0	14,361.3	7,788.0	107.3	107.5	58.29	5,916.2	803.6	435.7	251.8	183.83	2.370		
15,400.0	8,016.0	14,461.3	7,788.0	109.0	109.2	58.20	6,016.2	803.6	434.6	248.0	186.62	2.329		
15,500.0	8,016.0	14,561.3	7,788.0	110.8	111.0	58.12	6,116.2	803.6	433.6	244.2	189.41	2.289		
15,600.0	8,016.0	14,661.3	7,788.0	112.5	112.7	58.03	6,216.2	803.6	432.6	240.4	192.20	2.251		
15,700.0	8,016.0	14,761.2	7,788.0	114.2	114.4	57.95	6,316.2	803.6	431.5	236.5	194.98	2.213		
15,800.0	8,016.0	14,861.2	7,788.0	116.0	116.1	57.86	6,416.2	803.6	430.5	232.7	197.75	2.177		
15,900.0	8,016.0	14,961.2	7,788.0	117.7	117.9	57.77	6,516.2	803.6	429.5	228.9	200.52	2.142		
16,000.0	8,016.0	15,061.2	7,788.0	119.4	119.6	57.69	6,616.2	803.6	428.4	225.1	203.28	2.108		
16,100.0	8,016.0	15,161.2	7,788.0	121.2	121.3	57.60	6,716.2	803.6	427.4	221.4	206.03	2.074		
16,200.0	8,016.0	15,261.2	7,788.0	122.9	123.1	57.51	6,816.2	803.6	426.4	217.6	208.78	2.042		
16,300.0	8,016.0	15,361.2	7,788.0	124.6	124.8	57.42	6,916.1	803.6	425.3	213.8	211.53	2.011		
16,400.0	8,016.0	15,461.2	7,788.0	126.4	126.5	57.33	7,016.1	803.6	424.3	210.0	214.26	1.980		
16,500.0	8,016.0	15,561.2	7,788.0	128.1	128.3	57.24	7,116.1	803.6	423.3	206.3	216.99	1.951		
16,600.0	8,016.0	15,661.2	7,788.0	129.9	130.0	57.15	7,216.1	803.6	422.2	202.5	219.71	1.922		
16,700.0	8,016.0	15,761.2	7,788.0	131.6	131.7	57.06	7,316.1	803.6	421.2	198.8	222.43	1.894		
16,800.0	8,016.0	15,861.2	7,788.0	133.3	133.4	56.97	7,416.1	803.6	420.2	195.1	225.14	1.866		
16,900.0	8,016.0	15,961.2	7,788.0	135.1	135.2	56.88	7,516.1	803.6	419.2	191.3	227.84	1.840		
16,990.0	8,016.0	16,051.2	7,788.0	136.6	136.7	56.80	7,606.1	803.6	418.2	188.0	230.27	1.816 SF		

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - WILLIAM PELTIER 1A-20H (EXISTING) - ENCANA WELL													Offset Site Error: 0.0 ft
Survey Program: 0-MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis			Distance						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	
16,990.0	8,016.0	11,114.8	7,722.3	136.6	78.7	-14.31	7,980.1	377.6	495.3	434.5	60.86	8.138 CC, ES, SF	

Anticollision Report

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

Offset Design S29-T1N-R68W (Pratt/Waste Connections) - WILLIAM PELTIER 1A-20H (EXISTING) - ENCANA WELL													Offset Site Error: 0.0 ft
Survey Program: 0-MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (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
16,990.0	8,016.0	11,342.5	7,722.3	136.6	80.2	-14.31	7,980.1	377.6	495.3	434.0	61.34	8.075	CC, ES, SF

Anticollision Report

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

Offset Design											S29-T1N-R68W (Pratt/Waste Connections) - WILLIAM PELTIER 1A-20H (EXISTING) - ENCANA WELL			Offset Site Error:		0.0 ft
Survey Program: 911-MWD, 8082-													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 +N/-S	Centre +E/-W	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)						
16,600.0	8,016.0	10,970.3	7,762.3	129.9	79.4	-18.98	7,620.2	358.9	497.4	429.9	67.50	7.368				
16,700.0	8,016.0	10,947.5	7,762.2	131.6	78.9	-14.77	7,625.1	381.1	419.9	359.6	60.20	6.974				
16,800.0	8,016.0	10,924.7	7,762.2	133.3	78.3	-10.38	7,630.0	403.3	352.3	299.1	53.20	6.622				
16,900.0	8,016.0	10,902.0	7,762.2	135.1	77.8	-5.87	7,635.0	425.6	301.6	254.1	47.46	6.355				
16,990.0	8,016.0	10,881.5	7,762.1	136.6	77.3	-1.75	7,639.4	445.6	278.0	233.5	44.54	6.241	CC, ES, SF			

Anticollision Report

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

Offset Design												S29-T1N-R68W (Pratt/Waste Connections) - WILLIAM PELTIER 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty	Separation				Warning											
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis	Factor															
16,700.0	8,016.0	10,935.6	7,677.6	131.6	78.4	-8.37	7,603.8	400.5	463.7	413.7	50.08	9.261															
16,800.0	8,016.0	10,916.2	7,678.0	133.3	78.0	-5.40	7,607.6	419.6	408.9	362.1	46.83	8.733															
16,900.0	8,016.0	10,896.8	7,678.3	135.1	77.5	-2.40	7,611.4	438.6	372.3	327.6	44.76	8.318															
16,990.0	8,016.0	10,879.5	7,678.5	136.6	77.1	0.29	7,614.7	455.5	359.6	315.3	44.24	8.127	CC, ES, SF														

Anticollision Report

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

Offset Design		S29-T1N-R68W (Pratt/Waste Connections) - WILLIAM PELTIER 22-20 (EXISTING) - ENCANA WELL -										Offset Site Error:		0.0 ft			
Survey Program:		0-MWD												Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance										
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty	Separation	Warning				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis	Factor					
16,200.0	8,016.0	8,155.7	7,955.0	122.9	31.2	90.00	7,227.3	585.2	434.8	297.9	136.88	3.176					
16,300.0	8,016.0	8,155.7	7,955.0	124.6	31.2	90.00	7,227.3	585.2	341.2	202.6	138.62	2.462					
16,400.0	8,016.0	8,155.7	7,955.0	126.4	31.2	90.00	7,227.3	585.2	252.7	112.4	140.36	1.801					
16,500.0	8,016.0	8,155.7	7,955.0	128.1	31.2	90.00	7,227.3	585.2	176.9	34.8	142.10	1.245	Level 2				
16,600.0	8,016.0	8,155.7	7,955.0	129.9	31.2	90.00	7,227.3	585.2	136.9	-7.0	143.84	0.951	Level 1				
16,612.9	8,016.0	8,155.7	7,955.0	130.1	31.2	90.00	7,227.3	585.2	136.3	-7.8	144.06	0.946	Level 1, CC, ES, SF				
16,700.0	8,016.0	8,155.7	7,955.0	131.6	31.2	90.00	7,227.3	585.2	161.7	16.2	145.58	1.111	Level 2				
16,800.0	8,016.0	8,155.7	7,955.0	133.3	31.2	90.00	7,227.3	585.2	231.5	84.2	147.32	1.571					
16,900.0	8,016.0	8,155.7	7,955.0	135.1	31.2	90.00	7,227.3	585.2	317.8	168.8	149.06	2.132					
16,990.0	8,016.0	8,155.7	7,955.0	136.6	31.2	90.00	7,227.3	585.2	401.0	250.4	150.63	2.662					

Anticollision Report

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

Reference Depths are relative to WELL @ 5153.0ft (Original Well Elev)

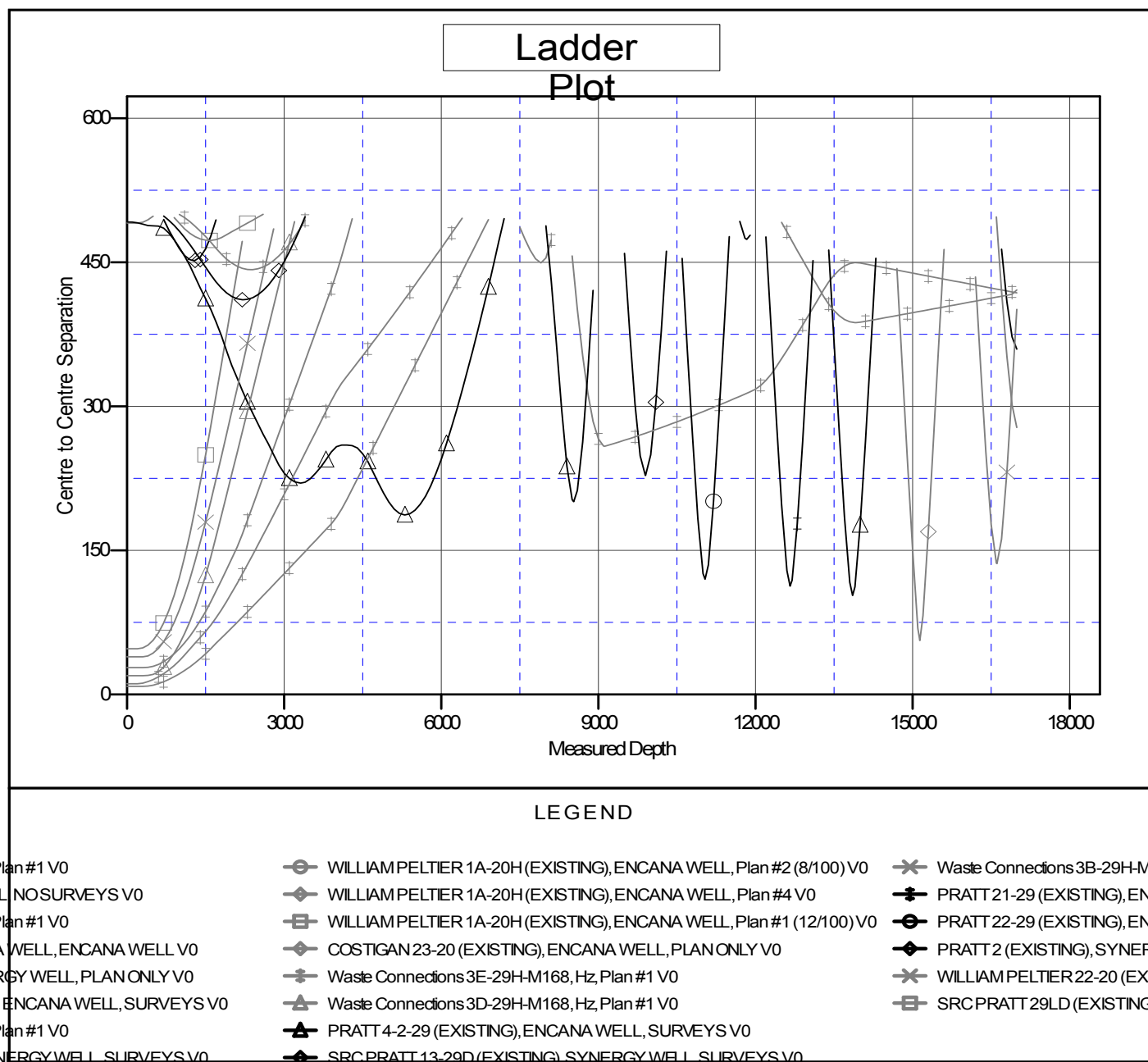
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

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

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.30°



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