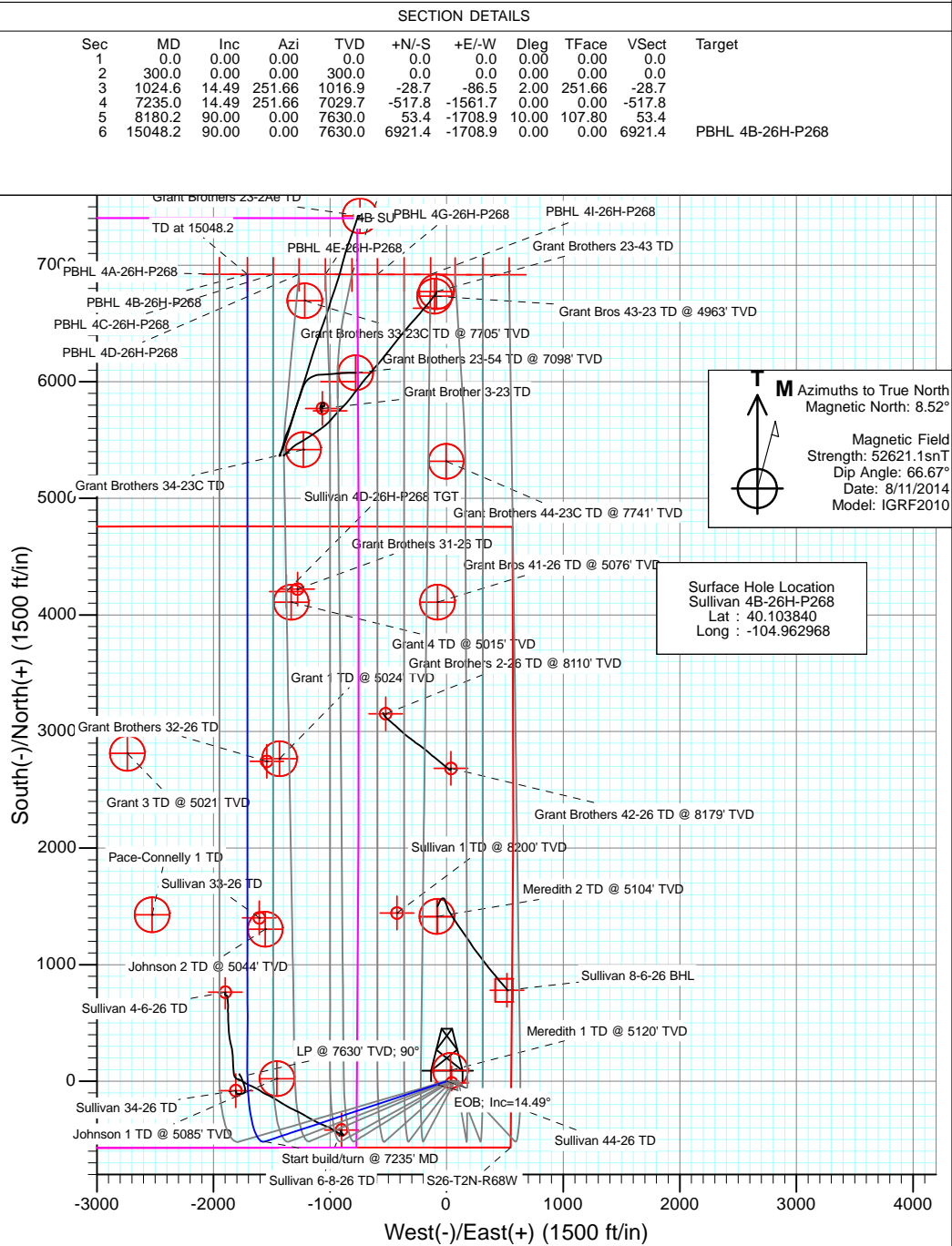
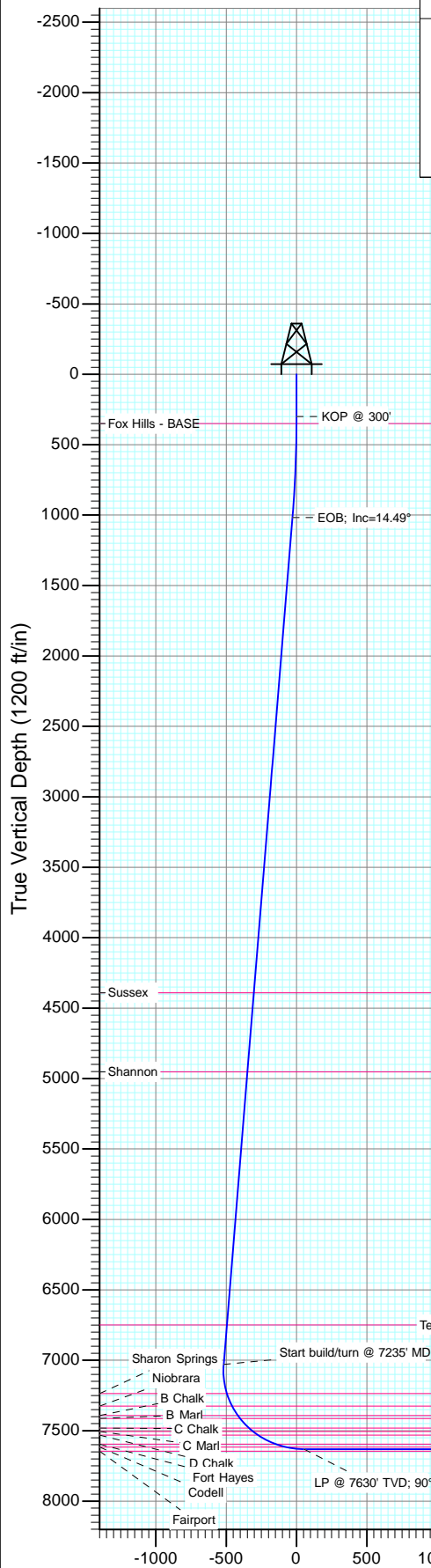




Project: DJ Wattenberg
Site: S26-T2N-R68W (Sullivan)
Well: Sullivan 4B-26H-P268
Wellbore: HZ
Design: Plan #1



DESIGN TARGET DETAILS					
Name	+N/-S	+E/-W	Northing	Easting	Latitude
PBHL 4B-26H-P268	6921.4	-1708.9	1288041.58	3148476.92	40.122840

Plan #1
Sullivan 4B-26H-P268
Well @ 4996.0ft
Ground Elevation @ 4964.0
North American Datum 1983
Well Sullivan 4B-26H-P268, True North

Vertical Section at 0.00° (1200 ft/in)

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	Well @ 4996.0ft
Project:	DJ Wattenberg	MD Reference:	Well @ 4996.0ft
Site:	S26-T2N-R68W (Sullivan)	North Reference:	True
Well:	Sullivan 4B-26H-P268	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		S26-T2N-R68W (Sullivan)			
Site Position:		Northing:	1,282,631.01 ft	Latitude:	40.107960
From:	Lat/Long	Easting:	3,150,139.78 ft	Longitude:	-104.963250
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.35 °

Well	Sullivan 4B-26H-P268					
Well Position	+N/-S	0.0 ft	Northing:	1,281,130.67 ft	Latitude:	40.103840
	+E/-W	0.0 ft	Easting:	3,150,227.74 ft	Longitude:	-104.962968
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level:	4,964.0 ft

Wellbore	HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/11/2014	8.52	66.67	52,621

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	
1,024.6	14.49	251.66	1,016.9	-28.7	-86.5	2.00	2.00	0.00	251.66	
7,235.0	14.49	251.66	7,029.7	-517.8	-1,561.7	0.00	0.00	0.00	0.00	
8,180.2	90.00	0.00	7,630.0	53.4	-1,708.9	10.00	7.99	11.46	107.80	
15,048.2	90.00	0.00	7,630.0	6,921.4	-1,708.9	0.00	0.00	0.00	0.00	PBHL 4B-26H-P268

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	Well @ 4996.0ft
Project:	DJ Wattenberg	MD Reference:	Well @ 4996.0ft
Site:	S26-T2N-R68W (Sullivan)	North Reference:	True
Well:	Sullivan 4B-26H-P268	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'
350.0	1.00	251.66	350.0	-0.1	-0.4	-0.1	2.00	2.00	Fox Hills - BASE
400.0	2.00	251.66	400.0	-0.5	-1.7	-0.5	2.00	2.00	
500.0	4.00	251.66	499.8	-2.2	-6.6	-2.2	2.00	2.00	
600.0	6.00	251.66	599.5	-4.9	-14.9	-4.9	2.00	2.00	
700.0	8.00	251.66	698.7	-8.8	-26.5	-8.8	2.00	2.00	
800.0	10.00	251.66	797.5	-13.7	-41.3	-13.7	2.00	2.00	
900.0	12.00	251.66	895.6	-19.7	-59.4	-19.7	2.00	2.00	
1,000.0	14.00	251.66	993.1	-26.8	-80.8	-26.8	2.00	2.00	
1,024.6	14.49	251.66	1,016.9	-28.7	-86.5	-28.7	2.00	2.00	EOB; Inc=14.49°
1,100.0	14.49	251.66	1,089.9	-34.6	-104.4	-34.6	0.00	0.00	
1,200.0	14.49	251.66	1,186.7	-42.5	-128.2	-42.5	0.00	0.00	
1,300.0	14.49	251.66	1,283.5	-50.4	-151.9	-50.4	0.00	0.00	
1,400.0	14.49	251.66	1,380.4	-58.3	-175.7	-58.3	0.00	0.00	
1,500.0	14.49	251.66	1,477.2	-66.1	-199.4	-66.1	0.00	0.00	
1,600.0	14.49	251.66	1,574.0	-74.0	-223.2	-74.0	0.00	0.00	
1,700.0	14.49	251.66	1,670.8	-81.9	-246.9	-81.9	0.00	0.00	
1,800.0	14.49	251.66	1,767.6	-89.8	-270.7	-89.8	0.00	0.00	
1,900.0	14.49	251.66	1,864.4	-97.6	-294.5	-97.6	0.00	0.00	
2,000.0	14.49	251.66	1,961.3	-105.5	-318.2	-105.5	0.00	0.00	
2,100.0	14.49	251.66	2,058.1	-113.4	-342.0	-113.4	0.00	0.00	
2,200.0	14.49	251.66	2,154.9	-121.3	-365.7	-121.3	0.00	0.00	
2,300.0	14.49	251.66	2,251.7	-129.1	-389.5	-129.1	0.00	0.00	
2,400.0	14.49	251.66	2,348.5	-137.0	-413.2	-137.0	0.00	0.00	
2,500.0	14.49	251.66	2,445.4	-144.9	-437.0	-144.9	0.00	0.00	
2,600.0	14.49	251.66	2,542.2	-152.8	-460.7	-152.8	0.00	0.00	
2,700.0	14.49	251.66	2,639.0	-160.6	-484.5	-160.6	0.00	0.00	
2,800.0	14.49	251.66	2,735.8	-168.5	-508.2	-168.5	0.00	0.00	
2,900.0	14.49	251.66	2,832.6	-176.4	-532.0	-176.4	0.00	0.00	
3,000.0	14.49	251.66	2,929.5	-184.3	-555.7	-184.3	0.00	0.00	
3,100.0	14.49	251.66	3,026.3	-192.1	-579.5	-192.1	0.00	0.00	
3,200.0	14.49	251.66	3,123.1	-200.0	-603.2	-200.0	0.00	0.00	
3,300.0	14.49	251.66	3,219.9	-207.9	-627.0	-207.9	0.00	0.00	
3,400.0	14.49	251.66	3,316.7	-215.8	-650.7	-215.8	0.00	0.00	
3,500.0	14.49	251.66	3,413.5	-223.6	-674.5	-223.6	0.00	0.00	
3,600.0	14.49	251.66	3,510.4	-231.5	-698.3	-231.5	0.00	0.00	
3,700.0	14.49	251.66	3,607.2	-239.4	-722.0	-239.4	0.00	0.00	
3,800.0	14.49	251.66	3,704.0	-247.3	-745.8	-247.3	0.00	0.00	
3,900.0	14.49	251.66	3,800.8	-255.1	-769.5	-255.1	0.00	0.00	
4,000.0	14.49	251.66	3,897.6	-263.0	-793.3	-263.0	0.00	0.00	
4,100.0	14.49	251.66	3,994.5	-270.9	-817.0	-270.9	0.00	0.00	
4,200.0	14.49	251.66	4,091.3	-278.8	-840.8	-278.8	0.00	0.00	
4,300.0	14.49	251.66	4,188.1	-286.6	-864.5	-286.6	0.00	0.00	
4,400.0	14.49	251.66	4,284.9	-294.5	-888.3	-294.5	0.00	0.00	
4,500.0	14.49	251.66	4,381.7	-302.4	-912.0	-302.4	0.00	0.00	
4,509.6	14.49	251.66	4,391.0	-303.2	-914.3	-303.2	0.00	0.00	Sussex
4,600.0	14.49	251.66	4,478.5	-310.3	-935.8	-310.3	0.00	0.00	
4,700.0	14.49	251.66	4,575.4	-318.1	-959.5	-318.1	0.00	0.00	
4,800.0	14.49	251.66	4,672.2	-326.0	-983.3	-326.0	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	Well @ 4996.0ft
Project:	DJ Wattenberg	MD Reference:	Well @ 4996.0ft
Site:	S26-T2N-R68W (Sullivan)	North Reference:	True
Well:	Sullivan 4B-26H-P268	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,900.0	14.49	251.66	4,769.0	-333.9	-1,007.0	-333.9	0.00	0.00	
5,000.0	14.49	251.66	4,865.8	-341.8	-1,030.8	-341.8	0.00	0.00	
5,089.0	14.49	251.66	4,952.0	-348.8	-1,051.9	-348.8	0.00	0.00	Shannon
5,100.0	14.49	251.66	4,962.6	-349.7	-1,054.5	-349.7	0.00	0.00	
5,200.0	14.49	251.66	5,059.5	-357.5	-1,078.3	-357.5	0.00	0.00	
5,300.0	14.49	251.66	5,156.3	-365.4	-1,102.0	-365.4	0.00	0.00	
5,400.0	14.49	251.66	5,253.1	-373.3	-1,125.8	-373.3	0.00	0.00	
5,500.0	14.49	251.66	5,349.9	-381.2	-1,149.6	-381.2	0.00	0.00	
5,600.0	14.49	251.66	5,446.7	-389.0	-1,173.3	-389.0	0.00	0.00	
5,700.0	14.49	251.66	5,543.6	-396.9	-1,197.1	-396.9	0.00	0.00	
5,800.0	14.49	251.66	5,640.4	-404.8	-1,220.8	-404.8	0.00	0.00	
5,900.0	14.49	251.66	5,737.2	-412.7	-1,244.6	-412.7	0.00	0.00	
6,000.0	14.49	251.66	5,834.0	-420.5	-1,268.3	-420.5	0.00	0.00	
6,100.0	14.49	251.66	5,930.8	-428.4	-1,292.1	-428.4	0.00	0.00	
6,200.0	14.49	251.66	6,027.6	-436.3	-1,315.8	-436.3	0.00	0.00	
6,300.0	14.49	251.66	6,124.5	-444.2	-1,339.6	-444.2	0.00	0.00	
6,400.0	14.49	251.66	6,221.3	-452.0	-1,363.3	-452.0	0.00	0.00	
6,500.0	14.49	251.66	6,318.1	-459.9	-1,387.1	-459.9	0.00	0.00	
6,600.0	14.49	251.66	6,414.9	-467.8	-1,410.8	-467.8	0.00	0.00	
6,700.0	14.49	251.66	6,511.7	-475.7	-1,434.6	-475.7	0.00	0.00	
6,800.0	14.49	251.66	6,608.6	-483.5	-1,458.3	-483.5	0.00	0.00	
6,900.0	14.49	251.66	6,705.4	-491.4	-1,482.1	-491.4	0.00	0.00	
6,944.0	14.49	251.66	6,748.0	-494.9	-1,492.6	-494.9	0.00	0.00	Teepee Buttes (*if present)
7,000.0	14.49	251.66	6,802.2	-499.3	-1,505.8	-499.3	0.00	0.00	
7,100.0	14.49	251.66	6,899.0	-507.2	-1,529.6	-507.2	0.00	0.00	
7,200.0	14.49	251.66	6,995.8	-515.0	-1,553.4	-515.0	0.00	0.00	
7,235.0	14.49	251.66	7,029.7	-517.8	-1,561.7	-517.8	0.00	0.00	Start build/turn @ 7235' MD
7,300.0	13.92	278.26	7,092.8	-519.2	-1,577.1	-519.2	10.00	-0.88	
7,400.0	18.19	311.69	7,189.1	-507.1	-1,600.8	-507.1	10.00	4.26	
7,449.9	21.74	322.03	7,236.0	-494.6	-1,612.3	-494.6	10.00	7.11	Sharon Springs
7,500.0	25.76	329.45	7,281.8	-477.9	-1,623.5	-477.9	10.00	8.04	
7,547.7	29.86	334.70	7,324.0	-458.3	-1,633.9	-458.3	10.00	8.59	Niobrara
7,600.0	34.53	339.11	7,368.3	-432.6	-1,644.7	-432.6	10.00	8.94	
7,629.3	37.21	341.15	7,392.0	-416.5	-1,650.5	-416.5	10.01	9.14	B Chalk
7,656.1	39.69	342.80	7,413.0	-400.6	-1,655.7	-400.6	10.00	9.24	B Marl
7,700.0	43.78	345.17	7,445.8	-372.5	-1,663.7	-372.5	10.00	9.33	
7,750.9	48.59	347.50	7,481.0	-336.8	-1,672.4	-336.8	10.00	9.44	C Chalk
7,786.9	52.01	348.96	7,504.0	-309.7	-1,678.0	-309.7	10.00	9.51	C Marl
7,800.0	53.26	349.45	7,511.9	-299.5	-1,680.0	-299.5	9.99	9.53	
7,833.1	56.43	350.63	7,531.0	-272.8	-1,684.7	-272.8	10.00	9.57	D Chalk
7,900.0	62.86	352.77	7,564.8	-215.8	-1,692.9	-215.8	10.00	9.61	
7,973.0	69.90	354.85	7,594.0	-149.4	-1,700.1	-149.4	10.00	9.66	Fort Hayes
8,000.0	72.52	355.57	7,602.7	-123.8	-1,702.2	-123.8	9.99	9.67	
8,051.4	77.50	356.88	7,616.0	-74.3	-1,705.5	-74.3	10.00	9.69	Codell
8,100.0	82.21	358.08	7,624.6	-26.5	-1,707.6	-26.5	10.00	9.70	
8,180.2	90.00	0.00	7,630.0	53.4	-1,708.9	53.4	10.00	9.71	LP @ 7630' TVD; 90°
8,200.0	90.00	0.00	7,630.0	73.2	-1,708.9	73.2	0.00	0.00	
8,300.0	90.00	0.00	7,630.0	173.2	-1,708.9	173.2	0.00	0.00	
8,400.0	90.00	0.00	7,630.0	273.2	-1,708.9	273.2	0.00	0.00	
8,500.0	90.00	0.00	7,630.0	373.2	-1,708.9	373.2	0.00	0.00	
8,600.0	90.00	0.00	7,630.0	473.2	-1,708.9	473.2	0.00	0.00	
8,700.0	90.00	0.00	7,630.0	573.2	-1,708.9	573.2	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	Well @ 4996.0ft
Project:	DJ Wattenberg	MD Reference:	Well @ 4996.0ft
Site:	S26-T2N-R68W (Sullivan)	North Reference:	True
Well:	Sullivan 4B-26H-P268	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
8,800.0	90.00	0.00	7,630.0	673.2	-1,708.9	673.2	0.00	0.00	
8,900.0	90.00	0.00	7,630.0	773.2	-1,708.9	773.2	0.00	0.00	
9,000.0	90.00	0.00	7,630.0	873.2	-1,708.9	873.2	0.00	0.00	
9,100.0	90.00	0.00	7,630.0	973.2	-1,708.9	973.2	0.00	0.00	
9,200.0	90.00	0.00	7,630.0	1,073.2	-1,708.9	1,073.2	0.00	0.00	
9,300.0	90.00	0.00	7,630.0	1,173.2	-1,708.9	1,173.2	0.00	0.00	
9,400.0	90.00	0.00	7,630.0	1,273.2	-1,708.9	1,273.2	0.00	0.00	
9,500.0	90.00	0.00	7,630.0	1,373.2	-1,708.9	1,373.2	0.00	0.00	
9,600.0	90.00	0.00	7,630.0	1,473.2	-1,708.9	1,473.2	0.00	0.00	
9,700.0	90.00	0.00	7,630.0	1,573.2	-1,708.9	1,573.2	0.00	0.00	
9,800.0	90.00	0.00	7,630.0	1,673.2	-1,708.9	1,673.2	0.00	0.00	
9,900.0	90.00	0.00	7,630.0	1,773.2	-1,708.9	1,773.2	0.00	0.00	
10,000.0	90.00	0.00	7,630.0	1,873.2	-1,708.9	1,873.2	0.00	0.00	
10,100.0	90.00	0.00	7,630.0	1,973.2	-1,708.9	1,973.2	0.00	0.00	
10,200.0	90.00	0.00	7,630.0	2,073.2	-1,708.9	2,073.2	0.00	0.00	
10,300.0	90.00	0.00	7,630.0	2,173.2	-1,708.9	2,173.2	0.00	0.00	
10,400.0	90.00	0.00	7,630.0	2,273.2	-1,708.9	2,273.2	0.00	0.00	
10,500.0	90.00	0.00	7,630.0	2,373.2	-1,708.9	2,373.2	0.00	0.00	
10,600.0	90.00	0.00	7,630.0	2,473.2	-1,708.9	2,473.2	0.00	0.00	
10,700.0	90.00	0.00	7,630.0	2,573.2	-1,708.9	2,573.2	0.00	0.00	
10,800.0	90.00	0.00	7,630.0	2,673.2	-1,708.9	2,673.2	0.00	0.00	
10,900.0	90.00	0.00	7,630.0	2,773.2	-1,708.9	2,773.2	0.00	0.00	
11,000.0	90.00	0.00	7,630.0	2,873.2	-1,708.9	2,873.2	0.00	0.00	
11,100.0	90.00	0.00	7,630.0	2,973.2	-1,708.9	2,973.2	0.00	0.00	
11,200.0	90.00	0.00	7,630.0	3,073.2	-1,708.9	3,073.2	0.00	0.00	
11,300.0	90.00	0.00	7,630.0	3,173.2	-1,708.9	3,173.2	0.00	0.00	
11,400.0	90.00	0.00	7,630.0	3,273.2	-1,708.9	3,273.2	0.00	0.00	
11,500.0	90.00	0.00	7,630.0	3,373.2	-1,708.9	3,373.2	0.00	0.00	
11,600.0	90.00	0.00	7,630.0	3,473.2	-1,708.9	3,473.2	0.00	0.00	
11,700.0	90.00	0.00	7,630.0	3,573.2	-1,708.9	3,573.2	0.00	0.00	
11,800.0	90.00	0.00	7,630.0	3,673.2	-1,708.9	3,673.2	0.00	0.00	
11,900.0	90.00	0.00	7,630.0	3,773.2	-1,708.9	3,773.2	0.00	0.00	
12,000.0	90.00	0.00	7,630.0	3,873.2	-1,708.9	3,873.2	0.00	0.00	
12,100.0	90.00	0.00	7,630.0	3,973.2	-1,708.9	3,973.2	0.00	0.00	
12,200.0	90.00	0.00	7,630.0	4,073.2	-1,708.9	4,073.2	0.00	0.00	
12,300.0	90.00	0.00	7,630.0	4,173.2	-1,708.9	4,173.2	0.00	0.00	
12,400.0	90.00	0.00	7,630.0	4,273.2	-1,708.9	4,273.2	0.00	0.00	
12,500.0	90.00	0.00	7,630.0	4,373.2	-1,708.9	4,373.2	0.00	0.00	
12,600.0	90.00	0.00	7,630.0	4,473.2	-1,708.9	4,473.2	0.00	0.00	
12,700.0	90.00	0.00	7,630.0	4,573.2	-1,708.9	4,573.2	0.00	0.00	
12,800.0	90.00	0.00	7,630.0	4,673.2	-1,708.9	4,673.2	0.00	0.00	
12,900.0	90.00	0.00	7,630.0	4,773.2	-1,708.9	4,773.2	0.00	0.00	
13,000.0	90.00	0.00	7,630.0	4,873.2	-1,708.9	4,873.2	0.00	0.00	
13,100.0	90.00	0.00	7,630.0	4,973.2	-1,708.9	4,973.2	0.00	0.00	
13,200.0	90.00	0.00	7,630.0	5,073.2	-1,708.9	5,073.2	0.00	0.00	
13,300.0	90.00	0.00	7,630.0	5,173.2	-1,708.9	5,173.2	0.00	0.00	
13,400.0	90.00	0.00	7,630.0	5,273.2	-1,708.9	5,273.2	0.00	0.00	
13,500.0	90.00	0.00	7,630.0	5,373.2	-1,708.9	5,373.2	0.00	0.00	
13,600.0	90.00	0.00	7,630.0	5,473.2	-1,708.9	5,473.2	0.00	0.00	
13,700.0	90.00	0.00	7,630.0	5,573.2	-1,708.9	5,573.2	0.00	0.00	
13,800.0	90.00	0.00	7,630.0	5,673.2	-1,708.9	5,673.2	0.00	0.00	
13,900.0	90.00	0.00	7,630.0	5,773.2	-1,708.9	5,773.2	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	Well @ 4996.0ft
Project:	DJ Wattenberg	MD Reference:	Well @ 4996.0ft
Site:	S26-T2N-R68W (Sullivan)	North Reference:	True
Well:	Sullivan 4B-26H-P268	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
14,000.0	90.00	0.00	7,630.0	5,873.2	-1,708.9	5,873.2	0.00	0.00	
14,100.0	90.00	0.00	7,630.0	5,973.2	-1,708.9	5,973.2	0.00	0.00	
14,200.0	90.00	0.00	7,630.0	6,073.2	-1,708.9	6,073.2	0.00	0.00	
14,300.0	90.00	0.00	7,630.0	6,173.2	-1,708.9	6,173.2	0.00	0.00	
14,400.0	90.00	0.00	7,630.0	6,273.2	-1,708.9	6,273.2	0.00	0.00	
14,500.0	90.00	0.00	7,630.0	6,373.2	-1,708.9	6,373.2	0.00	0.00	
14,600.0	90.00	0.00	7,630.0	6,473.2	-1,708.9	6,473.2	0.00	0.00	
14,700.0	90.00	0.00	7,630.0	6,573.2	-1,708.9	6,573.2	0.00	0.00	
14,800.0	90.00	0.00	7,630.0	6,673.2	-1,708.9	6,673.2	0.00	0.00	
14,900.0	90.00	0.00	7,630.0	6,773.2	-1,708.9	6,773.2	0.00	0.00	
15,000.0	90.00	0.00	7,630.0	6,873.2	-1,708.9	6,873.2	0.00	0.00	
15,048.2	90.00	0.00	7,630.0	6,921.4	-1,708.9	6,921.4	0.00	0.00	TD at 15048.2

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL 4B-26H-P268 - plan hits target center - Point	0.00	0.00	7,630.0	6,921.4	-1,708.9	1,288,041.58	3,148,476.92	40.122840	-104.969079

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
350.0	350.0	Fox Hills - BASE			
4,509.6	4,391.0	Sussex			
5,089.0	4,952.0	Shannon			
6,944.0	6,748.0	Teepee Buttes (*if present)			
7,449.9	7,236.0	Sharon Springs			
7,547.7	7,324.0	Niobrara			
7,629.3	7,392.0	B Chalk			
7,656.1	7,413.0	B Marl			
7,750.9	7,481.0	C Chalk			
7,786.9	7,504.0	C Marl			
7,833.1	7,531.0	D Chalk			
7,973.0	7,594.0	Fort Hayes			
8,051.4	7,616.0	Codell			

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	Well @ 4996.0ft
Project:	DJ Wattenberg	MD Reference:	Well @ 4996.0ft
Site:	S26-T2N-R68W (Sullivan)	North Reference:	True
Well:	Sullivan 4B-26H-P268	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

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'
1,024.6	1,016.9	-28.7	-86.5	EOB; Inc=14.49°
7,235.0	7,029.7	-517.8	-1,561.7	Start build/turn @ 7235' MD
8,180.2	7,630.0	53.4	-1,708.9	LP @ 7630' TVD; 90°
15,048.2	7,630.0	6,921.4	-1,708.9	TD at 15048.2

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S26-T2N-R68W (Sullivan)

Sullivan 4B-26H-P268

HZ

Plan #1

Anticollision Report

26 August, 2014

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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:	0.0 to 14,337.0ft	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	8/26/2014		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	15,048.2	Plan #1 (HZ)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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						
S26-T2N-R68W (Sullivan)						
BERGER 32-23 (EXISTING) - SUNDANCE WELL - NO S						Out of range
BERGER 42-23C (EXISTING) - SUNDANCE WELL - NO						Out of range
GRANT 1 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
GRANT 3 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
GRANT 4 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
GRANT BROS 41-26 (EXISTING) - SUNDANCE WELL -						Out of range
GRANT BROS 43-23 (EXISTING) - SUNDANCE WELL -						Out of range
GRANT BROTHERS 2-26 (EXISTING) - ENCANA WELL						Out of range
GRANT BROTHERS 23-2Ae (EXISTING) - SUNDANCE						Out of range
GRANT BROTHERS 23-43 (EXISTING) - SUNDANCE W						Out of range
GRANT BROTHERS 23-54 (EXISTING) - SUNDANCE W						Out of range
GRANT BROTHERS 31-26 (EXISTING) - ENCANA WEL	12,347.7	7,559.0	430.0	339.7	4.762	CC, ES
GRANT BROTHERS 31-26 (EXISTING) - ENCANA WEL	12,400.0	7,559.0	433.1	341.9	4.750	SF
GRANT BROTHERS 32-26 (EXISTING) - ENCANA WEL	10,870.6	7,565.0	165.6	100.5	2.546	CC, ES, SF
GRANT BROTHERS 3-23 (EXISTING) - ENCANA WELL	13,902.4	7,567.6	641.6	531.0	5.799	CC, ES
GRANT BROTHERS 3-23 (EXISTING) - ENCANA WELL	14,000.0	7,566.2	649.0	536.7	5.777	SF
GRANT BROTHERS 33-23C (EXISTING) - SUNDANCE	14,300.0	7,545.0	716.9	592.8	5.776	CC, ES, SF
GRANT BROTHERS 34-23C (EXISTING) - SUNDANCE	13,545.5	7,551.0	480.1	369.1	4.325	CC, ES
GRANT BROTHERS 34-23C (EXISTING) - SUNDANCE	13,600.0	7,551.0	483.2	371.2	4.316	SF
GRANT BROTHERS 42-26 (EXISTING) - ENCANA WEL						Out of range
GRANT BROTHERS 44-23C (EXISTING) - SUNDANCE						Out of range
JOHNSON 1 (EXISTING) - KPK WELL - NO SURVEYS	5,341.5	5,085.0	522.6	492.2	17.207	CC, ES
JOHNSON 1 (EXISTING) - KPK WELL - NO SURVEYS	5,400.0	5,085.0	525.9	495.2	17.167	SF
JOHNSON 2 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
MEREDITH 1 (EXISTING) - KPK WELL - NO SURVEYS	300.0	263.0	98.3	97.4	106.054	CC, ES
MEREDITH 1 (EXISTING) - KPK WELL - NO SURVEYS	900.0	858.6	145.1	142.0	46.110	SF
MEREDITH 2 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
PACE-CONNELLY 1 (EXISTING) - FOUNDATION WELL						Out of range
SULLIVAN 1 (EXISTING) - ENCANA WELL - NO SURVE						Out of range
SULLIVAN 33-26 (EXISTING) - ENCANA WELL - NO SU	9,528.2	7,573.0	101.4	58.4	2.357	CC, ES, SF
SULLIVAN 34-26 (EXISTING) - ENCANA WELL - SURVE	8,042.3	7,563.6	101.6	74.3	3.715	CC, ES, SF
SULLIVAN 44-26 (EXISTING) - ENCANA WELL - NO SU	300.0	265.0	45.6	44.7	49.000	CC, ES
SULLIVAN 44-26 (EXISTING) - ENCANA WELL - NO SU	600.0	564.5	58.8	56.8	29.601	SF
SULLIVAN 4-6-26 (EXISTING) - ENCANA WELL - SURV	8,883.2	7,660.8	188.7	149.6	4.821	CC, ES
SULLIVAN 4-6-26 (EXISTING) - ENCANA WELL - SURV	8,900.0	7,661.0	189.4	150.1	4.814	SF
Sullivan 4A-26H-P268 - HZ - Plan #1	200.0	199.0	10.1	9.5	17.223	CC, ES
Sullivan 4A-26H-P268 - HZ - Plan #1	14,300.0	14,226.7	275.8	80.2	1.410	Level 3, SF
Sullivan 4C-26H-P268 - HZ - Plan #1	300.0	300.0	10.1	9.1	10.765	CC, ES
Sullivan 4C-26H-P268 - HZ - Plan #1	14,300.0	14,036.7	316.1	157.3	1.991	SF
Sullivan 4D-26H-P268 - HZ - Plan #1	300.0	300.0	19.9	18.9	21.230	CC, ES
Sullivan 4D-26H-P268 - HZ - Plan #1	13,800.0	13,561.6	351.9	163.2	1.865	SF
Sullivan 4E-26H-P268 - HZ - Plan #1	300.0	300.0	29.9	29.0	31.995	CC, ES
Sullivan 4E-26H-P268 - HZ - Plan #1	14,300.0	14,199.5	696.8	474.5	3.134	SF
Sullivan 4F-26H-P268 - HZ - Plan #1	300.0	300.0	40.0	39.1	42.761	CC, ES
Sullivan 4F-26H-P268 - HZ - Plan #1	14,300.0	13,900.0	808.8	596.2	3.804	SF
Sullivan 4G-26H-P268 - HZ - Plan #1	300.0	300.0	50.1	49.1	53.525	CC, ES
Sullivan 4G-26H-P268 - HZ - Plan #1	7,000.0	6,948.1	976.9	946.2	31.829	SF
Sullivan 4H-26H-P268 - HZ - Plan #1	300.0	301.0	59.9	58.9	63.871	CC, ES
Sullivan 4H-26H-P268 - HZ - Plan #1	700.0	699.7	86.7	84.4	37.249	SF
Sullivan 4I-26H-P268 - HZ - Plan #1	300.0	301.0	69.9	69.0	74.616	CC, ES
Sullivan 4I-26H-P268 - HZ - Plan #1	700.0	699.7	96.8	94.4	41.541	SF
Sullivan 4J-26H-P268 - HZ - Plan #1	300.0	300.0	80.0	79.1	85.519	CC, ES
Sullivan 4J-26H-P268 - HZ - Plan #1	800.0	797.5	122.0	119.4	45.676	SF

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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)		Separation Factor	Warning
Offset Well - Wellbore - Design						
S26-T2N-R68W (Sullivan)						
Sullivan 4K-26H-P268 - HZ - Plan #1	300.0	300.0	90.1	89.1	96.284	CC, ES
Sullivan 4K-26H-P268 - HZ - Plan #1	800.0	797.5	132.1	129.4	49.402	SF
Sullivan 4L-26H-P268 - HZ - Plan #1	300.0	300.0	99.9	98.9	106.751	CC, ES
Sullivan 4L-26H-P268 - HZ - Plan #1	800.0	797.5	141.8	139.1	53.009	SF
SULLIVAN 6-8-26 (EXISTING) - ENCANA WELL - SURV	4,567.8	4,526.0	153.7	118.5	4.360	CC, ES, SF
SULLIVAN 8-6-26 (EXISTING) - ENCANA WELL - SURV						Out of range

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - GRANT BROTHERS 31-26 (EXISTING) - ENCANA WELL - NO SURVEYS													Offset Site Error: 0.0 ft
Survey Program: 8118-Geolink MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
11,500.0	7,630.0	7,559.0	7,559.0	69.4	13.2	90.00	4,220.9	-1,279.0	950.5	874.8	75.72	12.553	
11,600.0	7,630.0	7,559.0	7,559.0	70.9	13.2	90.00	4,220.9	-1,279.0	862.6	785.1	77.43	11.140	
11,700.0	7,630.0	7,559.0	7,559.0	72.5	13.2	90.00	4,220.9	-1,279.0	777.5	698.3	79.14	9.823	
11,800.0	7,630.0	7,559.0	7,559.0	74.1	13.2	90.00	4,220.9	-1,279.0	696.3	615.5	80.86	8.612	
11,900.0	7,630.0	7,559.0	7,559.0	75.6	13.2	90.00	4,220.9	-1,279.0	620.8	538.2	82.58	7.517	
12,000.0	7,630.0	7,559.0	7,559.0	77.2	13.2	90.00	4,220.9	-1,279.0	553.0	468.7	84.30	6.560	
12,100.0	7,630.0	7,559.0	7,559.0	78.8	13.2	90.00	4,220.9	-1,279.0	496.2	410.2	86.02	5.769	
12,200.0	7,630.0	7,559.0	7,559.0	80.4	13.2	90.00	4,220.9	-1,279.0	454.6	366.9	87.74	5.182	
12,300.0	7,630.0	7,559.0	7,559.0	82.0	13.2	90.00	4,220.9	-1,279.0	432.6	343.1	89.46	4.835	
12,347.7	7,630.0	7,559.0	7,559.0	82.7	13.2	90.00	4,220.9	-1,279.0	430.0	339.7	90.29	4.762 CC, ES	
12,400.0	7,630.0	7,559.0	7,559.0	83.6	13.2	90.00	4,220.9	-1,279.0	433.1	341.9	91.19	4.750 SF	
12,500.0	7,630.0	7,559.0	7,559.0	85.2	13.2	90.00	4,220.9	-1,279.0	456.1	363.2	92.92	4.909	
12,600.0	7,630.0	7,559.0	7,559.0	86.8	13.2	90.00	4,220.9	-1,279.0	498.5	403.9	94.64	5.267	
12,700.0	7,630.0	7,559.0	7,559.0	88.4	13.2	90.00	4,220.9	-1,279.0	555.8	459.5	96.37	5.768	
12,800.0	7,630.0	7,559.0	7,559.0	90.1	13.2	90.00	4,220.9	-1,279.0	624.0	525.9	98.10	6.361	
12,900.0	7,630.0	7,559.0	7,559.0	91.7	13.2	90.00	4,220.9	-1,279.0	699.9	600.1	99.83	7.011	
13,000.0	7,630.0	7,559.0	7,559.0	93.3	13.2	90.00	4,220.9	-1,279.0	781.2	679.7	101.57	7.692	
13,100.0	7,630.0	7,559.0	7,559.0	95.0	13.2	90.00	4,220.9	-1,279.0	866.5	763.2	103.30	8.388	
13,200.0	7,630.0	7,559.0	7,559.0	96.6	13.2	90.00	4,220.9	-1,279.0	954.6	849.5	105.03	9.088	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - GRANT BROTHERS 32-26 (EXISTING) - ENCANA WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8140-Geolink 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			
9,900.0	7,630.0	7,565.0	7,565.0	46.8	13.2	90.00	2,743.8	-1,543.4	984.6	935.7	48.92	20.128		
10,000.0	7,630.0	7,565.0	7,565.0	48.1	13.2	90.00	2,743.8	-1,543.4	886.2	835.7	50.54	17.535		
10,100.0	7,630.0	7,565.0	7,565.0	49.3	13.2	90.00	2,743.8	-1,543.4	788.2	736.0	52.17	15.107		
10,200.0	7,630.0	7,565.0	7,565.0	50.6	13.2	90.00	2,743.8	-1,543.4	690.7	636.9	53.82	12.835		
10,300.0	7,630.0	7,565.0	7,565.0	52.0	13.2	90.00	2,743.8	-1,543.4	594.1	538.7	55.47	10.711		
10,400.0	7,630.0	7,565.0	7,565.0	53.3	13.2	90.00	2,743.8	-1,543.4	498.9	441.8	57.13	8.732		
10,500.0	7,630.0	7,565.0	7,565.0	54.7	13.2	90.00	2,743.8	-1,543.4	405.9	347.1	58.80	6.904		
10,600.0	7,630.0	7,565.0	7,565.0	56.1	13.2	90.00	2,743.8	-1,543.4	317.2	256.8	60.47	5.246		
10,700.0	7,630.0	7,565.0	7,565.0	57.5	13.2	90.00	2,743.8	-1,543.4	237.7	175.6	62.15	3.825		
10,800.0	7,630.0	7,565.0	7,565.0	58.9	13.2	90.00	2,743.8	-1,543.4	180.0	116.2	63.83	2.820		
10,870.6	7,630.0	7,565.0	7,565.0	59.9	13.2	90.00	2,743.8	-1,543.4	165.6	100.5	65.03	2.546 CC, ES, SF		
10,900.0	7,630.0	7,565.0	7,565.0	60.4	13.2	90.00	2,743.8	-1,543.4	168.2	102.6	65.52	2.566		
11,000.0	7,630.0	7,565.0	7,565.0	61.8	13.2	90.00	2,743.8	-1,543.4	210.1	142.9	67.22	3.126		
11,100.0	7,630.0	7,565.0	7,565.0	63.3	13.2	90.00	2,743.8	-1,543.4	282.9	214.0	68.91	4.105		
11,200.0	7,630.0	7,565.0	7,565.0	64.8	13.2	90.00	2,743.8	-1,543.4	368.7	298.1	70.61	5.221		
11,300.0	7,630.0	7,565.0	7,565.0	66.3	13.2	90.00	2,743.8	-1,543.4	460.2	387.9	72.32	6.364		
11,400.0	7,630.0	7,565.0	7,565.0	67.9	13.2	90.00	2,743.8	-1,543.4	554.7	480.7	74.02	7.493		
11,500.0	7,630.0	7,565.0	7,565.0	69.4	13.2	90.00	2,743.8	-1,543.4	650.8	575.1	75.73	8.594		
11,600.0	7,630.0	7,565.0	7,565.0	70.9	13.2	90.00	2,743.8	-1,543.4	747.9	670.5	77.44	9.658		
11,700.0	7,630.0	7,565.0	7,565.0	72.5	13.2	90.00	2,743.8	-1,543.4	845.8	766.6	79.16	10.685		
11,800.0	7,630.0	7,565.0	7,565.0	74.1	13.2	90.00	2,743.8	-1,543.4	944.0	863.2	80.87	11.673		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - GRANT BROTHERS 3-23 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 100-Gyro													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		
13,200.0	7,630.0	7,577.5	7,575.1	96.6	6.6	90.54	5,775.5	-1,067.3	951.3	852.9	98.46	9.662		
13,300.0	7,630.0	7,576.1	7,573.7	98.3	6.6	90.42	5,775.5	-1,067.3	880.1	779.9	100.19	8.784		
13,400.0	7,630.0	7,574.7	7,572.3	99.9	6.6	90.30	5,775.5	-1,067.3	814.9	713.0	101.93	7.995		
13,500.0	7,630.0	7,573.3	7,570.9	101.6	6.6	90.17	5,775.5	-1,067.3	757.4	653.7	103.66	7.306		
13,600.0	7,630.0	7,571.9	7,569.5	103.2	6.6	90.05	5,775.6	-1,067.3	709.3	603.9	105.40	6.730		
13,700.0	7,630.0	7,570.5	7,568.1	104.9	6.6	89.92	5,775.6	-1,067.3	672.8	565.7	107.13	6.280		
13,800.0	7,630.0	7,569.0	7,566.7	106.6	6.6	89.79	5,775.6	-1,067.3	649.8	540.9	108.87	5.968		
13,900.0	7,630.0	7,567.6	7,565.2	108.2	6.6	89.66	5,775.6	-1,067.3	641.6	531.0	110.60	5.801		
13,902.4	7,630.0	7,567.6	7,565.2	108.3	6.6	89.66	5,775.6	-1,067.3	641.6	531.0	110.64	5.799 CC, ES		
14,000.0	7,630.0	7,566.2	7,563.8	109.9	6.6	89.54	5,775.7	-1,067.3	649.0	536.7	112.34	5.777 SF		
14,100.0	7,630.0	7,564.7	7,562.4	111.6	6.6	89.41	5,775.7	-1,067.3	671.4	557.3	114.07	5.885		
14,200.0	7,630.0	7,563.2	7,560.9	113.3	6.6	89.28	5,775.7	-1,067.3	707.3	591.5	115.80	6.107		
14,300.0	7,630.0	7,561.8	7,559.4	114.9	6.6	89.14	5,775.7	-1,067.4	754.8	637.3	117.54	6.422		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - GRANT BROTHERS 33-23C (EXISTING) - SUNDANCE WELL - NO SURV												Offset Site Error:	0.0 ft
Survey Program: 8100-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
14,000.0	7,630.0	7,545.0	7,545.0	109.9	13.2	90.00	6,694.8	-1,217.0	957.6	838.7	118.90	8.054	
14,100.0	7,630.0	7,545.0	7,545.0	111.6	13.2	90.00	6,694.8	-1,217.0	873.3	752.6	120.64	7.239	
14,200.0	7,630.0	7,545.0	7,545.0	113.3	13.2	90.00	6,694.8	-1,217.0	792.7	670.3	122.38	6.477	
14,300.0	7,630.0	7,545.0	7,545.0	114.9	13.2	90.00	6,694.8	-1,217.0	716.9	592.8	124.12	5.776	CC, ES, SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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										S26-T2N-R68W (Sullivan) - GRANT BROTHERS 34-23C (EXISTING) - SUNDANCE WELL - NO SURV				Offset Site Error:		0.0 ft
Survey Program:										8090-Geolink MWD				Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance									
Measured Depth	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between	Total	Separation	Warning			
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Centres (ft)	Ellipses (ft)	Uncertainty Axis	Factor				
12,700.0	7,630.0	7,551.0	7,551.0	88.4	13.2	90.00	5,418.7	-1,228.9	972.3	875.9	96.36	10.090				
12,800.0	7,630.0	7,551.0	7,551.0	90.1	13.2	90.00	5,418.7	-1,228.9	886.7	788.6	98.09	9.040				
12,900.0	7,630.0	7,551.0	7,551.0	91.7	13.2	90.00	5,418.7	-1,228.9	804.5	704.6	99.82	8.059				
13,000.0	7,630.0	7,551.0	7,551.0	93.3	13.2	90.00	5,418.7	-1,228.9	726.7	625.1	101.55	7.156				
13,100.0	7,630.0	7,551.0	7,551.0	95.0	13.2	90.00	5,418.7	-1,228.9	654.9	551.7	103.28	6.341				
13,200.0	7,630.0	7,551.0	7,551.0	96.6	13.2	90.00	5,418.7	-1,228.9	591.5	486.5	105.02	5.632				
13,300.0	7,630.0	7,551.0	7,551.0	98.3	13.2	90.00	5,418.7	-1,228.9	539.2	432.5	106.75	5.051				
13,400.0	7,630.0	7,551.0	7,551.0	99.9	13.2	90.00	5,418.7	-1,228.9	501.6	393.2	108.49	4.624				
13,500.0	7,630.0	7,551.0	7,551.0	101.6	13.2	90.00	5,418.7	-1,228.9	482.2	372.0	110.22	4.375				
13,545.5	7,630.0	7,551.0	7,551.0	102.3	13.2	90.00	5,418.7	-1,228.9	480.1	369.1	111.01	4.325 CC, ES				
13,600.0	7,630.0	7,551.0	7,551.0	103.2	13.2	90.00	5,418.7	-1,228.9	483.2	371.2	111.96	4.316 SF				
13,700.0	7,630.0	7,551.0	7,551.0	104.9	13.2	90.00	5,418.7	-1,228.9	504.3	390.6	113.70	4.436				
13,800.0	7,630.0	7,551.0	7,551.0	106.6	13.2	90.00	5,418.7	-1,228.9	543.4	427.9	115.43	4.707				
13,900.0	7,630.0	7,551.0	7,551.0	108.2	13.2	90.00	5,418.7	-1,228.9	596.8	479.6	117.17	5.093				
14,000.0	7,630.0	7,551.0	7,551.0	109.9	13.2	90.00	5,418.7	-1,228.9	661.1	542.2	118.91	5.560				
14,100.0	7,630.0	7,551.0	7,551.0	111.6	13.2	90.00	5,418.7	-1,228.9	733.5	612.8	120.65	6.079				
14,200.0	7,630.0	7,551.0	7,551.0	113.3	13.2	90.00	5,418.7	-1,228.9	811.7	689.3	122.39	6.632				
14,300.0	7,630.0	7,551.0	7,551.0	114.9	13.2	90.00	5,418.7	-1,228.9	894.3	770.2	124.13	7.205				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - JOHNSON 1 (EXISTING) - KPK WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 5085-Geolink 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		
2,700.0	2,639.0	2,580.0	2,580.0	10.4	4.5	29.79	21.9	-1,455.1	987.7	976.7	11.02	89.661		
2,800.0	2,735.8	2,676.8	2,676.8	10.9	4.7	30.52	21.9	-1,455.1	965.9	954.3	11.54	83.683		
2,900.0	2,832.6	2,773.6	2,773.6	11.4	4.8	31.28	21.9	-1,455.1	944.2	932.1	12.08	78.163		
3,000.0	2,929.4	2,870.4	2,870.4	11.9	5.0	32.08	21.9	-1,455.1	922.7	910.1	12.63	73.053		
3,100.0	3,026.3	2,967.3	2,967.3	12.4	5.2	32.92	21.9	-1,455.1	901.4	888.2	13.20	68.315		
3,200.0	3,123.1	3,064.1	3,064.1	12.8	5.3	33.80	21.9	-1,455.1	880.3	866.6	13.77	63.913		
3,300.0	3,219.9	3,160.9	3,160.9	13.3	5.5	34.71	21.9	-1,455.1	859.4	845.1	14.37	59.817		
3,400.0	3,316.7	3,257.7	3,257.7	13.8	5.7	35.68	21.9	-1,455.1	838.8	823.8	14.98	56.002		
3,500.0	3,413.5	3,354.5	3,354.5	14.3	5.9	36.69	21.9	-1,455.1	818.4	802.7	15.60	52.445		
3,600.0	3,510.4	3,451.4	3,451.4	14.8	6.0	37.75	21.9	-1,455.1	798.2	781.9	16.25	49.125		
3,700.0	3,607.2	3,548.2	3,548.2	15.2	6.2	38.86	21.9	-1,455.1	778.3	761.4	16.91	46.024		
3,800.0	3,704.0	3,645.0	3,645.0	15.7	6.4	40.03	21.9	-1,455.1	758.7	741.1	17.59	43.127		
3,900.0	3,800.8	3,741.8	3,741.8	16.2	6.5	41.26	21.9	-1,455.1	739.5	721.2	18.30	40.419		
4,000.0	3,897.6	3,838.6	3,838.6	16.7	6.7	42.56	21.9	-1,455.1	720.6	701.6	19.02	37.889		
4,100.0	3,994.4	3,935.4	3,935.4	17.2	6.9	43.92	21.9	-1,455.1	702.1	682.3	19.76	35.524		
4,200.0	4,091.3	4,032.3	4,032.3	17.6	7.0	45.35	21.9	-1,455.1	684.0	663.5	20.53	33.316		
4,300.0	4,188.1	4,129.1	4,129.1	18.1	7.2	46.85	21.9	-1,455.1	666.4	645.0	21.32	31.255		
4,400.0	4,284.9	4,225.9	4,225.9	18.6	7.4	48.44	21.9	-1,455.1	649.2	627.1	22.13	29.334		
4,500.0	4,381.7	4,322.7	4,322.7	19.1	7.5	50.10	21.9	-1,455.1	632.6	609.6	22.97	27.545		
4,600.0	4,478.5	4,419.5	4,419.5	19.6	7.7	51.85	21.9	-1,455.1	616.5	592.7	23.82	25.881		
4,700.0	4,575.4	4,516.4	4,516.4	20.1	7.9	53.69	21.9	-1,455.1	601.1	576.4	24.70	24.338		
4,800.0	4,672.2	4,613.2	4,613.2	20.5	8.1	55.62	21.9	-1,455.1	586.3	560.7	25.59	22.909		
4,900.0	4,769.0	4,710.0	4,710.0	21.0	8.2	57.64	21.9	-1,455.1	572.2	545.7	26.50	21.590		
5,000.0	4,865.8	4,806.8	4,806.8	21.5	8.4	59.75	21.9	-1,455.1	558.9	531.4	27.43	20.376		
5,100.0	4,962.6	4,903.6	4,903.6	22.0	8.6	61.96	21.9	-1,455.1	546.4	518.0	28.36	19.263		
5,200.0	5,059.4	5,000.4	5,000.4	22.5	8.7	64.27	21.9	-1,455.1	534.8	505.5	29.31	18.248		
5,300.0	5,156.3	5,085.0	5,085.0	22.9	8.9	66.36	21.9	-1,455.1	524.2	494.1	30.19	17.367		
5,341.5	5,196.4	5,085.0	5,085.0	23.1	8.9	66.36	21.9	-1,455.1	522.6	492.2	30.37	17.207 CC, ES		
5,400.0	5,253.1	5,085.0	5,085.0	23.4	8.9	66.36	21.9	-1,455.1	525.9	495.2	30.63	17.167 SF		
5,500.0	5,349.9	5,085.0	5,085.0	23.9	8.9	66.36	21.9	-1,455.1	546.1	515.0	31.08	17.572		
5,600.0	5,446.7	5,085.0	5,085.0	24.4	8.9	66.36	21.9	-1,455.1	583.0	551.5	31.53	18.494		
5,700.0	5,543.5	5,085.0	5,085.0	24.9	8.9	66.36	21.9	-1,455.1	633.7	601.8	31.97	19.822		
5,800.0	5,640.4	5,085.0	5,085.0	25.3	8.9	66.36	21.9	-1,455.1	695.2	662.8	32.42	21.446		
5,900.0	5,737.2	5,085.0	5,085.0	25.8	8.9	66.36	21.9	-1,455.1	764.9	732.0	32.86	23.274		
6,000.0	5,834.0	5,085.0	5,085.0	26.3	8.9	66.36	21.9	-1,455.1	840.7	807.4	33.31	25.237		
6,100.0	5,930.8	5,085.0	5,085.0	26.8	8.9	66.36	21.9	-1,455.1	921.1	887.4	33.76	27.286		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - MEREDITH 1 (EXISTING) - KPK WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 5120-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	19.10	92.9	32.2	105.0					
100.0	100.0	63.0	63.0	0.1	0.1	19.10	92.9	32.2	98.3	98.1	0.23	429.598		
200.0	200.0	163.0	163.0	0.3	0.3	19.10	92.9	32.2	98.3	97.7	0.58	170.112		
300.0	300.0	263.0	263.0	0.5	0.5	19.10	92.9	32.2	98.3	97.4	0.93	106.054 CC, ES		
400.0	400.0	363.0	363.0	0.6	0.6	128.23	92.9	32.2	99.4	98.1	1.28	77.786		
500.0	499.8	462.8	462.8	0.8	0.8	130.47	92.9	32.2	102.7	101.1	1.64	62.788		
600.0	599.5	562.5	562.5	1.1	1.0	133.88	92.9	32.2	108.6	106.6	2.01	54.146		
700.0	698.7	661.7	661.7	1.3	1.2	138.04	92.9	32.2	117.4	115.0	2.38	49.223		
800.0	797.5	760.5	760.5	1.6	1.3	142.50	92.9	32.2	129.5	126.7	2.77	46.778		
900.0	895.6	858.6	858.6	2.0	1.5	146.89	92.9	32.2	145.1	142.0	3.15	46.110 SF		
1,000.0	993.1	956.1	956.1	2.4	1.7	150.96	92.9	32.2	164.6	161.0	3.52	46.758		
1,100.0	1,089.9	1,052.9	1,052.9	2.9	1.8	154.60	92.9	32.2	186.9	183.0	3.88	48.158		
1,200.0	1,186.7	1,149.7	1,149.7	3.3	2.0	157.52	92.9	32.2	209.9	205.6	4.23	49.570		
1,300.0	1,283.5	1,246.5	1,246.5	3.8	2.2	159.86	92.9	32.2	233.3	228.7	4.58	50.926		
1,400.0	1,380.4	1,343.4	1,343.4	4.2	2.3	161.78	92.9	32.2	257.0	252.1	4.92	52.198		
1,500.0	1,477.2	1,440.2	1,440.2	4.7	2.5	163.37	92.9	32.2	280.9	275.7	5.26	53.375		
1,600.0	1,574.0	1,537.0	1,537.0	5.2	2.7	164.71	92.9	32.2	305.1	299.5	5.60	54.458		
1,700.0	1,670.8	1,633.8	1,633.8	5.7	2.9	165.86	92.9	32.2	329.3	323.4	5.94	55.451		
1,800.0	1,767.6	1,730.6	1,730.6	6.1	3.0	166.85	92.9	32.2	353.7	347.4	6.28	56.361		
1,900.0	1,864.4	1,827.4	1,827.4	6.6	3.2	167.71	92.9	32.2	378.1	371.5	6.61	57.195		
2,000.0	1,961.3	1,924.3	1,924.3	7.1	3.4	168.47	92.9	32.2	402.6	395.7	6.95	57.960		
2,100.0	2,058.1	2,021.1	2,021.1	7.6	3.5	169.14	92.9	32.2	427.2	419.9	7.28	58.663		
2,200.0	2,154.9	2,117.9	2,117.9	8.0	3.7	169.73	92.9	32.2	451.8	444.2	7.62	59.310		
2,300.0	2,251.7	2,214.7	2,214.7	8.5	3.9	170.27	92.9	32.2	476.5	468.6	7.95	59.907		
2,400.0	2,348.5	2,311.5	2,311.5	9.0	4.0	170.75	92.9	32.2	501.2	492.9	8.29	60.459		
2,500.0	2,445.4	2,408.4	2,408.4	9.5	4.2	171.19	92.9	32.2	526.0	517.3	8.63	60.971		
2,600.0	2,542.2	2,505.2	2,505.2	10.0	4.4	171.59	92.9	32.2	550.7	541.8	8.96	61.445		
2,700.0	2,639.0	2,602.0	2,602.0	10.4	4.5	171.95	92.9	32.2	575.5	566.2	9.30	61.887		
2,800.0	2,735.8	2,698.8	2,698.8	10.9	4.7	172.29	92.9	32.2	600.3	590.7	9.64	62.299		
2,900.0	2,832.6	2,795.6	2,795.6	11.4	4.9	172.59	92.9	32.2	625.1	615.1	9.97	62.683		
3,000.0	2,929.4	2,892.4	2,892.4	11.9	5.0	172.88	92.9	32.2	650.0	639.6	10.31	63.043		
3,100.0	3,026.3	2,989.3	2,989.3	12.4	5.2	173.14	92.9	32.2	674.8	664.2	10.65	63.380		
3,200.0	3,123.1	3,086.1	3,086.1	12.8	5.4	173.39	92.9	32.2	699.7	688.7	10.98	63.697		
3,300.0	3,219.9	3,182.9	3,182.9	13.3	5.6	173.61	92.9	32.2	724.5	713.2	11.32	63.995		
3,400.0	3,316.7	3,279.7	3,279.7	13.8	5.7	173.83	92.9	32.2	749.4	737.8	11.66	64.276		
3,500.0	3,413.5	3,376.5	3,376.5	14.3	5.9	174.03	92.9	32.2	774.3	762.3	12.00	64.541		
3,600.0	3,510.4	3,473.4	3,473.4	14.8	6.1	174.21	92.9	32.2	799.2	786.9	12.34	64.791		
3,700.0	3,607.2	3,570.2	3,570.2	15.2	6.2	174.39	92.9	32.2	824.1	811.5	12.67	65.028		
3,800.0	3,704.0	3,667.0	3,667.0	15.7	6.4	174.55	92.9	32.2	849.0	836.0	13.01	65.252		
3,900.0	3,800.8	3,763.8	3,763.8	16.2	6.6	174.71	92.9	32.2	874.0	860.6	13.35	65.465		
4,000.0	3,897.6	3,860.6	3,860.6	16.7	6.7	174.86	92.9	32.2	898.9	885.2	13.69	65.668		
4,100.0	3,994.4	3,957.4	3,957.4	17.2	6.9	175.00	92.9	32.2	923.8	909.8	14.03	65.860		
4,200.0	4,091.3	4,054.3	4,054.3	17.6	7.1	175.13	92.9	32.2	948.8	934.4	14.37	66.043		
4,300.0	4,188.1	4,151.1	4,151.1	18.1	7.2	175.25	92.9	32.2	973.7	959.0	14.70	66.218		
4,400.0	4,284.9	4,247.9	4,247.9	18.6	7.4	175.37	92.9	32.2	998.6	983.6	15.04	66.384		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - SULLIVAN 33-26 (EXISTING) - ENCANA WELL - NO SURVEYS													Offset Site Error: 0.0 ft	
Survey Program: 8170-Geolink 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		
8,600.0	7,630.0	7,573.0	7,573.0	35.1	13.2	90.00	1,401.4	-1,607.5	933.8	903.4	30.40	30.713		
8,700.0	7,630.0	7,573.0	7,573.0	35.7	13.2	90.00	1,401.4	-1,607.5	834.4	802.9	31.49	26.499		
8,800.0	7,630.0	7,573.0	7,573.0	36.3	13.2	90.00	1,401.4	-1,607.5	735.3	702.6	32.67	22.505		
8,900.0	7,630.0	7,573.0	7,573.0	36.9	13.2	90.00	1,401.4	-1,607.5	636.4	602.4	33.94	18.752		
9,000.0	7,630.0	7,573.0	7,573.0	37.7	13.2	90.00	1,401.4	-1,607.5	537.9	502.6	35.27	15.252		
9,100.0	7,630.0	7,573.0	7,573.0	38.5	13.2	90.00	1,401.4	-1,607.5	440.1	403.4	36.65	12.006		
9,200.0	7,630.0	7,573.0	7,573.0	39.3	13.2	90.00	1,401.4	-1,607.5	343.6	305.5	38.09	9.020		
9,300.0	7,630.0	7,573.0	7,573.0	40.2	13.2	90.00	1,401.4	-1,607.5	249.8	210.2	39.56	6.314		
9,400.0	7,630.0	7,573.0	7,573.0	41.2	13.2	90.00	1,401.4	-1,607.5	163.5	122.4	41.07	3.982		
9,500.0	7,630.0	7,573.0	7,573.0	42.3	13.2	90.00	1,401.4	-1,607.5	105.3	62.7	42.60	2.472		
9,528.2	7,630.0	7,573.0	7,573.0	42.6	13.2	90.00	1,401.4	-1,607.5	101.4	58.4	43.04	2.357 CC, ES, SF		
9,600.0	7,630.0	7,573.0	7,573.0	43.3	13.2	90.00	1,401.4	-1,607.5	124.2	80.1	44.15	2.814		
9,700.0	7,630.0	7,573.0	7,573.0	44.5	13.2	90.00	1,401.4	-1,607.5	199.5	153.7	45.73	4.362		
9,800.0	7,630.0	7,573.0	7,573.0	45.6	13.2	90.00	1,401.4	-1,607.5	290.1	242.7	47.32	6.129		
9,900.0	7,630.0	7,573.0	7,573.0	46.8	13.2	90.00	1,401.4	-1,607.5	385.3	336.4	48.93	7.875		
10,000.0	7,630.0	7,573.0	7,573.0	48.1	13.2	90.00	1,401.4	-1,607.5	482.5	432.0	50.55	9.545		
10,100.0	7,630.0	7,573.0	7,573.0	49.3	13.2	90.00	1,401.4	-1,607.5	580.7	528.5	52.19	11.127		
10,200.0	7,630.0	7,573.0	7,573.0	50.6	13.2	90.00	1,401.4	-1,607.5	679.4	625.5	53.83	12.620		
10,300.0	7,630.0	7,573.0	7,573.0	52.0	13.2	90.00	1,401.4	-1,607.5	778.4	722.9	55.48	14.029		
10,400.0	7,630.0	7,573.0	7,573.0	53.3	13.2	90.00	1,401.4	-1,607.5	877.6	820.5	57.14	15.358		
10,500.0	7,630.0	7,573.0	7,573.0	54.7	13.2	90.00	1,401.4	-1,607.5	977.0	918.2	58.81	16.613		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - SULLIVAN 34-26 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
4,000.0	3,897.6	3,826.5	3,819.7	16.7	7.3	27.91	-109.6	-1,768.4	987.3	970.3	17.07	57.836		
4,100.0	3,994.4	3,921.8	3,915.0	17.2	7.5	28.54	-110.0	-1,770.5	967.2	949.6	17.61	54.935		
4,200.0	4,091.3	4,017.4	4,010.6	17.6	7.6	29.21	-110.1	-1,772.7	947.4	929.2	18.16	52.175		
4,300.0	4,188.1	4,109.9	4,103.0	18.1	7.8	29.91	-110.0	-1,775.2	928.1	909.4	18.71	49.594		
4,400.0	4,284.9	4,205.0	4,198.1	18.6	7.9	30.66	-109.6	-1,778.1	909.3	890.0	19.29	47.131		
4,500.0	4,381.7	4,303.3	4,296.3	19.1	8.1	31.46	-109.2	-1,781.2	890.8	870.9	19.90	44.767		
4,600.0	4,478.5	4,400.7	4,393.7	19.6	8.2	32.28	-109.0	-1,784.2	872.4	851.9	20.52	42.520		
4,700.0	4,575.4	4,499.9	4,492.9	20.1	8.4	33.17	-108.6	-1,787.1	854.1	832.9	21.16	40.370		
4,800.0	4,672.2	4,596.7	4,589.6	20.5	8.5	34.08	-108.1	-1,789.9	835.9	814.1	21.81	38.327		
4,900.0	4,769.0	4,692.6	4,685.4	21.0	8.7	35.01	-107.7	-1,792.8	818.1	795.6	22.48	36.398		
5,000.0	4,865.8	4,803.7	4,796.5	21.5	8.9	36.15	-107.3	-1,795.4	799.8	776.6	23.22	34.441		
5,100.0	4,962.6	4,909.5	4,902.4	22.0	9.0	37.32	-107.1	-1,796.2	780.3	756.4	23.98	32.547		
5,200.0	5,059.4	5,010.3	5,003.1	22.5	9.2	38.49	-107.1	-1,796.2	760.4	735.6	24.73	30.743		
5,300.0	5,156.3	5,106.2	5,099.1	22.9	9.4	39.67	-107.2	-1,796.1	740.5	715.0	25.49	29.048		
5,400.0	5,253.1	5,201.6	5,194.5	23.4	9.5	40.88	-107.5	-1,796.2	721.2	694.9	26.27	27.449		
5,500.0	5,349.9	5,304.5	5,297.3	23.9	9.7	42.19	-108.7	-1,796.3	701.8	674.7	27.10	25.894		
5,600.0	5,446.7	5,400.0	5,392.8	24.4	9.9	43.46	-110.1	-1,796.0	682.3	654.4	27.92	24.441		
5,700.0	5,543.5	5,492.6	5,485.5	24.9	10.0	44.83	-110.6	-1,795.8	663.7	634.9	28.75	23.081		
5,800.0	5,640.4	5,588.0	5,580.9	25.3	10.2	46.33	-110.7	-1,796.0	646.0	616.4	29.64	21.797		
5,900.0	5,737.2	5,686.6	5,679.4	25.8	10.4	47.90	-111.3	-1,796.5	628.8	598.3	30.55	20.581		
6,000.0	5,834.0	5,787.7	5,780.5	26.3	10.5	49.65	-111.9	-1,796.4	611.7	580.1	31.51	19.410		
6,100.0	5,930.8	5,882.1	5,874.9	26.8	10.7	51.40	-112.3	-1,795.9	594.8	562.4	32.47	18.320		
6,200.0	6,027.6	5,972.8	5,965.6	27.3	10.8	53.11	-112.7	-1,796.3	579.3	545.9	33.41	17.337		
6,300.0	6,124.4	6,069.2	6,062.0	27.8	11.0	55.00	-112.9	-1,797.5	565.2	530.8	34.41	16.426		
6,400.0	6,221.3	6,164.0	6,156.8	28.2	11.2	56.97	-112.9	-1,798.6	551.8	516.4	35.42	15.581		
6,500.0	6,318.1	6,257.2	6,250.0	28.7	11.3	59.06	-112.1	-1,799.7	539.8	503.4	36.44	14.815		
6,600.0	6,414.9	6,353.1	6,345.9	29.2	11.5	61.36	-110.4	-1,800.9	529.2	491.7	37.49	14.114		
6,700.0	6,511.7	6,450.6	6,443.3	29.7	11.6	63.82	-108.4	-1,801.8	519.4	480.8	38.57	13.468		
6,800.0	6,608.5	6,547.7	6,540.4	30.2	11.8	66.39	-106.4	-1,802.4	510.6	471.0	39.63	12.884		
6,900.0	6,705.4	6,645.5	6,638.2	30.6	11.9	69.08	-104.2	-1,802.8	502.9	462.2	40.69	12.358		
7,000.0	6,802.2	6,744.2	6,736.9	31.1	12.1	71.88	-102.3	-1,803.0	496.0	454.2	41.73	11.885		
7,100.0	6,899.0	6,841.7	6,834.4	31.6	12.3	74.67	-100.8	-1,803.3	489.9	447.2	42.72	11.468		
7,200.0	6,995.8	6,938.1	6,930.7	32.1	12.4	77.47	-99.5	-1,803.7	485.2	441.5	43.66	11.112		
7,300.0	7,092.8	7,034.5	7,027.1	32.5	12.6	54.07	-98.0	-1,803.9	478.5	434.3	44.21	10.822		
7,400.0	7,189.1	7,130.1	7,122.8	32.9	12.7	22.82	-96.4	-1,804.6	458.6	415.0	43.55	10.531		
7,500.0	7,281.8	7,224.3	7,217.0	33.2	12.9	5.66	-95.1	-1,805.4	423.9	382.2	41.69	10.169		
7,600.0	7,368.3	7,310.7	7,303.3	33.3	13.0	-5.41	-93.6	-1,805.7	375.4	336.7	38.71	9.697		
7,700.0	7,445.7	7,389.0	7,381.6	33.5	13.2	-16.19	-92.0	-1,806.0	314.6	279.8	34.81	9.038		
7,800.0	7,511.9	7,457.5	7,450.0	33.6	13.3	-31.61	-90.8	-1,806.3	244.0	213.5	30.51	7.999		
7,900.0	7,564.8	7,512.2	7,504.7	33.6	13.4	-56.00	-89.9	-1,806.5	169.5	141.9	27.60	6.141		
8,000.0	7,602.7	7,551.6	7,544.2	33.7	13.4	-82.53	-89.3	-1,806.5	109.8	82.5	27.34	4.016		
8,042.3	7,614.0	7,563.6	7,556.2	33.7	13.5	-90.11	-89.1	-1,806.5	101.6	74.3	27.36	3.715 CC, ES, SF		
8,100.0	7,624.6	7,575.2	7,567.8	33.8	13.5	-95.21	-88.9	-1,806.5	116.9	89.7	27.23	4.294		
8,200.0	7,630.0	7,582.5	7,575.0	33.9	13.5	-91.78	-88.8	-1,806.5	189.1	161.4	27.65	6.838		
8,300.0	7,630.0	7,584.3	7,576.8	34.1	13.5	-92.84	-88.8	-1,806.4	279.6	251.5	28.09	9.953		
8,400.0	7,630.0	7,586.1	7,578.7	34.3	13.5	-93.91	-88.7	-1,806.4	374.9	346.2	28.70	13.060		
8,500.0	7,630.0	7,587.9	7,580.5	34.7	13.5	-94.98	-88.7	-1,806.4	472.2	442.7	29.48	16.017		
8,600.0	7,630.0	7,589.8	7,582.3	35.1	13.5	-96.06	-88.7	-1,806.4	570.4	540.0	30.39	18.770		
8,700.0	7,630.0	7,591.7	7,584.2	35.7	13.5	-97.14	-88.6	-1,806.4	669.1	637.7	31.40	21.307		
8,800.0	7,630.0	7,593.5	7,586.1	36.3	13.5	-98.23	-88.6	-1,806.4	768.1	735.6	32.50	23.632		
8,900.0	7,630.0	7,595.5	7,588.0	36.9	13.5	-99.32	-88.6	-1,806.4	867.4	833.7	33.67	25.760		
9,000.0	7,630.0	7,597.4	7,589.9	37.7	13.5	-100.42	-88.5	-1,806.4	966.8	931.9	34.89	27.708		

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 Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - SULLIVAN 44-26 (EXISTING) - ENCANA WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8192-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	109.12	-14.9	43.1	57.5					
100.0	100.0	65.0	65.0	0.1	0.1	109.12	-14.9	43.1	45.6	45.4	0.23	196.242		
200.0	200.0	165.0	165.0	0.3	0.3	109.12	-14.9	43.1	45.6	45.0	0.58	78.419		
300.0	300.0	265.0	265.0	0.5	0.5	109.12	-14.9	43.1	45.6	44.7	0.93	49.000 CC, ES		
400.0	400.0	365.0	365.0	0.6	0.6	-143.82	-14.9	43.1	47.0	45.7	1.28	36.706		
500.0	499.8	464.8	464.8	0.8	0.8	-147.22	-14.9	43.1	51.3	49.7	1.63	31.424		
600.0	599.5	564.5	564.5	1.1	1.0	-151.75	-14.9	43.1	58.8	56.8	1.99	29.601 SF		
700.0	698.7	663.7	663.7	1.3	1.2	-156.39	-14.9	43.1	69.8	67.5	2.34	29.829		
800.0	797.5	762.5	762.5	1.6	1.3	-160.54	-14.9	43.1	84.4	81.7	2.69	31.392		
900.0	895.6	860.6	860.6	2.0	1.5	-163.99	-14.9	43.1	102.6	99.6	3.03	33.866		
1,000.0	993.1	958.1	958.1	2.4	1.7	-166.74	-14.9	43.1	124.4	121.1	3.36	36.983		
1,100.0	1,089.9	1,054.9	1,054.9	2.9	1.8	-168.92	-14.9	43.1	148.8	145.1	3.70	40.192		
1,200.0	1,186.7	1,151.7	1,151.7	3.3	2.0	-170.50	-14.9	43.1	173.5	169.4	4.04	42.900		
1,300.0	1,283.5	1,248.5	1,248.5	3.8	2.2	-171.70	-14.9	43.1	198.2	193.8	4.38	45.214		
1,400.0	1,380.4	1,345.4	1,345.4	4.2	2.3	-172.63	-14.9	43.1	223.0	218.3	4.72	47.210		
1,500.0	1,477.2	1,442.2	1,442.2	4.7	2.5	-173.37	-14.9	43.1	247.9	242.8	5.06	48.948		
1,600.0	1,574.0	1,539.0	1,539.0	5.2	2.7	-173.97	-14.9	43.1	272.7	267.3	5.40	50.473		
1,700.0	1,670.8	1,635.8	1,635.8	5.7	2.9	-174.48	-14.9	43.1	297.6	291.9	5.74	51.821		
1,800.0	1,767.6	1,732.6	1,732.6	6.1	3.0	-174.91	-14.9	43.1	322.6	316.5	6.08	53.022		
1,900.0	1,864.4	1,829.4	1,829.4	6.6	3.2	-175.27	-14.9	43.1	347.5	341.1	6.42	54.096		
2,000.0	1,961.3	1,926.3	1,926.3	7.1	3.4	-175.59	-14.9	43.1	372.5	365.7	6.76	55.064		
2,100.0	2,058.1	2,023.1	2,023.1	7.6	3.5	-175.87	-14.9	43.1	397.4	390.3	7.10	55.941		
2,200.0	2,154.9	2,119.9	2,119.9	8.0	3.7	-176.11	-14.9	43.1	422.4	414.9	7.44	56.737		
2,300.0	2,251.7	2,216.7	2,216.7	8.5	3.9	-176.33	-14.9	43.1	447.4	439.6	7.79	57.464		
2,400.0	2,348.5	2,313.5	2,313.5	9.0	4.0	-176.52	-14.9	43.1	472.3	464.2	8.13	58.131		
2,500.0	2,445.4	2,410.4	2,410.4	9.5	4.2	-176.70	-14.9	43.1	497.3	488.9	8.47	58.744		
2,600.0	2,542.2	2,507.2	2,507.2	10.0	4.4	-176.86	-14.9	43.1	522.3	513.5	8.81	59.310		
2,700.0	2,639.0	2,604.0	2,604.0	10.4	4.5	-177.00	-14.9	43.1	547.3	538.2	9.15	59.834		
2,800.0	2,735.8	2,700.8	2,700.8	10.9	4.7	-177.13	-14.9	43.1	572.3	562.8	9.49	60.320		
2,900.0	2,832.6	2,797.6	2,797.6	11.4	4.9	-177.25	-14.9	43.1	597.3	587.5	9.83	60.773		
3,000.0	2,929.4	2,894.4	2,894.4	11.9	5.1	-177.36	-14.9	43.1	622.3	612.1	10.17	61.195		
3,100.0	3,026.3	2,991.3	2,991.3	12.4	5.2	-177.46	-14.9	43.1	647.3	636.8	10.51	61.590		
3,200.0	3,123.1	3,088.1	3,088.1	12.8	5.4	-177.56	-14.9	43.1	672.3	661.4	10.85	61.960		
3,300.0	3,219.9	3,184.9	3,184.9	13.3	5.6	-177.65	-14.9	43.1	697.3	686.1	11.19	62.308		
3,400.0	3,316.7	3,281.7	3,281.7	13.8	5.7	-177.73	-14.9	43.1	722.3	710.8	11.53	62.635		
3,500.0	3,413.5	3,378.5	3,378.5	14.3	5.9	-177.80	-14.9	43.1	747.3	735.4	11.87	62.943		
3,600.0	3,510.4	3,475.4	3,475.4	14.8	6.1	-177.87	-14.9	43.1	772.3	760.1	12.21	63.234		
3,700.0	3,607.2	3,572.2	3,572.2	15.2	6.2	-177.94	-14.9	43.1	797.3	784.8	12.55	63.509		
3,800.0	3,704.0	3,669.0	3,669.0	15.7	6.4	-178.00	-14.9	43.1	822.3	809.4	12.90	63.770		
3,900.0	3,800.8	3,765.8	3,765.8	16.2	6.6	-178.06	-14.9	43.1	847.3	834.1	13.24	64.017		
4,000.0	3,897.6	3,862.6	3,862.6	16.7	6.7	-178.12	-14.9	43.1	872.4	858.8	13.58	64.252		
4,100.0	3,994.4	3,959.4	3,959.4	17.2	6.9	-178.17	-14.9	43.1	897.4	883.5	13.92	64.475		
4,200.0	4,091.3	4,056.3	4,056.3	17.6	7.1	-178.22	-14.9	43.1	922.4	908.1	14.26	64.687		
4,300.0	4,188.1	4,153.1	4,153.1	18.1	7.2	-178.27	-14.9	43.1	947.4	932.8	14.60	64.890		
4,400.0	4,284.9	4,249.9	4,249.9	18.6	7.4	-178.31	-14.9	43.1	972.4	957.5	14.94	65.083		
4,500.0	4,381.7	4,346.7	4,346.7	19.1	7.6	-178.35	-14.9	43.1	997.4	982.1	15.28	65.268		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - SULLIVAN 4-6-26 (EXISTING) - ENCANA WELL - SURVEYS												Offset Site Error:	0.0 ft
Survey Program: 74-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
7,900.0	7,564.8	7,582.4	7,509.9	33.6	18.6	-9.93	755.3	-1,897.7	992.5	965.3	27.19	36.499	
8,000.0	7,602.7	7,621.1	7,548.7	33.7	18.7	-24.41	755.8	-1,897.7	901.2	876.4	24.85	36.263	
8,100.0	7,624.6	7,644.2	7,571.8	33.8	18.7	-54.30	756.2	-1,897.7	805.5	776.1	29.47	27.335	
8,200.0	7,630.0	7,651.1	7,578.6	33.9	18.7	-87.12	756.3	-1,897.7	708.7	675.8	32.94	21.515	
8,300.0	7,630.0	7,652.5	7,580.0	34.1	18.7	-87.55	756.3	-1,897.7	612.9	579.5	33.41	18.344	
8,400.0	7,630.0	7,653.9	7,581.4	34.3	18.7	-87.98	756.3	-1,897.6	518.7	484.6	34.07	15.225	
8,500.0	7,630.0	7,655.3	7,582.9	34.7	18.7	-88.41	756.3	-1,897.6	427.1	392.2	34.89	12.243	
8,600.0	7,630.0	7,656.7	7,584.3	35.1	18.7	-88.84	756.3	-1,897.6	340.3	304.4	35.85	9.493	
8,700.0	7,630.0	7,658.2	7,585.7	35.7	18.7	-89.27	756.4	-1,897.6	263.0	226.1	36.92	7.123	
8,800.0	7,630.0	7,659.6	7,587.1	36.3	18.7	-89.71	756.4	-1,897.6	206.2	168.1	38.10	5.413	
8,883.2	7,630.0	7,660.8	7,588.3	36.8	18.7	-90.07	756.4	-1,897.6	188.7	149.6	39.14	4.821 CC, ES	
8,900.0	7,630.0	7,661.0	7,588.6	36.9	18.7	-90.14	756.4	-1,897.6	189.4	150.1	39.35	4.814 SF	
9,000.0	7,630.0	7,662.5	7,590.0	37.7	18.8	-90.58	756.4	-1,897.6	221.9	181.2	40.67	5.456	
9,100.0	7,630.0	7,663.9	7,591.5	38.5	18.8	-91.02	756.4	-1,897.6	287.4	245.3	42.05	6.835	
9,200.0	7,630.0	7,665.4	7,592.9	39.3	18.8	-91.45	756.5	-1,897.6	368.7	325.2	43.47	8.482	
9,300.0	7,630.0	7,666.8	7,594.3	40.2	18.8	-91.89	756.5	-1,897.6	457.5	412.5	44.93	10.182	
9,400.0	7,630.0	7,668.2	7,595.8	41.2	18.8	-92.33	756.5	-1,897.6	550.1	503.7	46.42	11.851	
9,500.0	7,630.0	7,669.7	7,597.2	42.3	18.8	-92.77	756.5	-1,897.6	644.9	597.0	47.93	13.456	
9,600.0	7,630.0	7,671.1	7,598.7	43.3	18.8	-93.21	756.6	-1,897.6	741.1	691.7	49.46	14.983	
9,700.0	7,630.0	7,672.6	7,600.1	44.5	18.8	-93.65	756.6	-1,897.6	838.2	787.2	51.02	16.431	
9,800.0	7,630.0	7,674.1	7,601.6	45.6	18.8	-94.09	756.6	-1,897.6	935.9	883.3	52.58	17.800	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4A-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-89.95	0.0	-10.1	10.1					
100.0	100.0	99.0	99.0	0.1	0.1	-89.95	0.0	-10.1	10.1	9.8	0.24	42.638		
200.0	200.0	199.0	199.0	0.3	0.3	-89.95	0.0	-10.1	10.1	9.5	0.58	17.223 CC, ES		
300.0	300.0	298.6	298.6	0.5	0.5	-92.30	-0.5	-11.7	11.7	10.8	0.94	12.518		
400.0	400.0	398.1	398.0	0.6	0.7	13.10	-1.9	-16.6	15.1	13.8	1.28	11.763		
500.0	499.8	497.5	496.9	0.8	0.9	11.62	-4.3	-24.9	18.5	16.8	1.63	11.327		
600.0	599.5	596.7	595.5	1.1	1.2	10.91	-7.7	-36.4	21.9	19.9	1.98	11.042		
700.0	698.7	695.9	693.4	1.3	1.5	10.67	-12.0	-51.2	25.3	22.9	2.33	10.832		
800.0	797.5	794.9	790.6	1.6	1.8	10.74	-17.3	-69.1	28.7	26.0	2.69	10.659		
900.0	895.6	893.8	887.0	2.0	2.3	11.00	-23.5	-90.3	32.0	29.0	3.05	10.501		
1,000.0	993.1	992.6	982.5	2.4	2.7	11.41	-30.6	-114.6	35.4	32.0	3.42	10.344		
1,100.0	1,089.9	1,092.2	1,078.1	2.9	3.3	11.89	-38.5	-141.5	38.7	34.9	3.81	10.174		
1,200.0	1,186.7	1,192.2	1,174.0	3.3	3.8	12.29	-46.4	-168.5	42.1	37.9	4.21	10.018		
1,300.0	1,283.5	1,292.1	1,269.9	3.8	4.3	12.63	-54.3	-195.5	45.5	40.9	4.61	9.878		
1,400.0	1,380.4	1,392.0	1,365.8	4.2	4.8	12.93	-62.3	-222.5	48.9	43.9	5.02	9.753		
1,500.0	1,477.2	1,492.0	1,461.7	4.7	5.4	13.18	-70.2	-249.6	52.3	46.9	5.43	9.641		
1,600.0	1,574.0	1,591.9	1,557.6	5.2	5.9	13.41	-78.1	-276.6	55.7	49.9	5.84	9.540		
1,700.0	1,670.8	1,691.9	1,653.5	5.7	6.4	13.61	-86.0	-303.6	59.1	52.9	6.26	9.449		
1,800.0	1,767.6	1,791.8	1,749.4	6.1	7.0	13.78	-93.9	-330.6	62.5	55.8	6.67	9.366		
1,900.0	1,864.4	1,891.8	1,845.3	6.6	7.5	13.94	-101.9	-357.7	65.9	58.8	7.09	9.290		
2,000.0	1,961.3	1,991.7	1,941.2	7.1	8.0	14.09	-109.8	-384.7	69.3	61.8	7.52	9.221		
2,100.0	2,058.1	2,091.6	2,037.1	7.6	8.6	14.22	-117.7	-411.7	72.7	64.8	7.94	9.158		
2,200.0	2,154.9	2,191.6	2,133.0	8.0	9.1	14.34	-125.6	-438.7	76.1	67.7	8.36	9.100		
2,300.0	2,251.7	2,291.5	2,228.8	8.5	9.6	14.45	-133.6	-465.8	79.5	70.7	8.79	9.046		
2,400.0	2,348.5	2,391.5	2,324.7	9.0	10.2	14.55	-141.5	-492.8	82.9	73.7	9.22	8.996		
2,500.0	2,445.4	2,491.4	2,420.6	9.5	10.7	14.64	-149.4	-519.8	86.3	76.7	9.64	8.950		
2,600.0	2,542.2	2,591.4	2,516.5	10.0	11.2	14.72	-157.3	-546.8	89.7	79.6	10.07	8.907		
2,700.0	2,639.0	2,691.3	2,612.4	10.4	11.8	14.80	-165.2	-573.9	93.1	82.6	10.50	8.867		
2,800.0	2,735.8	2,791.2	2,708.3	10.9	12.3	14.87	-173.2	-600.9	96.5	85.6	10.93	8.830		
2,900.0	2,832.6	2,891.2	2,804.2	11.4	12.9	14.94	-181.1	-627.9	99.9	88.5	11.36	8.795		
3,000.0	2,929.4	2,991.1	2,900.1	11.9	13.4	15.01	-189.0	-655.0	103.3	91.5	11.79	8.762		
3,100.0	3,026.3	3,091.1	2,996.0	12.4	13.9	15.07	-196.9	-682.0	106.7	94.5	12.22	8.731		
3,200.0	3,123.1	3,191.0	3,091.9	12.8	14.5	15.12	-204.8	-709.0	110.1	97.5	12.65	8.702		
3,300.0	3,219.9	3,290.9	3,187.8	13.3	15.0	15.17	-212.8	-736.0	113.5	100.4	13.08	8.675		
3,400.0	3,316.7	3,390.9	3,283.7	13.8	15.5	15.22	-220.7	-763.1	116.9	103.4	13.52	8.649		
3,500.0	3,413.5	3,490.8	3,379.5	14.3	16.1	15.27	-228.6	-790.1	120.3	106.4	13.95	8.625		
3,600.0	3,510.4	3,590.8	3,475.4	14.8	16.6	15.31	-236.5	-817.1	123.7	109.3	14.38	8.602		
3,700.0	3,607.2	3,690.7	3,571.3	15.2	17.2	15.36	-244.4	-844.1	127.1	112.3	14.82	8.580		
3,800.0	3,704.0	3,790.7	3,667.2	15.7	17.7	15.40	-252.4	-871.2	130.5	115.3	15.25	8.559		
3,900.0	3,800.8	3,890.6	3,763.1	16.2	18.2	15.43	-260.3	-898.2	133.9	118.2	15.68	8.539		
4,000.0	3,897.6	3,990.5	3,859.0	16.7	18.8	15.47	-268.2	-925.2	137.3	121.2	16.12	8.520		
4,100.0	3,994.4	4,090.5	3,954.9	17.2	19.3	15.50	-276.1	-952.2	140.7	124.2	16.55	8.502		
4,200.0	4,091.3	4,190.4	4,050.8	17.6	19.8	15.54	-284.0	-979.3	144.1	127.1	16.98	8.485		
4,300.0	4,188.1	4,290.4	4,146.7	18.1	20.4	15.57	-292.0	-1,006.3	147.5	130.1	17.42	8.469		
4,400.0	4,284.9	4,390.3	4,242.6	18.6	20.9	15.60	-299.9	-1,033.3	150.9	133.1	17.85	8.453		
4,500.0	4,381.7	4,490.3	4,338.5	19.1	21.5	15.62	-307.8	-1,060.4	154.3	136.0	18.29	8.438		
4,600.0	4,478.5	4,590.2	4,434.4	19.6	22.0	15.65	-315.7	-1,087.4	157.7	139.0	18.72	8.424		
4,700.0	4,575.4	4,690.1	4,530.3	20.1	22.5	15.68	-323.7	-1,114.4	161.1	142.0	19.16	8.410		
4,800.0	4,672.2	4,790.1	4,626.1	20.5	23.1	15.70	-331.6	-1,141.4	164.5	144.9	19.59	8.397		
4,900.0	4,769.0	4,890.0	4,722.0	21.0	23.6	15.73	-339.5	-1,168.5	167.9	147.9	20.03	8.384		
5,000.0	4,865.8	4,990.0	4,817.9	21.5	24.1	15.75	-347.4	-1,195.5	171.3	150.9	20.46	8.372		
5,100.0	4,962.6	5,089.9	4,913.8	22.0	24.7	15.77	-355.3	-1,222.5	174.7	153.8	20.90	8.360		

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 Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4A-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
5,200.0	5,059.4	5,189.8	5,009.7	22.5	25.2	15.79	-363.3	-1,249.5	178.1	156.8	21.34	8.349		
5,300.0	5,156.3	5,289.8	5,105.6	22.9	25.8	15.81	-371.2	-1,276.6	181.5	159.8	21.77	8.338		
5,400.0	5,253.1	5,389.7	5,201.5	23.4	26.3	15.83	-379.1	-1,303.6	184.9	162.7	22.21	8.328		
5,500.0	5,349.9	5,489.7	5,297.4	23.9	26.8	15.85	-387.0	-1,330.6	188.3	165.7	22.64	8.318		
5,600.0	5,446.7	5,589.6	5,393.3	24.4	27.4	15.87	-394.9	-1,357.6	191.7	168.7	23.08	8.308		
5,700.0	5,543.5	5,689.6	5,489.2	24.9	27.9	15.89	-402.9	-1,384.7	195.1	171.6	23.52	8.299		
5,800.0	5,640.4	5,789.5	5,585.1	25.3	28.4	15.90	-410.8	-1,411.7	198.5	174.6	23.95	8.289		
5,900.0	5,737.2	5,889.4	5,681.0	25.8	29.0	15.92	-418.7	-1,438.7	201.9	177.6	24.39	8.281		
6,000.0	5,834.0	5,989.4	5,776.8	26.3	29.5	15.94	-426.6	-1,465.7	205.4	180.5	24.82	8.272		
6,100.0	5,930.8	6,089.3	5,872.7	26.8	30.1	15.95	-434.5	-1,492.8	208.8	183.5	25.26	8.264		
6,200.0	6,027.6	6,189.3	5,968.6	27.3	30.6	15.97	-442.5	-1,519.8	212.2	186.5	25.70	8.256		
6,300.0	6,124.4	6,289.2	6,064.5	27.8	31.1	15.98	-450.4	-1,546.8	215.6	189.4	26.13	8.248		
6,400.0	6,221.3	6,389.2	6,160.4	28.2	31.7	15.99	-458.3	-1,573.9	219.0	192.4	26.57	8.241		
6,500.0	6,318.1	6,489.1	6,256.3	28.7	32.2	16.01	-466.2	-1,600.9	222.4	195.4	27.01	8.234		
6,600.0	6,414.9	6,589.0	6,352.2	29.2	32.7	16.02	-474.2	-1,627.9	225.8	198.3	27.44	8.227		
6,700.0	6,511.7	6,689.0	6,448.1	29.7	33.3	16.03	-482.1	-1,654.9	229.2	201.3	27.88	8.220		
6,800.0	6,608.5	6,788.9	6,544.0	30.2	33.8	16.05	-490.0	-1,682.0	232.6	204.3	28.32	8.213		
6,900.0	6,705.4	6,888.9	6,639.9	30.6	34.4	16.06	-497.9	-1,709.0	236.0	207.2	28.75	8.207		
7,000.0	6,802.2	6,988.8	6,735.8	31.1	34.9	16.07	-505.8	-1,736.0	239.4	210.2	29.19	8.200		
7,100.0	6,899.0	7,088.7	6,831.7	31.6	35.4	16.08	-513.8	-1,763.0	242.8	213.1	29.63	8.194		
7,200.0	6,995.8	7,189.0	6,927.9	32.1	36.0	16.26	-521.0	-1,790.2	246.2	216.0	30.15	8.165		
7,300.0	7,092.8	7,288.7	7,023.5	32.5	36.4	-7.01	-515.1	-1,817.1	249.5	217.6	31.90	7.821		
7,400.0	7,189.1	7,386.4	7,115.0	32.9	36.8	-36.44	-492.8	-1,842.9	253.3	219.9	33.47	7.569		
7,500.0	7,281.8	7,482.4	7,200.0	33.2	37.1	-50.39	-455.5	-1,866.9	257.4	223.0	34.35	7.493		
7,600.0	7,368.3	7,576.9	7,276.7	33.3	37.3	-56.47	-404.8	-1,888.5	261.5	227.1	34.39	7.605		
7,700.0	7,445.7	7,670.1	7,343.5	33.5	37.4	-59.18	-342.7	-1,907.3	265.5	231.9	33.57	7.907		
7,800.0	7,511.9	7,762.3	7,399.1	33.6	37.5	-60.37	-271.1	-1,923.0	269.0	236.9	32.08	8.386		
7,900.0	7,564.8	7,853.6	7,442.7	33.6	37.6	-60.83	-191.9	-1,935.2	271.9	241.7	30.27	8.985		
8,000.0	7,602.7	7,944.3	7,473.4	33.7	37.7	-60.96	-107.1	-1,943.9	274.1	245.5	28.66	9.565		
8,100.0	7,624.6	8,034.5	7,490.8	33.8	37.8	-60.97	-18.8	-1,948.8	275.4	247.6	27.83	9.896		
8,200.0	7,630.0	8,126.7	7,495.0	33.9	37.9	-60.93	73.2	-1,950.0	275.8	247.6	28.19	9.783		
8,300.0	7,630.0	8,226.7	7,495.0	34.1	38.0	-60.93	173.2	-1,950.0	275.8	246.8	29.03	9.502		
8,400.0	7,630.0	8,326.7	7,495.0	34.3	38.3	-60.93	273.2	-1,950.0	275.8	245.7	30.15	9.148		
8,500.0	7,630.0	8,426.7	7,495.0	34.7	38.6	-60.93	373.2	-1,950.0	275.8	244.3	31.53	8.747		
8,600.0	7,630.0	8,526.7	7,495.0	35.1	39.0	-60.93	473.2	-1,950.0	275.8	242.7	33.14	8.322		
8,700.0	7,630.0	8,626.7	7,495.0	35.7	39.4	-60.93	573.2	-1,950.0	275.8	240.9	34.95	7.891		
8,800.0	7,630.0	8,726.7	7,495.0	36.3	40.0	-60.93	673.2	-1,950.0	275.8	238.9	36.92	7.469		
8,900.0	7,630.0	8,826.7	7,495.0	36.9	40.6	-60.93	773.2	-1,950.0	275.8	236.8	39.04	7.064		
9,000.0	7,630.0	8,926.7	7,495.0	37.7	41.2	-60.93	873.2	-1,950.0	275.8	234.5	41.28	6.681		
9,100.0	7,630.0	9,026.7	7,495.0	38.5	41.9	-60.93	973.2	-1,950.0	275.8	232.2	43.62	6.323		
9,200.0	7,630.0	9,126.7	7,495.0	39.3	42.7	-60.93	1,073.2	-1,950.0	275.8	229.8	46.04	5.990		
9,300.0	7,630.0	9,226.7	7,495.0	40.2	43.6	-60.93	1,173.2	-1,950.0	275.8	227.3	48.54	5.682		
9,400.0	7,630.0	9,326.7	7,495.0	41.2	44.5	-60.93	1,273.2	-1,950.0	275.8	224.7	51.10	5.397		
9,500.0	7,630.0	9,426.7	7,495.0	42.3	45.4	-60.93	1,373.2	-1,950.0	275.8	222.1	53.72	5.134		
9,600.0	7,630.0	9,526.7	7,495.0	43.3	46.4	-60.93	1,473.2	-1,950.0	275.8	219.4	56.38	4.892		
9,700.0	7,630.0	9,626.7	7,495.0	44.5	47.4	-60.93	1,573.2	-1,950.0	275.8	216.7	59.08	4.668		
9,800.0	7,630.0	9,726.7	7,495.0	45.6	48.5	-60.93	1,673.2	-1,950.0	275.8	214.0	61.82	4.462		
9,900.0	7,630.0	9,826.7	7,495.0	46.8	49.6	-60.93	1,773.2	-1,950.0	275.8	211.2	64.58	4.271		
10,000.0	7,630.0	9,926.7	7,495.0	48.1	50.8	-60.93	1,873.2	-1,950.0	275.8	208.4	67.38	4.094		
10,100.0	7,630.0	10,026.7	7,495.0	49.3	52.0	-60.93	1,973.2	-1,950.0	275.8	205.6	70.19	3.929		
10,200.0	7,630.0	10,126.7	7,495.0	50.6	53.2	-60.93	2,073.2	-1,950.0	275.8	202.8	73.03	3.777		
10,300.0	7,630.0	10,226.7	7,495.0	52.0	54.5	-60.93	2,173.2	-1,950.0	275.8	199.9	75.88	3.635		

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 Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4A-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
10,400.0	7,630.0	10,326.7	7,495.0	53.3	55.8	-60.93	2,273.2	-1,950.0	275.8	197.0	78.75	3.502		
10,500.0	7,630.0	10,426.7	7,495.0	54.7	57.1	-60.93	2,373.2	-1,950.0	275.8	194.2	81.64	3.378		
10,600.0	7,630.0	10,526.7	7,495.0	56.1	58.4	-60.93	2,473.2	-1,950.0	275.8	191.3	84.54	3.262		
10,700.0	7,630.0	10,626.7	7,495.0	57.5	59.8	-60.93	2,573.2	-1,950.0	275.8	188.4	87.45	3.154		
10,800.0	7,630.0	10,726.7	7,495.0	58.9	61.1	-60.93	2,673.2	-1,950.0	275.8	185.4	90.37	3.052		
10,900.0	7,630.0	10,826.7	7,495.0	60.4	62.5	-60.93	2,773.2	-1,950.0	275.8	182.5	93.30	2.956		
11,000.0	7,630.0	10,926.7	7,495.0	61.8	63.9	-60.93	2,873.2	-1,950.0	275.8	179.6	96.24	2.866		
11,100.0	7,630.0	11,026.7	7,495.0	63.3	65.4	-60.93	2,973.2	-1,950.0	275.8	176.6	99.19	2.781		
11,200.0	7,630.0	11,126.7	7,495.0	64.8	66.8	-60.93	3,073.2	-1,950.0	275.8	173.7	102.15	2.700		
11,300.0	7,630.0	11,226.7	7,495.0	66.3	68.3	-60.93	3,173.2	-1,950.0	275.8	170.7	105.11	2.624		
11,400.0	7,630.0	11,326.7	7,495.0	67.9	69.8	-60.93	3,273.2	-1,950.0	275.8	167.7	108.08	2.552		
11,500.0	7,630.0	11,426.7	7,495.0	69.4	71.2	-60.93	3,373.2	-1,950.0	275.8	164.8	111.05	2.484		
11,600.0	7,630.0	11,526.7	7,495.0	70.9	72.7	-60.93	3,473.2	-1,950.0	275.8	161.8	114.03	2.419		
11,700.0	7,630.0	11,626.7	7,495.0	72.5	74.3	-60.93	3,573.2	-1,950.0	275.8	158.8	117.01	2.357		
11,800.0	7,630.0	11,726.7	7,495.0	74.1	75.8	-60.93	3,673.2	-1,950.0	275.8	155.8	120.00	2.298		
11,900.0	7,630.0	11,826.7	7,495.0	75.6	77.3	-60.93	3,773.2	-1,950.0	275.8	152.8	122.99	2.242		
12,000.0	7,630.0	11,926.7	7,495.0	77.2	78.9	-60.93	3,873.2	-1,950.0	275.8	149.8	125.99	2.189		
12,100.0	7,630.0	12,026.7	7,495.0	78.8	80.4	-60.93	3,973.2	-1,950.0	275.8	146.8	128.99	2.138		
12,200.0	7,630.0	12,126.7	7,495.0	80.4	82.0	-60.93	4,073.2	-1,950.0	275.8	143.8	131.99	2.090		
12,300.0	7,630.0	12,226.7	7,495.0	82.0	83.5	-60.93	4,173.2	-1,950.0	275.8	140.8	135.00	2.043		
12,400.0	7,630.0	12,326.7	7,495.0	83.6	85.1	-60.93	4,273.2	-1,950.0	275.8	137.8	138.01	1.998		
12,500.0	7,630.0	12,426.7	7,495.0	85.2	86.7	-60.93	4,373.2	-1,950.0	275.8	134.8	141.02	1.956		
12,600.0	7,630.0	12,526.7	7,495.0	86.8	88.3	-60.93	4,473.2	-1,950.0	275.8	131.8	144.03	1.915		
12,700.0	7,630.0	12,626.7	7,495.0	88.4	89.9	-60.93	4,573.2	-1,950.0	275.8	128.8	147.05	1.876		
12,800.0	7,630.0	12,726.7	7,495.0	90.1	91.5	-60.93	4,673.2	-1,950.0	275.8	125.7	150.07	1.838		
12,900.0	7,630.0	12,826.7	7,495.0	91.7	93.1	-60.93	4,773.2	-1,950.0	275.8	122.7	153.09	1.802		
13,000.0	7,630.0	12,926.7	7,495.0	93.3	94.7	-60.93	4,873.2	-1,950.0	275.8	119.7	156.11	1.767		
13,100.0	7,630.0	13,026.7	7,495.0	95.0	96.3	-60.93	4,973.2	-1,950.0	275.8	116.7	159.14	1.733		
13,200.0	7,630.0	13,126.7	7,495.0	96.6	97.9	-60.93	5,073.2	-1,950.0	275.8	113.6	162.16	1.701		
13,300.0	7,630.0	13,226.7	7,495.0	98.3	99.6	-60.93	5,173.2	-1,950.0	275.8	110.6	165.19	1.670		
13,400.0	7,630.0	13,326.7	7,495.0	99.9	101.2	-60.93	5,273.2	-1,950.0	275.8	107.6	168.22	1.639		
13,500.0	7,630.0	13,426.7	7,495.0	101.6	102.8	-60.93	5,373.2	-1,950.0	275.8	104.5	171.25	1.610		
13,600.0	7,630.0	13,526.7	7,495.0	103.2	104.5	-60.93	5,473.2	-1,950.0	275.8	101.5	174.29	1.582		
13,700.0	7,630.0	13,626.7	7,495.0	104.9	106.1	-60.93	5,573.2	-1,950.0	275.8	98.5	177.32	1.555		
13,800.0	7,630.0	13,726.7	7,495.0	106.6	107.8	-60.93	5,673.2	-1,950.0	275.8	95.4	180.36	1.529		
13,900.0	7,630.0	13,826.7	7,495.0	108.2	109.4	-60.93	5,773.2	-1,950.0	275.8	92.4	183.39	1.504		
14,000.0	7,630.0	13,926.7	7,495.0	109.9	111.1	-60.93	5,873.2	-1,950.0	275.8	89.4	186.43	1.479 Level 3		
14,100.0	7,630.0	14,026.7	7,495.0	111.6	112.7	-60.93	5,973.2	-1,950.0	275.8	86.3	189.47	1.456 Level 3		
14,200.0	7,630.0	14,126.7	7,495.0	113.3	114.4	-60.93	6,073.2	-1,950.0	275.8	83.3	192.51	1.433 Level 3		
14,300.0	7,630.0	14,226.7	7,495.0	114.9	116.0	-60.93	6,173.2	-1,950.0	275.8	80.2	195.55	1.410 Level 3, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4C-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	90.05	0.0	10.1	10.1					
100.0	100.0	100.0	100.0	0.1	0.1	90.05	0.0	10.1	10.1	9.8	0.24	42.425		
200.0	200.0	200.0	200.0	0.3	0.3	90.05	0.0	10.1	10.1	9.5	0.59	17.172		
300.0	300.0	300.0	300.0	0.5	0.5	90.05	0.0	10.1	10.1	9.1	0.94	10.765 CC, ES		
400.0	400.0	400.0	400.0	0.6	0.6	-164.29	0.0	10.1	11.7	10.5	1.28	9.141		
500.0	499.8	500.4	500.4	0.8	0.8	-167.58	-0.6	8.4	15.1	13.5	1.63	9.270		
600.0	599.5	600.9	600.7	1.1	1.0	-169.19	-2.5	3.5	18.6	16.6	1.98	9.376		
700.0	698.7	701.5	701.0	1.3	1.2	-169.90	-5.6	-4.7	22.1	19.7	2.33	9.454		
800.0	797.5	802.3	801.0	1.6	1.5	-170.06	-10.0	-16.3	25.5	22.8	2.69	9.504		
900.0	895.6	903.2	900.6	2.0	1.8	-169.88	-15.7	-31.1	29.0	26.0	3.04	9.528		
1,000.0	993.1	1,004.2	999.7	2.4	2.1	-169.46	-22.6	-49.2	32.5	29.1	3.41	9.523		
1,100.0	1,089.9	1,104.9	1,097.9	2.9	2.5	-168.63	-30.7	-70.4	35.1	31.3	3.80	9.241		
1,200.0	1,186.7	1,204.9	1,195.1	3.3	3.0	-167.62	-39.0	-92.3	37.0	32.8	4.21	8.798		
1,300.0	1,283.5	1,304.9	1,292.3	3.8	3.4	-166.71	-47.3	-114.1	39.0	34.3	4.63	8.412		
1,400.0	1,380.4	1,404.9	1,389.5	4.2	3.8	-165.88	-55.6	-135.9	40.9	35.8	5.06	8.074		
1,500.0	1,477.2	1,504.8	1,486.7	4.7	4.3	-165.13	-63.9	-157.8	42.8	37.3	5.51	7.775		
1,600.0	1,574.0	1,604.8	1,583.9	5.2	4.7	-164.44	-72.2	-179.6	44.7	38.8	5.96	7.509		
1,700.0	1,670.8	1,704.8	1,681.1	5.7	5.1	-163.81	-80.5	-201.4	46.7	40.3	6.42	7.271		
1,800.0	1,767.6	1,804.8	1,778.4	6.1	5.6	-163.23	-88.8	-223.3	48.6	41.7	6.89	7.058		
1,900.0	1,864.4	1,904.8	1,875.6	6.6	6.0	-162.69	-97.1	-245.1	50.6	43.2	7.37	6.865		
2,000.0	1,961.3	2,004.7	1,972.8	7.1	6.5	-162.20	-105.4	-266.9	52.6	44.7	7.85	6.690		
2,100.0	2,058.1	2,104.7	2,070.0	7.6	6.9	-161.74	-113.7	-288.8	54.5	46.2	8.35	6.531		
2,200.0	2,154.9	2,204.7	2,167.2	8.0	7.4	-161.31	-122.0	-310.6	56.5	47.6	8.84	6.387		
2,300.0	2,251.7	2,304.7	2,264.4	8.5	7.8	-160.91	-130.4	-332.4	58.4	49.1	9.35	6.254		
2,400.0	2,348.5	2,404.7	2,361.6	9.0	8.3	-160.54	-138.7	-354.3	60.4	50.6	9.85	6.132		
2,500.0	2,445.4	2,504.6	2,458.8	9.5	8.7	-160.19	-147.0	-376.1	62.4	52.0	10.36	6.020		
2,600.0	2,542.2	2,604.6	2,556.1	10.0	9.2	-159.86	-155.3	-397.9	64.4	53.5	10.88	5.917		
2,700.0	2,639.0	2,704.6	2,653.3	10.4	9.6	-159.55	-163.6	-419.8	66.3	54.9	11.40	5.821		
2,800.0	2,735.8	2,804.6	2,750.5	10.9	10.1	-159.26	-171.9	-441.6	68.3	56.4	11.92	5.733		
2,900.0	2,832.6	2,904.6	2,847.7	11.4	10.5	-158.99	-180.2	-463.4	70.3	57.9	12.44	5.650		
3,000.0	2,929.4	3,004.5	2,944.9	11.9	11.0	-158.73	-188.5	-485.2	72.3	59.3	12.97	5.573		
3,100.0	3,026.3	3,104.5	3,042.1	12.4	11.4	-158.48	-196.8	-507.1	74.3	60.8	13.50	5.501		
3,200.0	3,123.1	3,204.5	3,139.3	12.8	11.9	-158.25	-205.1	-528.9	76.3	62.2	14.03	5.434		
3,300.0	3,219.9	3,304.5	3,236.5	13.3	12.3	-158.03	-213.4	-550.7	78.2	63.7	14.57	5.371		
3,400.0	3,316.7	3,404.5	3,333.8	13.8	12.8	-157.82	-221.8	-572.6	80.2	65.1	15.10	5.312		
3,500.0	3,413.5	3,504.4	3,431.0	14.3	13.2	-157.62	-230.1	-594.4	82.2	66.6	15.64	5.256		
3,600.0	3,510.4	3,604.4	3,528.2	14.8	13.7	-157.43	-238.4	-616.2	84.2	68.0	16.18	5.204		
3,700.0	3,607.2	3,704.4	3,625.4	15.2	14.1	-157.25	-246.7	-638.1	86.2	69.5	16.72	5.154		
3,800.0	3,704.0	3,804.4	3,722.6	15.7	14.6	-157.07	-255.0	-659.9	88.2	70.9	17.27	5.107		
3,900.0	3,800.8	3,904.4	3,819.8	16.2	15.0	-156.91	-263.3	-681.7	90.2	72.4	17.81	5.063		
4,000.0	3,897.6	4,004.3	3,917.0	16.7	15.5	-156.75	-271.6	-703.6	92.2	73.8	18.36	5.021		
4,100.0	3,994.4	4,104.3	4,014.3	17.2	15.9	-156.60	-279.9	-725.4	94.2	75.3	18.90	4.981		
4,200.0	4,091.3	4,204.3	4,111.5	17.6	16.4	-156.45	-288.2	-747.2	96.2	76.7	19.45	4.943		
4,300.0	4,188.1	4,304.3	4,208.7	18.1	16.8	-156.31	-296.5	-769.1	98.1	78.1	20.00	4.907		
4,400.0	4,284.9	4,404.3	4,305.9	18.6	17.3	-156.18	-304.8	-790.9	100.1	79.6	20.55	4.873		
4,500.0	4,381.7	4,504.2	4,403.1	19.1	17.7	-156.05	-313.1	-812.7	102.1	81.0	21.10	4.840		
4,600.0	4,478.5	4,604.2	4,500.3	19.6	18.2	-155.92	-321.5	-834.6	104.1	82.5	21.65	4.809		
4,700.0	4,575.4	4,704.2	4,597.5	20.1	18.6	-155.80	-329.8	-856.4	106.1	83.9	22.21	4.779		
4,800.0	4,672.2	4,804.2	4,694.7	20.5	19.1	-155.69	-338.1	-878.2	108.1	85.4	22.76	4.751		
4,900.0	4,769.0	4,904.2	4,792.0	21.0	19.5	-155.58	-346.4	-900.1	110.1	86.8	23.31	4.724		
5,000.0	4,865.8	5,004.1	4,889.2	21.5	20.0	-155.47	-354.7	-921.9	112.1	88.3	23.87	4.698		
5,100.0	4,962.6	5,104.1	4,986.4	22.0	20.4	-155.37	-363.0	-943.7	114.1	89.7	24.42	4.672		

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 Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4C-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,200.0	5,059.4	5,204.1	5,083.6	22.5	20.9	-155.27	-371.3	-965.6	116.1	91.1	24.98	4.648		
5,300.0	5,156.3	5,304.1	5,180.8	22.9	21.3	-155.17	-379.6	-987.4	118.1	92.6	25.54	4.625		
5,400.0	5,253.1	5,404.1	5,278.0	23.4	21.8	-155.08	-387.9	-1,009.2	120.1	94.0	26.09	4.603		
5,500.0	5,349.9	5,504.0	5,375.2	23.9	22.2	-154.99	-396.2	-1,031.0	122.1	95.5	26.65	4.582		
5,600.0	5,446.7	5,604.0	5,472.4	24.4	22.7	-154.90	-404.5	-1,052.9	124.1	96.9	27.21	4.561		
5,700.0	5,543.5	5,704.0	5,569.7	24.9	23.1	-154.82	-412.9	-1,074.7	126.1	98.3	27.77	4.541		
5,800.0	5,640.4	5,804.0	5,666.9	25.3	23.6	-154.74	-421.2	-1,096.5	128.1	99.8	28.33	4.522		
5,900.0	5,737.2	5,904.0	5,764.1	25.8	24.0	-154.66	-429.5	-1,118.4	130.1	101.2	28.89	4.504		
6,000.0	5,834.0	6,003.9	5,861.3	26.3	24.5	-154.58	-437.8	-1,140.2	132.1	102.7	29.45	4.486		
6,100.0	5,930.8	6,103.9	5,958.5	26.8	24.9	-154.51	-446.1	-1,162.0	134.1	104.1	30.01	4.469		
6,200.0	6,027.6	6,203.9	6,055.7	27.3	25.4	-154.44	-454.4	-1,183.9	136.1	105.5	30.57	4.453		
6,300.0	6,124.4	6,303.9	6,152.9	27.8	25.9	-154.37	-462.7	-1,205.7	138.1	107.0	31.13	4.437		
6,400.0	6,221.3	6,403.9	6,250.1	28.2	26.3	-154.30	-471.0	-1,227.5	140.1	108.4	31.69	4.421		
6,500.0	6,318.1	6,503.8	6,347.4	28.7	26.8	-154.23	-479.3	-1,249.4	142.1	109.9	32.26	4.406		
6,600.0	6,414.9	6,603.8	6,444.6	29.2	27.2	-154.17	-487.6	-1,271.2	144.1	111.3	32.82	4.392		
6,700.0	6,511.7	6,703.8	6,541.8	29.7	27.7	-154.11	-495.9	-1,293.0	146.1	112.7	33.38	4.378		
6,800.0	6,608.5	6,803.8	6,639.0	30.2	28.1	-154.04	-504.3	-1,314.9	148.1	114.2	33.94	4.364		
6,900.0	6,705.4	6,903.8	6,736.2	30.6	28.6	-153.99	-512.6	-1,336.7	150.1	115.6	34.51	4.351		
7,000.0	6,802.2	7,005.1	6,834.8	31.1	29.0	-154.35	-519.8	-1,358.8	152.0	117.2	34.79	4.369		
7,100.0	6,899.0	7,106.4	6,933.3	31.6	29.4	-159.99	-512.9	-1,381.0	152.7	120.9	31.73	4.811		
7,200.0	6,995.8	7,200.0	7,021.9	32.1	29.6	-170.78	-490.8	-1,400.9	156.6	129.8	26.81	5.841		
7,300.0	7,092.8	7,283.8	7,097.4	32.5	29.7	150.41	-458.8	-1,417.8	170.5	144.7	25.83	6.600		
7,400.0	7,189.1	7,363.1	7,163.9	32.9	29.8	107.23	-418.3	-1,432.7	191.7	161.9	29.77	6.440		
7,500.0	7,281.8	7,439.3	7,222.0	33.2	29.9	82.42	-370.9	-1,445.8	215.9	182.3	33.60	6.426		
7,600.0	7,368.3	7,513.1	7,272.0	33.3	29.9	67.93	-317.9	-1,457.0	240.1	204.8	35.26	6.809		
7,700.0	7,445.7	7,585.0	7,314.0	33.5	29.9	58.78	-260.3	-1,466.5	262.4	227.8	34.66	7.572		
7,800.0	7,511.9	7,650.0	7,345.6	33.6	29.9	52.88	-204.0	-1,473.6	281.8	249.6	32.16	8.761		
7,900.0	7,564.8	7,725.0	7,374.1	33.6	30.0	48.77	-134.9	-1,479.9	297.1	268.4	28.74	10.337		
8,000.0	7,602.7	7,800.0	7,393.5	33.7	30.0	46.21	-62.7	-1,484.3	308.2	283.2	24.99	12.332		
8,100.0	7,624.6	7,862.1	7,402.5	33.8	30.1	44.94	-1.3	-1,486.3	314.5	292.5	22.00	14.297		
8,200.0	7,630.0	7,936.7	7,405.0	33.9	30.2	44.62	73.2	-1,486.9	316.1	294.8	21.29	14.848		
8,300.0	7,630.0	8,036.7	7,405.0	34.1	30.4	44.62	173.2	-1,486.9	316.1	294.0	22.15	14.273		
8,400.0	7,630.0	8,136.7	7,405.0	34.3	30.7	44.62	273.2	-1,486.9	316.1	292.9	23.23	13.606		
8,500.0	7,630.0	8,236.7	7,405.0	34.7	31.1	44.62	373.2	-1,486.9	316.1	291.6	24.52	12.891		
8,600.0	7,630.0	8,336.7	7,405.0	35.1	31.6	44.62	473.2	-1,486.9	316.1	290.1	25.98	12.165		
8,700.0	7,630.0	8,436.7	7,405.0	35.7	32.2	44.62	573.2	-1,486.9	316.1	288.5	27.59	11.456		
8,800.0	7,630.0	8,536.7	7,405.0	36.3	32.8	44.62	673.2	-1,486.9	316.1	286.8	29.32	10.781		
8,900.0	7,630.0	8,636.7	7,405.0	36.9	33.6	44.62	773.2	-1,486.9	316.1	285.0	31.15	10.147		
9,000.0	7,630.0	8,736.7	7,405.0	37.7	34.4	44.62	873.2	-1,486.9	316.1	283.0	33.07	9.559		
9,100.0	7,630.0	8,836.7	7,405.0	38.5	35.3	44.62	973.2	-1,486.9	316.1	281.1	35.06	9.017		
9,200.0	7,630.0	8,936.7	7,405.0	39.3	36.2	44.62	1,073.2	-1,486.9	316.1	279.0	37.10	8.520		
9,300.0	7,630.0	9,036.7	7,405.0	40.2	37.2	44.62	1,173.2	-1,486.9	316.1	276.9	39.20	8.064		
9,400.0	7,630.0	9,136.7	7,405.0	41.2	38.3	44.62	1,273.2	-1,486.9	316.1	274.8	41.34	7.647		
9,500.0	7,630.0	9,236.7	7,405.0	42.3	39.4	44.62	1,373.2	-1,486.9	316.1	272.6	43.51	7.265		
9,600.0	7,630.0	9,336.7	7,405.0	43.3	40.5	44.62	1,473.2	-1,486.9	316.1	270.4	45.72	6.914		
9,700.0	7,630.0	9,436.7	7,405.0	44.5	41.8	44.62	1,573.2	-1,486.9	316.1	268.2	47.95	6.592		
9,800.0	7,630.0	9,536.7	7,405.0	45.6	43.0	44.62	1,673.2	-1,486.9	316.1	265.9	50.21	6.296		
9,900.0	7,630.0	9,636.7	7,405.0	46.8	44.3	44.62	1,773.2	-1,486.9	316.1	263.6	52.49	6.023		
10,000.0	7,630.0	9,736.7	7,405.0	48.1	45.6	44.62	1,873.2	-1,486.9	316.1	261.3	54.78	5.771		
10,100.0	7,630.0	9,836.7	7,405.0	49.3	46.9	44.62	1,973.2	-1,486.9	316.1	259.0	57.09	5.537		
10,200.0	7,630.0	9,936.7	7,405.0	50.6	48.3	44.62	2,073.2	-1,486.9	316.1	256.7	59.41	5.321		
10,300.0	7,630.0	10,036.7	7,405.0	52.0	49.7	44.62	2,173.2	-1,486.9	316.1	254.4	61.75	5.119		

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 Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4C-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink 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		
10,400.0	7,630.0	10,136.7	7,405.0	53.3	51.1	44.62	2,273.2	-1,486.9	316.1	252.0	64.10	4.932		
10,500.0	7,630.0	10,236.7	7,405.0	54.7	52.5	44.62	2,373.2	-1,486.9	316.1	249.7	66.45	4.757		
10,600.0	7,630.0	10,336.7	7,405.0	56.1	54.0	44.62	2,473.2	-1,486.9	316.1	247.3	68.82	4.594		
10,700.0	7,630.0	10,436.7	7,405.0	57.5	55.4	44.62	2,573.2	-1,486.9	316.1	244.9	71.19	4.441		
10,800.0	7,630.0	10,536.7	7,405.0	58.9	56.9	44.62	2,673.2	-1,486.9	316.1	242.5	73.57	4.297		
10,900.0	7,630.0	10,636.7	7,405.0	60.4	58.4	44.62	2,773.2	-1,486.9	316.1	240.2	75.95	4.162		
11,000.0	7,630.0	10,736.7	7,405.0	61.8	60.0	44.62	2,873.2	-1,486.9	316.1	237.8	78.35	4.035		
11,100.0	7,630.0	10,836.7	7,405.0	63.3	61.5	44.62	2,973.2	-1,486.9	316.1	235.4	80.74	3.915		
11,200.0	7,630.0	10,936.7	7,405.0	64.8	63.0	44.62	3,073.2	-1,486.9	316.1	233.0	83.15	3.802		
11,300.0	7,630.0	11,036.7	7,405.0	66.3	64.6	44.62	3,173.2	-1,486.9	316.1	230.6	85.55	3.695		
11,400.0	7,630.0	11,136.7	7,405.0	67.9	66.1	44.62	3,273.2	-1,486.9	316.1	228.2	87.96	3.594		
11,500.0	7,630.0	11,236.7	7,405.0	69.4	67.7	44.62	3,373.2	-1,486.9	316.1	225.7	90.38	3.498		
11,600.0	7,630.0	11,336.7	7,405.0	70.9	69.3	44.62	3,473.2	-1,486.9	316.1	223.3	92.79	3.407		
11,700.0	7,630.0	11,436.7	7,405.0	72.5	70.9	44.62	3,573.2	-1,486.9	316.1	220.9	95.21	3.320		
11,800.0	7,630.0	11,536.7	7,405.0	74.1	72.5	44.62	3,673.2	-1,486.9	316.1	218.5	97.64	3.238		
11,900.0	7,630.0	11,636.7	7,405.0	75.6	74.1	44.62	3,773.2	-1,486.9	316.1	216.0	100.07	3.159		
12,000.0	7,630.0	11,736.7	7,405.0	77.2	75.7	44.62	3,873.2	-1,486.9	316.1	213.6	102.49	3.084		
12,100.0	7,630.0	11,836.7	7,405.0	78.8	77.3	44.62	3,973.2	-1,486.9	316.1	211.2	104.93	3.013		
12,200.0	7,630.0	11,936.7	7,405.0	80.4	78.9	44.62	4,073.2	-1,486.9	316.1	208.8	107.36	2.944		
12,300.0	7,630.0	12,036.7	7,405.0	82.0	80.6	44.62	4,173.2	-1,486.9	316.1	206.3	109.80	2.879		
12,400.0	7,630.0	12,136.7	7,405.0	83.6	82.2	44.62	4,273.2	-1,486.9	316.1	203.9	112.23	2.817		
12,500.0	7,630.0	12,236.7	7,405.0	85.2	83.8	44.62	4,373.2	-1,486.9	316.1	201.4	114.67	2.757		
12,600.0	7,630.0	12,336.7	7,405.0	86.8	85.5	44.62	4,473.2	-1,486.9	316.1	199.0	117.11	2.699		
12,700.0	7,630.0	12,436.7	7,405.0	88.4	87.1	44.62	4,573.2	-1,486.9	316.1	196.6	119.56	2.644		
12,800.0	7,630.0	12,536.7	7,405.0	90.1	88.8	44.62	4,673.2	-1,486.9	316.1	194.1	122.00	2.591		
12,900.0	7,630.0	12,636.7	7,405.0	91.7	90.4	44.62	4,773.2	-1,486.9	316.1	191.7	124.45	2.540		
13,000.0	7,630.0	12,736.7	7,405.0	93.3	92.1	44.62	4,873.2	-1,486.9	316.1	189.2	126.89	2.491		
13,100.0	7,630.0	12,836.7	7,405.0	95.0	93.8	44.62	4,973.2	-1,486.9	316.1	186.8	129.34	2.444		
13,200.0	7,630.0	12,936.7	7,405.0	96.6	95.4	44.62	5,073.2	-1,486.9	316.1	184.3	131.79	2.399		
13,300.0	7,630.0	13,036.7	7,405.0	98.3	97.1	44.62	5,173.2	-1,486.9	316.1	181.9	134.24	2.355		
13,400.0	7,630.0	13,136.7	7,405.0	99.9	98.8	44.62	5,273.2	-1,486.9	316.1	179.4	136.69	2.313		
13,500.0	7,630.0	13,236.7	7,405.0	101.6	100.4	44.62	5,373.2	-1,486.9	316.1	177.0	139.15	2.272		
13,600.0	7,630.0	13,336.7	7,405.0	103.2	102.1	44.62	5,473.2	-1,486.9	316.1	174.5	141.60	2.232		
13,700.0	7,630.0	13,436.7	7,405.0	104.9	103.8	44.62	5,573.2	-1,486.9	316.1	172.1	144.05	2.194		
13,800.0	7,630.0	13,536.7	7,405.0	106.6	105.5	44.62	5,673.2	-1,486.9	316.1	169.6	146.51	2.158		
13,900.0	7,630.0	13,636.7	7,405.0	108.2	107.2	44.62	5,773.2	-1,486.9	316.1	167.1	148.96	2.122		
14,000.0	7,630.0	13,736.7	7,405.0	109.9	108.9	44.62	5,873.2	-1,486.9	316.1	164.7	151.42	2.088		
14,100.0	7,630.0	13,836.7	7,405.0	111.6	110.5	44.62	5,973.2	-1,486.9	316.1	162.2	153.88	2.054		
14,200.0	7,630.0	13,936.7	7,405.0	113.3	112.2	44.62	6,073.2	-1,486.9	316.1	159.8	156.34	2.022		
14,300.0	7,630.0	14,036.7	7,405.0	114.9	113.9	44.62	6,173.2	-1,486.9	316.1	157.3	158.80	1.991 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4D-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.05	0.0	19.9	19.9					
100.0	100.0	100.0	100.0	0.1	0.1	90.05	0.0	19.9	19.9	19.6	0.24	83.671		
200.0	200.0	200.0	200.0	0.3	0.3	90.05	0.0	19.9	19.9	19.3	0.59	33.867		
300.0	300.0	300.0	300.0	0.5	0.5	90.05	0.0	19.9	19.9	18.9	0.94	21.230	CC, ES	
400.0	400.0	400.0	400.0	0.6	0.6	-163.06	0.0	19.9	21.5	20.2	1.28	16.759		
500.0	499.8	499.8	499.8	0.8	0.8	-166.33	0.0	19.9	26.6	24.9	1.63	16.279		
600.0	599.5	600.6	600.6	1.1	1.0	-168.90	-0.7	18.2	33.4	31.4	1.98	16.871		
700.0	698.7	701.6	701.4	1.3	1.2	-170.15	-2.8	13.4	40.3	38.0	2.33	17.316		
800.0	797.5	802.9	802.3	1.6	1.4	-170.65	-6.4	5.2	47.3	44.6	2.68	17.648		
900.0	895.6	904.4	903.0	2.0	1.6	-170.69	-11.3	-6.3	54.3	51.3	3.04	17.888		
1,000.0	993.1	1,006.1	1,003.5	2.4	1.9	-170.42	-17.7	-21.1	61.3	57.9	3.40	18.045		
1,100.0	1,089.9	1,108.0	1,103.5	2.9	2.3	-169.81	-25.5	-39.1	67.3	63.5	3.78	17.811		
1,200.0	1,186.7	1,207.9	1,201.2	3.3	2.7	-168.99	-33.8	-58.3	71.9	67.7	4.17	17.228		
1,300.0	1,283.5	1,307.8	1,298.8	3.8	3.0	-168.26	-42.1	-77.4	76.5	71.9	4.58	16.717		
1,400.0	1,380.4	1,407.7	1,396.5	4.2	3.4	-167.62	-50.3	-96.6	81.1	76.1	4.99	16.265		
1,500.0	1,477.2	1,507.6	1,494.2	4.7	3.8	-167.05	-58.6	-115.7	85.8	80.3	5.41	15.862		
1,600.0	1,574.0	1,607.5	1,591.9	5.2	4.2	-166.54	-66.9	-134.9	90.4	84.6	5.83	15.501		
1,700.0	1,670.8	1,707.4	1,689.6	5.7	4.6	-166.07	-75.1	-154.0	95.0	88.8	6.26	15.176		
1,800.0	1,767.6	1,807.2	1,787.3	6.1	5.0	-165.65	-83.4	-173.2	99.7	93.0	6.70	14.882		
1,900.0	1,864.4	1,907.1	1,885.0	6.6	5.4	-165.27	-91.7	-192.3	104.3	97.2	7.14	14.615		
2,000.0	1,961.3	2,007.0	1,982.7	7.1	5.8	-164.92	-100.0	-211.5	109.0	101.4	7.58	14.372		
2,100.0	2,058.1	2,106.9	2,080.3	7.6	6.2	-164.60	-108.2	-230.6	113.7	105.6	8.03	14.150		
2,200.0	2,154.9	2,206.8	2,178.0	8.0	6.6	-164.30	-116.5	-249.8	118.3	109.8	8.48	13.946		
2,300.0	2,251.7	2,306.7	2,275.7	8.5	7.0	-164.03	-124.8	-268.9	123.0	114.1	8.94	13.759		
2,400.0	2,348.5	2,406.6	2,373.4	9.0	7.4	-163.78	-133.0	-288.1	127.7	118.3	9.40	13.586		
2,500.0	2,445.4	2,506.5	2,471.1	9.5	7.8	-163.54	-141.3	-307.2	132.3	122.5	9.86	13.426		
2,600.0	2,542.2	2,606.4	2,568.8	10.0	8.2	-163.32	-149.6	-326.4	137.0	126.7	10.32	13.278		
2,700.0	2,639.0	2,706.3	2,666.5	10.4	8.6	-163.12	-157.9	-345.5	141.7	130.9	10.78	13.140		
2,800.0	2,735.8	2,806.1	2,764.2	10.9	9.0	-162.93	-166.1	-364.7	146.4	135.1	11.25	13.012		
2,900.0	2,832.6	2,906.0	2,861.8	11.4	9.4	-162.75	-174.4	-383.8	151.0	139.3	11.72	12.892		
3,000.0	2,929.4	3,005.9	2,959.5	11.9	9.8	-162.58	-182.7	-402.9	155.7	143.5	12.19	12.780		
3,100.0	3,026.3	3,105.8	3,057.2	12.4	10.2	-162.42	-190.9	-422.1	160.4	147.8	12.66	12.675		
3,200.0	3,123.1	3,205.7	3,154.9	12.8	10.7	-162.27	-199.2	-441.2	165.1	152.0	13.13	12.576		
3,300.0	3,219.9	3,305.6	3,252.6	13.3	11.1	-162.12	-207.5	-460.4	169.8	156.2	13.60	12.483		
3,400.0	3,316.7	3,405.5	3,350.3	13.8	11.5	-161.99	-215.8	-479.5	174.5	160.4	14.07	12.396		
3,500.0	3,413.5	3,505.4	3,448.0	14.3	11.9	-161.86	-224.0	-498.7	179.2	164.6	14.55	12.313		
3,600.0	3,510.4	3,605.3	3,545.7	14.8	12.3	-161.74	-232.3	-517.8	183.8	168.8	15.03	12.235		
3,700.0	3,607.2	3,705.1	3,643.3	15.2	12.7	-161.63	-240.6	-537.0	188.5	173.0	15.50	12.162		
3,800.0	3,704.0	3,805.0	3,741.0	15.7	13.1	-161.52	-248.9	-556.1	193.2	177.2	15.98	12.092		
3,900.0	3,800.8	3,904.9	3,838.7	16.2	13.5	-161.41	-257.1	-575.3	197.9	181.4	16.46	12.025		
4,000.0	3,897.6	4,004.8	3,936.4	16.7	13.9	-161.31	-265.4	-594.4	202.6	185.7	16.94	11.962		
4,100.0	3,994.4	4,104.7	4,034.1	17.2	14.3	-161.22	-273.7	-613.6	207.3	189.9	17.42	11.902		
4,200.0	4,091.3	4,204.6	4,131.8	17.6	14.7	-161.13	-281.9	-632.7	212.0	194.1	17.90	11.845		
4,300.0	4,188.1	4,304.5	4,229.5	18.1	15.1	-161.04	-290.2	-651.9	216.7	198.3	18.38	11.790		
4,400.0	4,284.9	4,404.4	4,327.2	18.6	15.5	-160.96	-298.5	-671.0	221.4	202.5	18.86	11.738		
4,500.0	4,381.7	4,504.3	4,424.8	19.1	16.0	-160.88	-306.8	-690.2	226.1	206.7	19.34	11.688		
4,600.0	4,478.5	4,604.1	4,522.5	19.6	16.4	-160.80	-315.0	-709.3	230.8	210.9	19.82	11.641		
4,700.0	4,575.4	4,704.0	4,620.2	20.1	16.8	-160.73	-323.3	-728.5	235.4	215.1	20.31	11.595		
4,800.0	4,672.2	4,803.9	4,717.9	20.5	17.2	-160.66	-331.6	-747.6	240.1	219.4	20.79	11.551		
4,900.0	4,769.0	4,903.8	4,815.6	21.0	17.6	-160.59	-339.8	-766.7	244.8	223.6	21.27	11.510		
5,000.0	4,865.8	5,003.7	4,913.3	21.5	18.0	-160.53	-348.1	-785.9	249.5	227.8	21.76	11.469		
5,100.0	4,962.6	5,103.6	5,011.0	22.0	18.4	-160.46	-356.4	-805.0	254.2	232.0	22.24	11.431		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4D-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,200.0	5,059.4	5,203.5	5,108.7	22.5	18.8	-160.40	-364.7	-824.2	258.9	236.2	22.72	11.394		
5,300.0	5,156.3	5,303.4	5,206.3	22.9	19.2	-160.35	-372.9	-843.3	263.6	240.4	23.21	11.358		
5,400.0	5,253.1	5,403.3	5,304.0	23.4	19.6	-160.29	-381.2	-862.5	268.3	244.6	23.69	11.324		
5,500.0	5,349.9	5,503.2	5,401.7	23.9	20.0	-160.23	-389.5	-881.6	273.0	248.8	24.18	11.290		
5,600.0	5,446.7	5,603.0	5,499.4	24.4	20.5	-160.18	-397.7	-900.8	277.7	253.0	24.67	11.259		
5,700.0	5,543.5	5,702.9	5,597.1	24.9	20.9	-160.13	-406.0	-919.9	282.4	257.2	25.15	11.228		
5,800.0	5,640.4	5,802.8	5,694.8	25.3	21.3	-160.08	-414.3	-939.1	287.1	261.5	25.64	11.198		
5,900.0	5,737.2	5,902.7	5,792.5	25.8	21.7	-160.03	-422.6	-958.2	291.8	265.7	26.12	11.169		
6,000.0	5,834.0	6,002.6	5,890.1	26.3	22.1	-159.99	-430.8	-977.4	296.5	269.9	26.61	11.142		
6,100.0	5,930.8	6,102.5	5,987.8	26.8	22.5	-159.94	-439.1	-996.5	301.2	274.1	27.10	11.115		
6,200.0	6,027.6	6,202.4	6,085.5	27.3	22.9	-159.90	-447.4	-1,015.7	305.9	278.3	27.59	11.089		
6,300.0	6,124.4	6,302.3	6,183.2	27.8	23.3	-159.86	-455.7	-1,034.8	310.6	282.5	28.07	11.064		
6,400.0	6,221.3	6,402.2	6,280.9	28.2	23.7	-159.82	-463.9	-1,054.0	315.3	286.7	28.56	11.039		
6,500.0	6,318.1	6,502.0	6,378.6	28.7	24.1	-159.78	-472.2	-1,073.1	320.0	290.9	29.05	11.016		
6,600.0	6,414.9	6,601.9	6,476.3	29.2	24.5	-159.74	-480.5	-1,092.3	324.7	295.1	29.54	10.993		
6,700.0	6,511.7	6,701.8	6,574.0	29.7	25.0	-159.70	-488.7	-1,111.4	329.4	299.4	30.02	10.971		
6,800.0	6,608.5	6,801.7	6,671.6	30.2	25.4	-159.67	-497.0	-1,130.6	334.1	303.6	30.51	10.949		
6,900.0	6,705.4	6,901.6	6,769.3	30.6	25.8	-159.63	-505.3	-1,149.7	338.8	307.8	31.00	10.929		
7,000.0	6,802.2	7,001.5	6,867.0	31.1	26.2	-159.60	-513.6	-1,168.8	343.5	312.0	31.49	10.908		
7,100.0	6,899.0	7,103.8	6,967.2	31.6	26.5	-160.50	-516.4	-1,188.6	347.9	316.5	31.40	11.081		
7,200.0	6,995.8	7,202.1	7,062.5	32.1	26.8	-164.04	-502.3	-1,207.6	352.3	322.5	29.80	11.822		
7,300.0	7,092.8	7,292.2	7,146.6	32.5	26.9	164.72	-475.0	-1,224.7	359.2	331.6	27.60	13.017		
7,400.0	7,189.1	7,377.8	7,221.6	32.9	27.0	127.19	-437.0	-1,240.2	368.7	342.5	26.29	14.028		
7,500.0	7,281.8	7,460.0	7,287.6	33.2	27.1	105.93	-390.1	-1,254.1	379.8	353.7	26.07	14.569		
7,600.0	7,368.3	7,539.6	7,344.6	33.3	27.1	93.44	-335.9	-1,266.3	391.3	364.9	26.46	14.792		
7,700.0	7,445.7	7,617.2	7,392.5	33.5	27.1	85.30	-275.9	-1,276.8	402.4	375.5	26.88	14.968		
7,800.0	7,511.9	7,693.1	7,431.2	33.6	27.1	79.70	-211.2	-1,285.5	412.2	385.2	27.01	15.259		
7,900.0	7,564.8	7,767.9	7,460.8	33.6	27.1	75.85	-143.0	-1,292.6	420.0	393.2	26.81	15.666		
8,000.0	7,602.7	7,841.8	7,481.3	33.7	27.2	73.33	-72.3	-1,297.9	425.4	399.0	26.42	16.101		
8,100.0	7,624.6	7,915.1	7,492.5	33.8	27.3	71.96	0.1	-1,301.3	428.0	401.9	26.10	16.396		
8,200.0	7,630.0	7,995.4	7,495.0	33.9	27.4	71.60	80.3	-1,303.2	427.6	401.4	26.27	16.280		
8,300.0	7,630.0	8,095.4	7,495.0	34.1	27.7	71.52	180.2	-1,305.0	426.0	398.7	27.23	15.642		
8,400.0	7,630.0	8,195.4	7,495.0	34.3	28.1	71.45	280.2	-1,306.7	424.3	395.8	28.55	14.861		
8,500.0	7,630.0	8,295.4	7,495.0	34.7	28.6	71.37	380.2	-1,308.5	422.7	392.5	30.18	14.005		
8,600.0	7,630.0	8,395.4	7,495.0	35.1	29.1	71.30	480.2	-1,310.2	421.0	389.0	32.07	13.128		
8,700.0	7,630.0	8,495.3	7,495.0	35.7	29.8	71.22	580.1	-1,312.0	419.4	385.2	34.18	12.271		
8,800.0	7,630.0	8,595.3	7,495.0	36.3	30.5	71.14	680.1	-1,313.7	417.7	381.3	36.46	11.457		
8,900.0	7,630.0	8,695.3	7,495.0	36.9	31.4	71.06	780.1	-1,315.4	416.1	377.2	38.89	10.699		
9,000.0	7,630.0	8,795.3	7,495.0	37.7	32.3	70.99	880.0	-1,317.2	414.4	373.0	41.44	10.000		
9,100.0	7,630.0	8,895.3	7,495.0	38.5	33.3	70.91	980.0	-1,318.9	412.8	368.7	44.09	9.362		
9,200.0	7,630.0	8,995.3	7,495.0	39.3	34.3	70.83	1,080.0	-1,320.7	411.1	364.3	46.82	8.781		
9,300.0	7,630.0	9,095.2	7,495.0	40.2	35.4	70.75	1,179.9	-1,322.4	409.5	359.9	49.61	8.253		
9,400.0	7,630.0	9,195.2	7,495.0	41.2	36.6	70.67	1,279.9	-1,324.2	407.8	355.4	52.46	7.774		
9,500.0	7,630.0	9,295.2	7,495.0	42.3	37.8	70.58	1,379.9	-1,325.9	406.2	350.8	55.36	7.337		
9,600.0	7,630.0	9,395.2	7,495.0	43.3	39.0	70.50	1,479.8	-1,327.7	404.5	346.2	58.29	6.939		
9,700.0	7,630.0	9,495.2	7,495.0	44.5	40.3	70.42	1,579.8	-1,329.4	402.9	341.6	61.26	6.576		
9,800.0	7,630.0	9,595.2	7,495.0	45.6	41.6	70.34	1,679.8	-1,331.2	401.2	337.0	64.26	6.244		
9,900.0	7,630.0	9,695.2	7,495.0	46.8	42.9	70.25	1,779.8	-1,332.9	399.6	332.3	67.28	5.940		
10,000.0	7,630.0	9,795.1	7,495.0	48.1	44.3	70.17	1,879.7	-1,334.6	398.0	327.6	70.31	5.660		
10,100.0	7,630.0	9,895.1	7,495.0	49.3	45.7	70.08	1,979.7	-1,336.4	396.3	322.9	73.37	5.402		
10,200.0	7,630.0	9,995.1	7,495.0	50.6	47.1	69.99	2,079.7	-1,338.1	394.7	318.2	76.44	5.163		
10,300.0	7,630.0	10,095.1	7,495.0	52.0	48.6	69.91	2,179.6	-1,339.9	393.0	313.5	79.52	4.943		

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 Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4D-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink 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			
10,400.0	7,630.0	10,195.1	7,495.0	53.3	50.0	69.82	2,279.6	-1,341.6	391.4	308.8	82.61	4.738		
10,500.0	7,630.0	10,295.1	7,495.0	54.7	51.5	69.73	2,379.6	-1,343.4	389.8	304.1	85.70	4.548		
10,600.0	7,630.0	10,395.1	7,495.0	56.1	53.0	69.64	2,479.5	-1,345.1	388.1	299.3	88.81	4.370		
10,700.0	7,630.0	10,495.0	7,495.0	57.5	54.5	69.55	2,579.5	-1,346.9	386.5	294.6	91.92	4.205		
10,800.0	7,630.0	10,595.0	7,495.0	58.9	56.1	69.46	2,679.5	-1,348.6	384.8	289.8	95.04	4.050		
10,900.0	7,630.0	10,695.0	7,495.0	60.4	57.6	69.37	2,779.5	-1,350.3	383.2	285.1	98.15	3.904		
11,000.0	7,630.0	10,795.0	7,495.0	61.8	59.2	69.28	2,879.4	-1,352.1	381.6	280.3	101.28	3.768		
11,100.0	7,630.0	10,895.0	7,495.0	63.3	60.7	69.18	2,979.4	-1,353.8	379.9	275.5	104.40	3.639		
11,200.0	7,630.0	10,995.0	7,495.0	64.8	62.3	69.09	3,079.4	-1,355.6	378.3	270.8	107.53	3.518		
11,300.0	7,630.0	11,094.9	7,495.0	66.3	63.9	69.00	3,179.3	-1,357.3	376.7	266.0	110.65	3.404		
11,400.0	7,630.0	11,194.9	7,495.0	67.9	65.5	68.90	3,279.3	-1,359.1	375.1	261.3	113.78	3.296		
11,500.0	7,630.0	11,294.9	7,495.0	69.4	67.1	68.80	3,379.3	-1,360.8	373.4	256.5	116.90	3.194		
11,600.0	7,630.0	11,394.9	7,495.0	70.9	68.7	68.71	3,479.2	-1,362.6	371.8	251.8	120.03	3.098		
11,700.0	7,630.0	11,494.9	7,495.0	72.5	70.3	68.61	3,579.2	-1,364.3	370.2	247.0	123.15	3.006		
11,800.0	7,630.0	11,594.9	7,495.0	74.1	71.9	68.51	3,679.2	-1,366.1	368.6	242.3	126.27	2.919		
11,900.0	7,630.0	11,694.9	7,495.0	75.6	73.6	68.41	3,779.1	-1,367.8	366.9	237.5	129.39	2.836		
12,000.0	7,630.0	11,794.8	7,495.0	77.2	75.2	68.31	3,879.1	-1,369.5	365.3	232.8	132.51	2.757		
12,100.0	7,630.0	11,894.8	7,495.0	78.8	76.8	68.21	3,979.1	-1,371.3	363.7	228.1	135.63	2.682		
12,200.0	7,630.0	11,994.8	7,495.0	80.4	78.5	68.10	4,079.1	-1,373.0	362.1	223.3	138.74	2.610		
12,300.0	7,630.0	12,094.8	7,495.0	82.0	80.1	68.00	4,179.0	-1,374.8	360.4	218.6	141.85	2.541		
12,400.0	7,630.0	12,194.8	7,495.0	83.6	81.8	67.90	4,279.0	-1,376.5	358.8	213.9	144.95	2.476		
12,500.0	7,630.0	12,294.8	7,495.0	85.2	83.4	67.79	4,379.0	-1,378.3	357.2	209.2	148.05	2.413		
12,600.0	7,630.0	12,394.7	7,495.0	86.8	85.1	67.69	4,478.9	-1,380.0	355.6	204.4	151.15	2.353		
12,700.0	7,630.0	12,494.7	7,495.0	88.4	86.8	67.58	4,578.9	-1,381.8	354.0	199.7	154.24	2.295		
12,800.0	7,630.0	12,594.7	7,495.0	90.1	88.4	67.47	4,678.9	-1,383.5	352.4	195.0	157.33	2.240		
12,900.0	7,630.0	12,694.7	7,495.0	91.7	90.1	67.36	4,778.8	-1,385.2	350.8	190.3	160.41	2.187		
13,000.0	7,630.0	12,794.7	7,495.0	93.3	91.8	67.25	4,878.8	-1,387.0	349.2	185.7	163.49	2.136		
13,100.0	7,630.0	12,894.7	7,495.0	95.0	93.5	67.14	4,978.8	-1,388.7	347.5	181.0	166.56	2.087		
13,200.0	7,630.0	12,994.7	7,495.0	96.6	95.1	67.03	5,078.8	-1,390.5	345.9	176.3	169.63	2.039		
13,300.0	7,630.0	13,094.6	7,495.0	98.3	96.8	66.91	5,178.7	-1,392.2	344.3	171.6	172.69	1.994		
13,400.0	7,630.0	13,194.6	7,495.0	99.9	98.5	66.80	5,278.7	-1,394.0	342.7	167.0	175.74	1.950		
13,500.0	7,630.0	13,291.8	7,495.0	101.6	100.2	66.69	5,375.8	-1,395.5	341.2	162.5	178.76	1.909		
13,526.6	7,630.0	13,315.8	7,495.0	102.0	100.6	66.69	5,399.8	-1,395.7	341.1	161.6	179.56	1.900		
13,600.0	7,630.0	13,381.9	7,495.0	103.2	101.7	66.74	5,465.9	-1,394.9	341.9	160.1	181.86	1.880		
13,700.0	7,630.0	13,471.9	7,495.0	104.9	103.2	66.97	5,555.9	-1,391.4	345.5	160.3	185.19	1.866		
13,800.0	7,630.0	13,561.6	7,495.0	106.6	104.6	67.37	5,645.3	-1,385.1	351.9	163.2	188.76	1.865 SF		
13,900.0	7,630.0	13,659.0	7,495.0	108.2	106.2	67.92	5,742.3	-1,376.2	360.4	167.8	192.65	1.871		
14,000.0	7,630.0	13,758.5	7,495.0	109.9	107.9	68.46	5,841.5	-1,367.0	369.0	172.4	196.57	1.877		
14,100.0	7,630.0	13,858.1	7,495.0	111.6	109.5	68.97	5,940.6	-1,357.8	377.6	177.2	200.47	1.884		
14,200.0	7,630.0	13,957.7	7,495.0	113.3	111.2	69.46	6,039.8	-1,348.6	386.3	181.9	204.35	1.890		
14,300.0	7,630.0	14,057.3	7,495.0	114.9	112.8	69.93	6,138.9	-1,339.4	394.9	186.7	208.21	1.897		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4E-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.05	0.0	29.9	29.9					
100.0	100.0	100.0	100.0	0.1	0.1	90.05	0.0	29.9	29.9	29.7	0.24	126.096		
200.0	200.0	200.0	200.0	0.3	0.3	90.05	0.0	29.9	29.9	29.3	0.59	51.039		
300.0	300.0	300.0	300.0	0.5	0.5	90.05	0.0	29.9	29.9	29.0	0.94	31.995 CC, ES		
400.0	400.0	400.0	400.0	0.6	0.6	-162.60	0.0	29.9	31.6	30.3	1.28	24.597		
500.0	499.8	499.8	499.8	0.8	0.8	-165.02	0.0	29.9	36.6	35.0	1.63	22.429		
600.0	599.5	599.5	599.5	1.1	1.0	-167.85	0.0	29.9	45.1	43.1	1.98	22.783		
700.0	698.7	700.5	700.5	1.3	1.2	-169.80	-0.9	28.4	55.4	53.1	2.33	23.825		
800.0	797.5	802.0	801.8	1.6	1.4	-170.57	-3.5	23.7	66.0	63.3	2.68	24.644		
900.0	895.6	903.8	903.3	2.0	1.6	-170.64	-7.8	15.8	76.6	73.5	3.03	25.279		
1,000.0	993.1	1,006.0	1,004.6	2.4	1.8	-170.26	-13.9	4.8	87.3	83.9	3.39	25.750		
1,100.0	1,089.9	1,108.1	1,105.4	2.9	2.1	-169.51	-21.7	-9.4	97.2	93.4	3.77	25.747		
1,200.0	1,186.7	1,207.7	1,203.5	3.3	2.4	-168.68	-29.9	-24.3	106.0	101.8	4.17	25.432		
1,300.0	1,283.5	1,307.3	1,301.7	3.8	2.7	-167.98	-38.1	-39.2	114.9	110.3	4.57	25.129		
1,400.0	1,380.4	1,406.9	1,399.8	4.2	3.0	-167.38	-46.3	-54.1	123.7	118.8	4.98	24.842		
1,500.0	1,477.2	1,506.5	1,497.9	4.7	3.3	-166.86	-54.5	-69.0	132.6	127.2	5.40	24.573		
1,600.0	1,574.0	1,606.0	1,596.1	5.2	3.7	-166.40	-62.7	-83.9	141.5	135.7	5.82	24.321		
1,700.0	1,670.8	1,705.6	1,694.2	5.7	4.0	-166.00	-70.9	-98.8	150.4	144.2	6.24	24.087		
1,800.0	1,767.6	1,805.2	1,792.4	6.1	4.3	-165.65	-79.1	-113.7	159.3	152.7	6.68	23.869		
1,900.0	1,864.4	1,904.8	1,890.5	6.6	4.7	-165.33	-87.3	-128.6	168.2	161.1	7.11	23.667		
2,000.0	1,961.3	2,004.4	1,988.6	7.1	5.0	-165.04	-95.5	-143.4	177.2	169.6	7.55	23.480		
2,100.0	2,058.1	2,104.0	2,086.8	7.6	5.3	-164.78	-103.8	-158.3	186.1	178.1	7.98	23.306		
2,200.0	2,154.9	2,203.6	2,184.9	8.0	5.7	-164.55	-112.0	-173.2	195.0	186.6	8.43	23.144		
2,300.0	2,251.7	2,303.2	2,283.0	8.5	6.0	-164.33	-120.2	-188.1	203.9	195.1	8.87	22.993		
2,400.0	2,348.5	2,402.8	2,381.2	9.0	6.4	-164.14	-128.4	-203.0	212.9	203.6	9.31	22.853		
2,500.0	2,445.4	2,502.4	2,479.3	9.5	6.7	-163.96	-136.6	-217.9	221.8	212.0	9.76	22.722		
2,600.0	2,542.2	2,602.0	2,577.4	10.0	7.0	-163.79	-144.8	-232.8	230.7	220.5	10.21	22.599		
2,700.0	2,639.0	2,701.6	2,675.6	10.4	7.4	-163.64	-153.0	-247.7	239.7	229.0	10.66	22.484		
2,800.0	2,735.8	2,801.2	2,773.7	10.9	7.7	-163.49	-161.2	-262.6	248.6	237.5	11.11	22.377		
2,900.0	2,832.6	2,900.8	2,871.8	11.4	8.1	-163.36	-169.4	-277.5	257.6	246.0	11.56	22.276		
3,000.0	2,929.4	3,000.4	2,970.0	11.9	8.4	-163.24	-177.6	-292.4	266.5	254.5	12.02	22.181		
3,100.0	3,026.3	3,100.0	3,068.1	12.4	8.8	-163.12	-185.8	-307.3	275.4	263.0	12.47	22.091		
3,200.0	3,123.1	3,199.6	3,166.2	12.8	9.1	-163.01	-194.0	-322.2	284.4	271.5	12.92	22.006		
3,300.0	3,219.9	3,299.2	3,264.4	13.3	9.5	-162.91	-202.2	-337.1	293.3	280.0	13.38	21.927		
3,400.0	3,316.7	3,398.8	3,362.5	13.8	9.8	-162.81	-210.4	-352.0	302.3	288.4	13.83	21.851		
3,500.0	3,413.5	3,498.4	3,460.6	14.3	10.1	-162.72	-218.6	-366.9	311.2	296.9	14.29	21.779		
3,600.0	3,510.4	3,598.0	3,558.8	14.8	10.5	-162.64	-226.9	-381.8	320.2	305.4	14.75	21.711		
3,700.0	3,607.2	3,697.6	3,656.9	15.2	10.8	-162.56	-235.1	-396.7	329.1	313.9	15.20	21.647		
3,800.0	3,704.0	3,797.2	3,755.1	15.7	11.2	-162.48	-243.3	-411.6	338.1	322.4	15.66	21.586		
3,900.0	3,800.8	3,896.8	3,853.2	16.2	11.5	-162.41	-251.5	-426.5	347.0	330.9	16.12	21.527		
4,000.0	3,897.6	3,996.4	3,951.3	16.7	11.9	-162.34	-259.7	-441.4	356.0	339.4	16.58	21.472		
4,100.0	3,994.4	4,096.0	4,049.5	17.2	12.2	-162.27	-267.9	-456.3	364.9	347.9	17.04	21.419		
4,200.0	4,091.3	4,195.6	4,147.6	17.6	12.6	-162.21	-276.1	-471.2	373.9	356.4	17.50	21.368		
4,300.0	4,188.1	4,295.2	4,245.7	18.1	12.9	-162.15	-284.3	-486.1	382.8	364.9	17.96	21.320		
4,400.0	4,284.9	4,394.8	4,343.9	18.6	13.2	-162.09	-292.5	-501.0	391.8	373.4	18.42	21.273		
4,500.0	4,381.7	4,494.4	4,442.0	19.1	13.6	-162.04	-300.7	-515.9	400.7	381.9	18.88	21.229		
4,600.0	4,478.5	4,594.0	4,540.1	19.6	13.9	-161.99	-308.9	-530.7	409.7	390.3	19.34	21.187		
4,700.0	4,575.4	4,693.6	4,638.3	20.1	14.3	-161.94	-317.1	-545.6	418.6	398.8	19.80	21.146		
4,800.0	4,672.2	4,793.2	4,736.4	20.5	14.6	-161.89	-325.3	-560.5	427.6	407.3	20.26	21.107		
4,900.0	4,769.0	4,892.8	4,834.5	21.0	15.0	-161.84	-333.5	-575.4	436.5	415.8	20.72	21.069		
5,000.0	4,865.8	4,992.4	4,932.7	21.5	15.3	-161.80	-341.7	-590.3	445.5	424.3	21.18	21.033		
5,100.0	4,962.6	5,092.0	5,030.8	22.0	15.7	-161.76	-350.0	-605.2	454.5	432.8	21.64	20.998		

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 Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4E-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink 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	5,059.4	5,191.6	5,128.9	22.5	16.0	-161.72	-358.2	-620.1	463.4	441.3	22.10	20.965		
5,300.0	5,156.3	5,291.2	5,227.1	22.9	16.4	-161.68	-366.4	-635.0	472.4	449.8	22.57	20.933		
5,400.0	5,253.1	5,390.8	5,325.2	23.4	16.7	-161.64	-374.6	-649.9	481.3	458.3	23.03	20.901		
5,500.0	5,349.9	5,490.4	5,423.3	23.9	17.1	-161.60	-382.8	-664.8	490.3	466.8	23.49	20.871		
5,600.0	5,446.7	5,590.0	5,521.5	24.4	17.4	-161.57	-391.0	-679.7	499.2	475.3	23.95	20.843		
5,700.0	5,543.5	5,689.6	5,619.6	24.9	17.7	-161.54	-399.2	-694.6	508.2	483.8	24.41	20.815		
5,800.0	5,640.4	5,789.2	5,717.8	25.3	18.1	-161.50	-407.4	-709.5	517.1	492.3	24.88	20.788		
5,900.0	5,737.2	5,888.8	5,815.9	25.8	18.4	-161.47	-415.6	-724.4	526.1	500.8	25.34	20.761		
6,000.0	5,834.0	5,988.4	5,914.0	26.3	18.8	-161.44	-423.8	-739.3	535.0	509.2	25.80	20.736		
6,100.0	5,930.8	6,087.9	6,012.2	26.8	19.1	-161.41	-432.0	-754.2	544.0	517.7	26.27	20.712		
6,200.0	6,027.6	6,187.5	6,110.3	27.3	19.5	-161.38	-440.2	-769.1	553.0	526.2	26.73	20.688		
6,300.0	6,124.4	6,287.1	6,208.4	27.8	19.8	-161.36	-448.4	-784.0	561.9	534.7	27.19	20.665		
6,400.0	6,221.3	6,386.7	6,306.6	28.2	20.2	-161.33	-456.6	-798.9	570.9	543.2	27.65	20.643		
6,500.0	6,318.1	6,486.3	6,404.7	28.7	20.5	-161.30	-464.8	-813.8	579.8	551.7	28.12	20.621		
6,600.0	6,414.9	6,585.9	6,502.8	29.2	20.9	-161.28	-473.0	-828.7	588.8	560.2	28.58	20.600		
6,700.0	6,511.7	6,685.5	6,601.0	29.7	21.2	-161.26	-481.3	-843.6	597.7	568.7	29.04	20.580		
6,800.0	6,608.5	6,785.1	6,699.1	30.2	21.6	-161.23	-489.5	-858.5	606.7	577.2	29.51	20.560		
6,900.0	6,705.4	6,884.7	6,797.2	30.6	21.9	-161.21	-497.7	-873.4	615.7	585.7	29.97	20.541		
7,000.0	6,802.2	6,984.3	6,895.4	31.1	22.2	-161.19	-505.9	-888.3	624.6	594.2	30.44	20.523		
7,100.0	6,899.0	7,083.9	6,993.5	31.6	22.6	-161.17	-514.1	-903.2	633.6	602.7	30.90	20.504		
7,200.0	6,995.8	7,184.0	7,092.3	32.1	22.9	-161.16	-517.2	-918.2	642.5	611.4	31.06	20.683		
7,300.0	7,092.8	7,281.0	7,187.2	32.5	23.0	170.46	-504.2	-932.6	651.6	621.4	30.25	21.544		
7,400.0	7,189.1	7,375.0	7,275.8	32.9	23.1	135.84	-476.2	-946.0	661.2	632.0	29.18	22.656		
7,500.0	7,281.8	7,466.6	7,356.7	33.2	23.1	117.08	-435.3	-958.3	670.8	642.5	28.28	23.719		
7,600.0	7,368.3	7,556.2	7,428.6	33.3	23.0	106.69	-383.1	-969.2	680.0	652.4	27.65	24.595		
7,700.0	7,445.7	7,644.1	7,490.5	33.5	22.9	100.24	-321.5	-978.6	688.5	661.2	27.31	25.211		
7,800.0	7,511.9	7,730.8	7,541.7	33.6	22.9	95.95	-252.1	-986.4	695.9	668.6	27.22	25.563		
7,900.0	7,564.8	7,816.4	7,581.6	33.6	22.8	93.07	-176.7	-992.4	701.8	674.5	27.31	25.693		
8,000.0	7,602.7	7,900.0	7,609.4	33.7	22.8	91.22	-98.0	-996.6	706.1	678.6	27.53	25.648		
8,100.0	7,624.6	7,985.9	7,625.9	33.8	22.9	90.23	-13.8	-999.1	708.6	680.7	27.87	25.426		
8,200.0	7,630.0	8,073.1	7,630.0	33.9	23.1	90.00	73.2	-999.8	709.2	680.8	28.35	25.017		
8,300.0	7,630.0	8,173.1	7,630.0	34.1	23.3	90.00	173.2	-999.8	709.2	679.8	29.32	24.186		
8,400.0	7,630.0	8,273.1	7,630.0	34.3	23.8	90.00	273.2	-999.8	709.2	678.5	30.65	23.136		
8,500.0	7,630.0	8,373.1	7,630.0	34.7	24.3	90.00	373.2	-999.8	709.2	676.9	32.31	21.948		
8,600.0	7,630.0	8,473.1	7,630.0	35.1	24.9	90.00	473.2	-999.8	709.2	674.9	34.25	20.705		
8,700.0	7,630.0	8,573.1	7,630.0	35.7	25.7	90.00	573.2	-999.8	709.2	672.7	36.43	19.469		
8,800.0	7,630.0	8,673.1	7,630.0	36.3	26.5	90.00	673.2	-999.8	709.2	670.4	38.80	18.279		
8,900.0	7,630.0	8,773.1	7,630.0	36.9	27.5	90.00	773.2	-999.8	709.2	667.8	41.33	17.159		
9,000.0	7,630.0	8,873.1	7,630.0	37.7	28.5	90.00	873.2	-999.8	709.2	665.2	44.00	16.119		
9,100.0	7,630.0	8,973.1	7,630.0	38.5	29.6	90.00	973.2	-999.8	709.2	662.4	46.77	15.161		
9,200.0	7,630.0	9,073.1	7,630.0	39.3	30.7	90.00	1,073.2	-999.8	709.2	659.5	49.65	14.285		
9,300.0	7,630.0	9,173.1	7,630.0	40.2	31.9	90.00	1,173.2	-999.8	709.2	656.6	52.59	13.484		
9,400.0	7,630.0	9,273.1	7,630.0	41.2	33.1	90.00	1,273.2	-999.8	709.2	653.6	55.61	12.753		
9,500.0	7,630.0	9,373.1	7,630.0	42.3	34.4	90.00	1,373.2	-999.8	709.2	650.5	58.68	12.086		
9,600.0	7,630.0	9,473.1	7,630.0	43.3	35.8	90.00	1,473.2	-999.8	709.2	647.4	61.79	11.477		
9,700.0	7,630.0	9,573.1	7,630.0	44.5	37.1	90.00	1,573.2	-999.8	709.2	644.2	64.95	10.919		
9,800.0	7,630.0	9,673.1	7,630.0	45.6	38.5	90.00	1,673.2	-999.8	709.2	641.0	68.14	10.408		
9,900.0	7,630.0	9,773.1	7,630.0	46.8	40.0	90.00	1,773.2	-999.8	709.2	637.8	71.36	9.938		
10,000.0	7,630.0	9,873.1	7,630.0	48.1	41.4	90.00	1,873.2	-999.8	709.2	634.6	74.60	9.506		
10,100.0	7,630.0	9,973.1	7,630.0	49.3	42.9	90.00	1,973.2	-999.8	709.2	631.3	77.87	9.107		
10,200.0	7,630.0	10,073.1	7,630.0	50.6	44.4	90.00	2,073.2	-999.8	709.2	628.0	81.16	8.738		
10,300.0	7,630.0	10,173.1	7,630.0	52.0	45.9	90.00	2,173.2	-999.8	709.2	624.7	84.46	8.396		

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 Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4E-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink 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			
10,400.0	7,630.0	10,273.1	7,630.0	53.3	47.4	90.00	2,273.2	-999.8	709.2	621.4	87.79	8.078		
10,500.0	7,630.0	10,373.1	7,630.0	54.7	49.0	90.00	2,373.2	-999.8	709.2	618.0	91.12	7.783		
10,600.0	7,630.0	10,473.1	7,630.0	56.1	50.6	90.00	2,473.2	-999.8	709.2	614.7	94.47	7.507		
10,700.0	7,630.0	10,573.1	7,630.0	57.5	52.1	90.00	2,573.2	-999.8	709.2	611.3	97.83	7.249		
10,800.0	7,630.0	10,673.1	7,630.0	58.9	53.7	90.00	2,673.2	-999.8	709.2	608.0	101.20	7.008		
10,900.0	7,630.0	10,773.1	7,630.0	60.4	55.3	90.00	2,773.2	-999.8	709.2	604.6	104.58	6.781		
11,000.0	7,630.0	10,873.1	7,630.0	61.8	56.9	90.00	2,873.2	-999.8	709.2	601.2	107.97	6.568		
11,100.0	7,630.0	10,973.1	7,630.0	63.3	58.5	90.00	2,973.2	-999.8	709.2	597.8	111.36	6.368		
11,200.0	7,630.0	11,073.1	7,630.0	64.8	60.1	90.00	3,073.2	-999.8	709.2	594.4	114.76	6.179		
11,300.0	7,630.0	11,173.1	7,630.0	66.3	61.8	90.00	3,173.2	-999.8	709.2	591.0	118.17	6.001		
11,400.0	7,630.0	11,273.1	7,630.0	67.9	63.4	90.00	3,273.2	-999.8	709.2	587.6	121.58	5.833		
11,500.0	7,630.0	11,373.1	7,630.0	69.4	65.0	90.00	3,373.2	-999.8	709.2	584.2	125.00	5.673		
11,600.0	7,630.0	11,473.1	7,630.0	70.9	66.7	90.00	3,473.2	-999.8	709.2	580.7	128.42	5.522		
11,700.0	7,630.0	11,573.1	7,630.0	72.5	68.3	90.00	3,573.2	-999.8	709.2	577.3	131.85	5.378		
11,800.0	7,630.0	11,673.1	7,630.0	74.1	70.0	90.00	3,673.2	-999.8	709.2	573.9	135.28	5.242		
11,900.0	7,630.0	11,773.1	7,630.0	75.6	71.7	90.00	3,773.2	-999.8	709.2	570.4	138.72	5.112		
12,000.0	7,630.0	11,873.1	7,630.0	77.2	73.3	90.00	3,873.2	-999.8	709.2	567.0	142.16	4.989		
12,100.0	7,630.0	11,973.1	7,630.0	78.8	75.0	90.00	3,973.2	-999.8	709.2	563.6	145.60	4.871		
12,200.0	7,630.0	12,073.1	7,630.0	80.4	76.7	90.00	4,073.2	-999.8	709.2	560.1	149.05	4.758		
12,300.0	7,630.0	12,173.1	7,630.0	82.0	78.3	90.00	4,173.2	-999.8	709.2	556.7	152.50	4.650		
12,400.0	7,630.0	12,273.1	7,630.0	83.6	80.0	90.00	4,273.2	-999.8	709.2	553.2	155.95	4.547		
12,500.0	7,630.0	12,373.1	7,630.0	85.2	81.7	90.00	4,373.2	-999.8	709.2	549.8	159.40	4.449		
12,600.0	7,630.0	12,473.1	7,630.0	86.8	83.4	90.00	4,473.2	-999.8	709.2	546.3	162.86	4.355		
12,700.0	7,630.0	12,573.1	7,630.0	88.4	85.1	90.00	4,573.2	-999.8	709.2	542.8	166.31	4.264		
12,800.0	7,630.0	12,673.1	7,630.0	90.1	86.8	90.00	4,673.2	-999.8	709.2	539.4	169.77	4.177		
12,900.0	7,630.0	12,773.1	7,630.0	91.7	88.5	90.00	4,773.2	-999.8	709.2	535.9	173.24	4.094		
13,000.0	7,630.0	12,873.1	7,630.0	93.3	90.2	90.00	4,873.2	-999.8	709.2	532.5	176.70	4.013		
13,100.0	7,630.0	12,973.1	7,630.0	95.0	91.9	90.00	4,973.2	-999.8	709.2	529.0	180.17	3.936		
13,200.0	7,630.0	13,073.1	7,630.0	96.6	93.6	90.00	5,073.2	-999.8	709.2	525.5	183.63	3.862		
13,300.0	7,630.0	13,173.1	7,630.0	98.3	95.3	90.00	5,173.2	-999.8	709.2	522.1	187.10	3.790		
13,400.0	7,630.0	13,273.1	7,630.0	99.9	97.0	90.00	5,273.2	-999.8	709.2	518.6	190.57	3.721		
13,500.0	7,630.0	13,373.1	7,630.0	101.6	98.7	90.00	5,373.2	-999.8	709.2	515.1	194.04	3.655		
13,600.0	7,630.0	13,473.1	7,630.0	103.2	100.4	90.00	5,473.2	-999.8	709.2	511.6	197.52	3.590		
13,700.0	7,630.0	13,573.1	7,630.0	104.9	102.1	90.00	5,573.2	-999.8	709.2	508.2	200.99	3.528		
13,800.0	7,630.0	13,673.1	7,630.0	106.6	103.8	90.00	5,673.2	-999.8	709.2	504.7	204.47	3.468		
13,900.0	7,630.0	13,776.4	7,630.0	108.2	105.6	90.00	5,776.5	-999.8	709.1	501.1	208.00	3.409		
14,000.0	7,630.0	13,890.5	7,630.0	109.9	107.5	90.00	5,890.6	-1,001.5	707.7	495.9	211.72	3.342		
14,100.0	7,630.0	13,999.6	7,630.0	111.6	109.4	90.00	5,999.7	-1,005.1	704.3	489.0	215.36	3.270		
14,200.0	7,630.0	14,099.6	7,630.0	113.3	111.1	90.00	6,099.5	-1,008.9	700.6	481.7	218.83	3.201		
14,300.0	7,630.0	14,199.5	7,630.0	114.9	112.9	90.00	6,199.4	-1,012.6	696.8	474.5	222.31	3.134 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4F-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	90.51	-0.4	40.0	40.0					
100.0	100.0	100.0	100.0	0.1	0.1	90.51	-0.4	40.0	40.0	39.8	0.24	168.528		
200.0	200.0	200.0	200.0	0.3	0.3	90.51	-0.4	40.0	40.0	39.4	0.59	68.214		
300.0	300.0	300.0	300.0	0.5	0.5	90.51	-0.4	40.0	40.0	39.1	0.94	42.761 CC, ES		
400.0	400.0	400.0	400.0	0.6	0.6	-161.91	-0.4	40.0	41.7	40.4	1.28	32.434		
500.0	499.8	499.8	499.8	0.8	0.8	-163.88	-0.4	40.0	46.7	45.0	1.63	28.576		
600.0	599.5	599.5	599.5	1.1	1.0	-166.36	-0.4	40.0	55.1	53.1	1.98	27.820		
700.0	698.7	698.7	698.7	1.3	1.2	-168.77	-0.4	40.0	67.0	64.7	2.32	28.819		
800.0	797.5	800.1	800.1	1.6	1.3	-170.41	-1.3	38.5	80.8	78.2	2.67	30.262		
900.0	895.6	902.0	901.8	2.0	1.5	-171.07	-4.1	34.0	94.9	91.9	3.02	31.424		
1,000.0	993.1	1,004.3	1,003.8	2.4	1.7	-171.11	-8.9	26.3	109.1	105.7	3.37	32.345		
1,100.0	1,089.9	1,107.3	1,105.9	2.9	2.0	-170.70	-15.6	15.4	122.4	118.7	3.75	32.683		
1,200.0	1,186.7	1,209.4	1,206.8	3.3	2.3	-169.81	-24.0	1.8	132.8	128.7	4.14	32.095		
1,300.0	1,283.5	1,308.9	1,304.9	3.8	2.5	-168.94	-32.7	-12.1	142.5	138.0	4.54	31.423		
1,400.0	1,380.4	1,408.4	1,403.1	4.2	2.8	-168.19	-41.3	-26.1	152.3	147.3	4.94	30.808		
1,500.0	1,477.2	1,507.9	1,501.2	4.7	3.1	-167.53	-50.0	-40.0	162.1	156.7	5.36	30.246		
1,600.0	1,574.0	1,607.4	1,599.4	5.2	3.4	-166.94	-58.6	-53.9	171.9	166.1	5.78	29.732		
1,700.0	1,670.8	1,706.9	1,697.5	5.7	3.8	-166.42	-67.2	-67.8	181.7	175.5	6.21	29.260		
1,800.0	1,767.6	1,806.5	1,795.7	6.1	4.1	-165.95	-75.9	-81.8	191.5	184.9	6.64	28.828		
1,900.0	1,864.4	1,906.0	1,893.8	6.6	4.4	-165.52	-84.5	-95.7	201.3	194.3	7.08	28.431		
2,000.0	1,961.3	2,005.5	1,991.9	7.1	4.7	-165.14	-93.1	-109.6	211.2	203.7	7.53	28.065		
2,100.0	2,058.1	2,105.0	2,090.1	7.6	5.1	-164.79	-101.8	-123.5	221.1	213.1	7.97	27.728		
2,200.0	2,154.9	2,204.5	2,188.2	8.0	5.4	-164.47	-110.4	-137.5	230.9	222.5	8.42	27.417		
2,300.0	2,251.7	2,304.0	2,286.4	8.5	5.7	-164.18	-119.0	-151.4	240.8	231.9	8.88	27.129		
2,400.0	2,348.5	2,403.5	2,384.5	9.0	6.0	-163.91	-127.7	-165.3	250.7	241.3	9.33	26.862		
2,500.0	2,445.4	2,503.0	2,482.7	9.5	6.4	-163.66	-136.3	-179.2	260.6	250.8	9.79	26.614		
2,600.0	2,542.2	2,602.5	2,580.8	10.0	6.7	-163.42	-144.9	-193.2	270.4	260.2	10.25	26.383		
2,700.0	2,639.0	2,702.0	2,679.0	10.4	7.0	-163.21	-153.6	-207.1	280.3	269.6	10.71	26.168		
2,800.0	2,735.8	2,801.5	2,777.1	10.9	7.4	-163.01	-162.2	-221.0	290.2	279.1	11.18	25.967		
2,900.0	2,832.6	2,901.0	2,875.3	11.4	7.7	-162.82	-170.8	-234.9	300.1	288.5	11.64	25.778		
3,000.0	2,929.4	3,000.5	2,973.4	11.9	8.0	-162.64	-179.5	-248.9	310.0	297.9	12.11	25.602		
3,100.0	3,026.3	3,100.0	3,071.6	12.4	8.4	-162.48	-188.1	-262.8	319.9	307.4	12.58	25.436		
3,200.0	3,123.1	3,199.5	3,169.7	12.8	8.7	-162.32	-196.7	-276.7	329.8	316.8	13.05	25.280		
3,300.0	3,219.9	3,299.0	3,267.8	13.3	9.0	-162.18	-205.4	-290.7	339.7	326.2	13.52	25.132		
3,400.0	3,316.7	3,398.5	3,366.0	13.8	9.4	-162.04	-214.0	-304.6	349.7	335.7	13.99	24.994		
3,500.0	3,413.5	3,498.0	3,464.1	14.3	9.7	-161.91	-222.7	-318.5	359.6	345.1	14.46	24.862		
3,600.0	3,510.4	3,597.5	3,562.3	14.8	10.0	-161.79	-231.3	-332.4	369.5	354.6	14.94	24.738		
3,700.0	3,607.2	3,697.0	3,660.4	15.2	10.4	-161.67	-239.9	-346.4	379.4	364.0	15.41	24.620		
3,800.0	3,704.0	3,796.5	3,758.6	15.7	10.7	-161.56	-248.6	-360.3	389.3	373.4	15.88	24.509		
3,900.0	3,800.8	3,896.0	3,856.7	16.2	11.0	-161.45	-257.2	-374.2	399.2	382.9	16.36	24.403		
4,000.0	3,897.6	3,995.5	3,954.9	16.7	11.4	-161.35	-265.8	-388.1	409.2	392.3	16.84	24.302		
4,100.0	3,994.4	4,095.0	4,053.0	17.2	11.7	-161.26	-274.5	-402.1	419.1	401.8	17.31	24.206		
4,200.0	4,091.3	4,194.6	4,151.2	17.6	12.0	-161.17	-283.1	-416.0	429.0	411.2	17.79	24.114		
4,300.0	4,188.1	4,294.1	4,249.3	18.1	12.4	-161.08	-291.7	-429.9	438.9	420.7	18.27	24.026		
4,400.0	4,284.9	4,393.6	4,347.4	18.6	12.7	-161.00	-300.4	-443.8	448.9	430.1	18.75	23.943		
4,500.0	4,381.7	4,493.1	4,445.6	19.1	13.0	-160.92	-309.0	-457.8	458.8	439.6	19.23	23.863		
4,600.0	4,478.5	4,592.6	4,543.7	19.6	13.4	-160.84	-317.6	-471.7	468.7	449.0	19.70	23.787		
4,700.0	4,575.4	4,692.1	4,641.9	20.1	13.7	-160.77	-326.3	-485.6	478.6	458.4	20.18	23.713		
4,800.0	4,672.2	4,791.6	4,740.0	20.5	14.0	-160.70	-334.9	-499.5	488.6	467.9	20.66	23.643		
4,900.0	4,769.0	4,891.1	4,838.2	21.0	14.4	-160.63	-343.5	-513.5	498.5	477.3	21.14	23.576		
5,000.0	4,865.8	4,990.6	4,936.3	21.5	14.7	-160.57	-352.2	-527.4	508.4	486.8	21.62	23.511		
5,100.0	4,962.6	5,090.1	5,034.5	22.0	15.1	-160.51	-360.8	-541.3	518.3	496.2	22.11	23.449		

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 Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4F-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
5,200.0	5,059.4	5,189.6	5,132.6	22.5	15.4	-160.45	-369.4	-555.2	528.3	505.7	22.59	23.389		
5,300.0	5,156.3	5,289.1	5,230.8	22.9	15.7	-160.39	-378.1	-569.2	538.2	515.1	23.07	23.332		
5,400.0	5,253.1	5,388.6	5,328.9	23.4	16.1	-160.33	-386.7	-583.1	548.1	524.6	23.55	23.276		
5,500.0	5,349.9	5,488.1	5,427.1	23.9	16.4	-160.28	-395.4	-597.0	558.1	534.0	24.03	23.223		
5,600.0	5,446.7	5,587.6	5,525.2	24.4	16.7	-160.23	-404.0	-610.9	568.0	543.5	24.51	23.171		
5,700.0	5,543.5	5,687.1	5,623.3	24.9	17.1	-160.18	-412.6	-624.9	577.9	552.9	25.00	23.122		
5,800.0	5,640.4	5,786.6	5,721.5	25.3	17.4	-160.13	-421.3	-638.8	587.9	562.4	25.48	23.074		
5,900.0	5,737.2	5,886.1	5,819.6	25.8	17.7	-160.08	-429.9	-652.7	597.8	571.8	25.96	23.027		
6,000.0	5,834.0	5,985.6	5,917.8	26.3	18.1	-160.04	-438.5	-666.7	607.7	581.3	26.44	22.983		
6,100.0	5,930.8	6,085.1	6,015.9	26.8	18.4	-160.00	-447.2	-680.6	617.7	590.7	26.93	22.939		
6,200.0	6,027.6	6,184.6	6,114.1	27.3	18.7	-159.95	-455.8	-694.5	627.6	600.2	27.41	22.897		
6,300.0	6,124.4	6,284.1	6,212.2	27.8	19.1	-159.91	-464.4	-708.4	637.5	609.7	27.89	22.857		
6,400.0	6,221.3	6,383.6	6,310.4	28.2	19.4	-159.87	-473.1	-722.4	647.5	619.1	28.38	22.817		
6,500.0	6,318.1	6,483.2	6,408.5	28.7	19.8	-159.84	-481.7	-736.3	657.4	628.6	28.86	22.779		
6,600.0	6,414.9	6,582.7	6,506.7	29.2	20.1	-159.80	-490.3	-750.2	667.4	638.0	29.34	22.742		
6,700.0	6,511.7	6,682.2	6,604.8	29.7	20.4	-159.76	-499.0	-764.1	677.3	647.5	29.83	22.706		
6,800.0	6,608.5	6,781.7	6,702.9	30.2	20.8	-159.73	-507.6	-778.1	687.2	656.9	30.31	22.672		
6,900.0	6,705.4	6,881.9	6,801.8	30.6	21.1	-159.70	-516.2	-792.1	697.2	666.4	30.79	22.646		
7,000.0	6,802.2	6,985.6	6,904.3	31.1	21.3	-160.62	-513.5	-806.7	706.7	676.0	30.68	23.031		
7,100.0	6,899.0	7,082.5	6,998.2	31.6	21.4	-162.78	-494.2	-820.3	716.3	686.5	29.87	23.982		
7,200.0	6,995.8	7,168.4	7,077.7	32.1	21.4	-165.67	-463.9	-831.9	727.9	699.1	28.73	25.333		
7,300.0	7,092.8	7,243.8	7,143.0	32.5	21.4	164.47	-427.7	-841.5	743.0	715.6	27.35	27.165		
7,400.0	7,189.1	7,315.2	7,200.0	32.9	21.3	127.91	-385.7	-850.0	760.5	734.2	26.36	28.856		
7,500.0	7,281.8	7,384.1	7,249.8	33.2	21.2	107.39	-338.7	-857.5	779.2	753.1	26.04	29.927		
7,600.0	7,368.3	7,450.0	7,291.8	33.3	21.1	95.48	-288.4	-864.0	797.6	771.5	26.16	30.496		
7,700.0	7,445.7	7,516.7	7,328.3	33.5	21.1	87.71	-232.8	-869.7	814.8	788.4	26.42	30.844		
7,800.0	7,511.9	7,581.3	7,357.2	33.6	21.1	82.40	-175.3	-874.3	829.8	803.2	26.56	31.238		
7,900.0	7,564.8	7,650.0	7,380.7	33.6	21.1	78.68	-110.9	-878.2	841.8	815.3	26.54	31.714		
8,000.0	7,602.7	7,700.0	7,393.0	33.7	21.1	76.40	-62.5	-880.4	850.4	824.0	26.37	32.244		
8,100.0	7,624.6	7,771.5	7,403.1	33.8	21.2	75.06	8.1	-882.4	855.1	828.7	26.35	32.456		
8,200.0	7,630.0	7,843.8	7,405.0	33.9	21.3	74.76	80.4	-883.3	855.7	829.1	26.61	32.153		
8,300.0	7,630.0	7,943.8	7,405.0	34.1	21.7	74.74	180.4	-884.2	854.9	827.3	27.60	30.971		
8,400.0	7,630.0	8,043.8	7,405.0	34.3	22.1	74.72	280.4	-885.1	854.1	825.1	28.95	29.505		
8,500.0	7,630.0	8,143.8	7,405.0	34.7	22.7	74.71	380.4	-886.0	853.2	822.6	30.61	27.878		
8,600.0	7,630.0	8,243.8	7,405.0	35.1	23.4	74.69	480.4	-886.8	852.4	819.8	32.53	26.200		
8,700.0	7,630.0	8,343.8	7,405.0	35.7	24.3	74.68	580.4	-887.7	851.5	816.8	34.68	24.550		
8,800.0	7,630.0	8,443.8	7,405.0	36.3	25.2	74.66	680.4	-888.6	850.7	813.7	37.02	22.979		
8,900.0	7,630.0	8,543.7	7,405.0	36.9	26.2	74.65	780.3	-889.5	849.8	810.3	39.51	21.510		
9,000.0	7,630.0	8,643.7	7,405.0	37.7	27.2	74.63	880.3	-890.3	849.0	806.9	42.12	20.156		
9,100.0	7,630.0	8,743.7	7,405.0	38.5	28.4	74.62	980.3	-891.2	848.2	803.3	44.84	18.917		
9,200.0	7,630.0	8,843.7	7,405.0	39.3	29.6	74.60	1,080.3	-892.1	847.3	799.7	47.64	17.787		
9,300.0	7,630.0	8,943.7	7,405.0	40.2	30.8	74.58	1,180.3	-892.9	846.5	796.0	50.51	16.760		
9,400.0	7,630.0	9,043.7	7,405.0	41.2	32.2	74.57	1,280.3	-893.8	845.6	792.2	53.44	15.825		
9,500.0	7,630.0	9,143.7	7,405.0	42.3	33.5	74.55	1,380.3	-894.7	844.8	788.4	56.42	14.974		
9,600.0	7,630.0	9,243.7	7,405.0	43.3	34.9	74.54	1,480.3	-895.6	844.0	784.5	59.44	14.198		
9,700.0	7,630.0	9,343.7	7,405.0	44.5	36.3	74.52	1,580.3	-896.4	843.1	780.6	62.50	13.490		
9,800.0	7,630.0	9,443.7	7,405.0	45.6	37.7	74.51	1,680.3	-897.3	842.3	776.7	65.59	12.842		
9,900.0	7,630.0	9,543.7	7,405.0	46.8	39.2	74.49	1,780.3	-898.2	841.4	772.7	68.70	12.247		
10,000.0	7,630.0	9,643.7	7,405.0	48.1	40.7	74.47	1,880.3	-899.1	840.6	768.7	71.84	11.700		
10,100.0	7,630.0	9,743.7	7,405.0	49.3	42.2	74.46	1,980.3	-899.9	839.7	764.7	75.00	11.196		
10,200.0	7,630.0	9,843.7	7,405.0	50.6	43.7	74.44	2,080.2	-900.8	838.9	760.7	78.18	10.730		
10,300.0	7,630.0	9,943.7	7,405.0	52.0	45.3	74.43	2,180.2	-901.7	838.1	756.7	81.37	10.299		

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 Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4F-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
10,400.0	7,630.0	10,043.7	7,405.0	53.3	46.8	74.41	2,280.2	-902.5	837.2	752.6	84.58	9.899		
10,500.0	7,630.0	10,143.7	7,405.0	54.7	48.4	74.39	2,380.2	-903.4	836.4	748.6	87.80	9.526		
10,600.0	7,630.0	10,243.7	7,405.0	56.1	50.0	74.38	2,480.2	-904.3	835.5	744.5	91.03	9.179		
10,700.0	7,630.0	10,343.7	7,405.0	57.5	51.6	74.36	2,580.2	-905.2	834.7	740.4	94.27	8.855		
10,800.0	7,630.0	10,443.7	7,405.0	58.9	53.2	74.35	2,680.2	-906.0	833.9	736.3	97.51	8.551		
10,900.0	7,630.0	10,543.7	7,405.0	60.4	54.8	74.33	2,780.2	-906.9	833.0	732.3	100.77	8.267		
11,000.0	7,630.0	10,643.7	7,405.0	61.8	56.4	74.31	2,880.2	-907.8	832.2	728.2	104.03	7.999		
11,100.0	7,630.0	10,743.7	7,405.0	63.3	58.1	74.30	2,980.2	-908.7	831.3	724.0	107.30	7.748		
11,200.0	7,630.0	10,843.7	7,405.0	64.8	59.7	74.28	3,080.2	-909.5	830.5	719.9	110.57	7.511		
11,300.0	7,630.0	10,943.7	7,405.0	66.3	61.4	74.26	3,180.2	-910.4	829.7	715.8	113.85	7.287		
11,400.0	7,630.0	11,043.7	7,405.0	67.9	63.0	74.25	3,280.2	-911.3	828.8	711.7	117.14	7.076		
11,500.0	7,630.0	11,143.7	7,405.0	69.4	64.7	74.23	3,380.1	-912.1	828.0	707.6	120.43	6.875		
11,600.0	7,630.0	11,243.6	7,405.0	70.9	66.3	74.21	3,480.1	-913.0	827.1	703.4	123.72	6.686		
11,700.0	7,630.0	11,343.6	7,405.0	72.5	68.0	74.20	3,580.1	-913.9	826.3	699.3	127.01	6.506		
11,800.0	7,630.0	11,443.6	7,405.0	74.1	69.7	74.18	3,680.1	-914.8	825.5	695.2	130.31	6.335		
11,900.0	7,630.0	11,543.6	7,405.0	75.6	71.3	74.17	3,780.1	-915.6	824.6	691.0	133.61	6.172		
12,000.0	7,630.0	11,643.6	7,405.0	77.2	73.0	74.15	3,880.1	-916.5	823.8	686.9	136.92	6.017		
12,100.0	7,630.0	11,743.6	7,405.0	78.8	74.7	74.13	3,980.1	-917.4	822.9	682.7	140.22	5.869		
12,200.0	7,630.0	11,843.6	7,405.0	80.4	76.4	74.12	4,080.1	-918.3	822.1	678.6	143.53	5.728		
12,300.0	7,630.0	11,943.6	7,405.0	82.0	78.1	74.10	4,180.1	-919.1	821.3	674.4	146.84	5.593		
12,400.0	7,630.0	12,043.6	7,405.0	83.6	79.8	74.08	4,280.1	-920.0	820.4	670.3	150.15	5.464		
12,500.0	7,630.0	12,143.6	7,405.0	85.2	81.5	74.07	4,380.1	-920.9	819.6	666.1	153.47	5.340		
12,600.0	7,630.0	12,243.6	7,405.0	86.8	83.2	74.05	4,480.1	-921.7	818.7	662.0	156.78	5.222		
12,700.0	7,630.0	12,343.6	7,405.0	88.4	84.9	74.03	4,580.1	-922.6	817.9	657.8	160.10	5.109		
12,800.0	7,630.0	12,443.6	7,405.0	90.1	86.6	74.02	4,680.0	-923.5	817.1	653.6	163.42	5.000		
12,900.0	7,630.0	12,543.6	7,405.0	91.7	88.3	74.00	4,780.0	-924.4	816.2	649.5	166.74	4.895		
13,000.0	7,630.0	12,643.6	7,405.0	93.3	90.0	73.98	4,880.0	-925.2	815.4	645.3	170.06	4.795		
13,100.0	7,630.0	12,743.6	7,405.0	95.0	91.7	73.96	4,980.0	-926.1	814.6	641.2	173.38	4.698		
13,200.0	7,630.0	12,843.6	7,405.0	96.6	93.4	73.95	5,080.0	-927.0	813.7	637.0	176.70	4.605		
13,300.0	7,630.0	12,943.6	7,405.0	98.3	95.1	73.93	5,180.0	-927.9	812.9	632.8	180.02	4.515		
13,400.0	7,630.0	13,043.6	7,405.0	99.9	96.8	73.91	5,280.0	-928.7	812.0	628.7	183.35	4.429		
13,500.0	7,630.0	13,143.6	7,405.0	101.6	98.5	73.90	5,380.0	-929.6	811.2	624.5	186.67	4.346		
13,600.0	7,630.0	13,243.6	7,405.0	103.2	100.2	73.88	5,480.0	-930.5	810.4	620.4	190.00	4.265		
13,700.0	7,630.0	13,343.6	7,405.0	104.9	101.9	73.86	5,580.0	-931.3	809.5	616.2	193.32	4.187		
13,800.0	7,630.0	13,443.6	7,405.0	106.6	103.7	73.84	5,680.0	-932.2	808.7	612.0	196.65	4.112		
13,900.0	7,630.0	13,543.6	7,405.0	108.2	105.4	73.83	5,780.0	-933.1	807.8	607.9	199.97	4.040		
14,000.0	7,630.0	13,643.6	7,405.0	109.9	107.1	73.81	5,880.0	-934.0	807.0	603.7	203.30	3.970		
14,100.0	7,630.0	13,743.6	7,405.0	111.6	108.8	73.79	5,979.9	-934.8	806.2	599.5	206.63	3.902		
14,151.5	7,630.0	13,788.3	7,405.0	112.4	109.6	73.79	6,024.6	-935.1	805.9	597.6	208.23	3.870		
14,200.0	7,630.0	13,826.5	7,405.0	113.3	110.2	73.79	6,062.9	-934.9	806.2	596.5	209.68	3.845		
14,300.0	7,630.0	13,900.0	7,405.0	114.9	111.5	73.83	6,136.4	-932.9	808.8	596.2	212.62	3.804 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4G-26H-P268 - HZ - Plan #1														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	90.42	-0.4	50.1	50.1						
100.0	100.0	100.0	100.0	0.1	0.1	90.42	-0.4	50.1	50.1	49.8	0.24	210.952			
200.0	200.0	200.0	200.0	0.3	0.3	90.42	-0.4	50.1	50.1	49.5	0.59	85.385			
300.0	300.0	300.0	300.0	0.5	0.5	90.42	-0.4	50.1	50.1	49.1	0.94	53.525 CC, ES			
400.0	400.0	400.0	400.0	0.6	0.6	-161.85	-0.4	50.1	51.7	50.4	1.28	40.275			
500.0	499.8	499.8	499.8	0.8	0.8	-163.47	-0.4	50.1	56.7	55.1	1.63	34.737			
600.0	599.5	599.5	599.5	1.1	1.0	-165.61	-0.4	50.1	65.1	63.1	1.98	32.883			
700.0	698.7	698.7	698.7	1.3	1.2	-167.81	-0.4	50.1	77.0	74.7	2.33	33.104			
800.0	797.5	797.5	797.5	1.6	1.3	-169.81	-0.4	50.1	92.3	89.7	2.67	34.623			
900.0	895.6	898.9	898.8	2.0	1.5	-171.07	-1.5	48.8	109.8	106.8	3.01	36.458			
1,000.0	993.1	1,000.8	1,000.7	2.4	1.7	-171.35	-5.0	44.8	127.7	124.3	3.36	38.010			
1,100.0	1,089.9	1,103.5	1,102.9	2.9	1.9	-170.97	-11.0	38.1	145.0	141.3	3.73	38.896			
1,200.0	1,186.7	1,205.6	1,204.3	3.3	2.1	-170.02	-19.3	28.8	159.6	155.5	4.12	38.760			
1,300.0	1,283.5	1,304.6	1,302.4	3.8	2.4	-169.09	-28.0	19.1	173.5	169.0	4.51	38.438			
1,400.0	1,380.4	1,403.6	1,400.5	4.2	2.6	-168.29	-36.6	9.4	187.4	182.5	4.92	38.105			
1,500.0	1,477.2	1,502.6	1,498.7	4.7	2.9	-167.60	-45.2	-0.3	201.4	196.0	5.33	37.771			
1,600.0	1,574.0	1,601.6	1,596.8	5.2	3.1	-167.00	-53.8	-10.0	215.3	209.6	5.75	37.445			
1,700.0	1,670.8	1,700.6	1,695.0	5.7	3.4	-166.48	-62.5	-19.7	229.3	223.1	6.18	37.131			
1,800.0	1,767.6	1,799.6	1,793.1	6.1	3.7	-166.02	-71.1	-29.4	243.3	236.7	6.61	36.832			
1,900.0	1,864.4	1,898.6	1,891.3	6.6	3.9	-165.60	-79.7	-39.1	257.4	250.3	7.04	36.548			
2,000.0	1,961.3	1,997.6	1,989.4	7.1	4.2	-165.23	-88.4	-48.8	271.4	263.9	7.48	36.281			
2,100.0	2,058.1	2,096.6	2,087.5	7.6	4.5	-164.90	-97.0	-58.5	285.4	277.5	7.92	36.030			
2,200.0	2,154.9	2,195.6	2,185.7	8.0	4.8	-164.59	-105.6	-68.2	299.5	291.1	8.37	35.794			
2,300.0	2,251.7	2,294.5	2,283.8	8.5	5.0	-164.32	-114.2	-77.9	313.6	304.7	8.81	35.573			
2,400.0	2,348.5	2,393.5	2,382.0	9.0	5.3	-164.07	-122.9	-87.6	327.6	318.4	9.26	35.365			
2,500.0	2,445.4	2,492.5	2,480.1	9.5	5.6	-163.83	-131.5	-97.3	341.7	332.0	9.72	35.170			
2,600.0	2,542.2	2,591.5	2,578.2	10.0	5.9	-163.62	-140.1	-107.0	355.8	345.6	10.17	34.987			
2,700.0	2,639.0	2,690.5	2,676.4	10.4	6.1	-163.42	-148.8	-116.7	369.9	359.2	10.62	34.814			
2,800.0	2,735.8	2,789.5	2,774.5	10.9	6.4	-163.24	-157.4	-126.4	383.9	372.9	11.08	34.652			
2,900.0	2,832.6	2,888.5	2,872.7	11.4	6.7	-163.07	-166.0	-136.1	398.0	386.5	11.54	34.499			
3,000.0	2,929.4	2,987.5	2,970.8	11.9	7.0	-162.91	-174.6	-145.8	412.1	400.1	12.00	34.355			
3,100.0	3,026.3	3,086.5	3,068.9	12.4	7.3	-162.77	-183.3	-155.5	426.2	413.8	12.46	34.219			
3,200.0	3,123.1	3,185.5	3,167.1	12.8	7.5	-162.63	-191.9	-165.2	440.3	427.4	12.92	34.091			
3,300.0	3,219.9	3,284.5	3,265.2	13.3	7.8	-162.50	-200.5	-174.9	454.4	441.1	13.38	33.969			
3,400.0	3,316.7	3,383.5	3,363.4	13.8	8.1	-162.38	-209.2	-184.6	468.5	454.7	13.84	33.854			
3,500.0	3,413.5	3,482.5	3,461.5	14.3	8.4	-162.26	-217.8	-194.3	482.6	468.3	14.30	33.744			
3,600.0	3,510.4	3,581.5	3,559.6	14.8	8.7	-162.15	-226.4	-204.0	496.7	482.0	14.77	33.640			
3,700.0	3,607.2	3,680.5	3,657.8	15.2	9.0	-162.05	-235.0	-213.7	510.9	495.6	15.23	33.542			
3,800.0	3,704.0	3,779.5	3,755.9	15.7	9.2	-161.96	-243.7	-223.4	525.0	509.3	15.70	33.448			
3,900.0	3,800.8	3,878.5	3,854.1	16.2	9.5	-161.86	-252.3	-233.1	539.1	522.9	16.16	33.358			
4,000.0	3,897.6	3,977.5	3,952.2	16.7	9.8	-161.78	-260.9	-242.8	553.2	536.6	16.63	33.273			
4,100.0	3,994.4	4,076.5	4,050.4	17.2	10.1	-161.69	-269.5	-252.5	567.3	550.2	17.09	33.191			
4,200.0	4,091.3	4,175.5	4,148.5	17.6	10.4	-161.62	-278.2	-262.2	581.4	563.9	17.56	33.113			
4,300.0	4,188.1	4,274.5	4,246.6	18.1	10.7	-161.54	-286.8	-271.9	595.5	577.5	18.03	33.039			
4,400.0	4,284.9	4,373.5	4,344.8	18.6	10.9	-161.47	-295.4	-281.6	609.7	591.2	18.49	32.968			
4,500.0	4,381.7	4,472.5	4,442.9	19.1	11.2	-161.40	-304.1	-291.3	623.8	604.8	18.96	32.900			
4,600.0	4,478.5	4,571.4	4,541.1	19.6	11.5	-161.34	-312.7	-301.0	637.9	618.5	19.43	32.834			
4,700.0	4,575.4	4,670.4	4,639.2	20.1	11.8	-161.27	-321.3	-310.7	652.0	632.1	19.90	32.771			
4,800.0	4,672.2	4,769.4	4,737.3	20.5	12.1	-161.21	-329.9	-320.3	666.1	645.8	20.36	32.711			
4,900.0	4,769.0	4,868.4	4,835.5	21.0	12.4	-161.16	-338.6	-330.0	680.3	659.4	20.83	32.653			
5,000.0	4,865.8	4,967.4	4,933.6	21.5	12.6	-161.10	-347.2	-339.7	694.4	673.1	21.30	32.598			
5,100.0	4,962.6	5,066.4	5,031.8	22.0	12.9	-161.05	-355.8	-349.4	708.5	686.7	21.77	32.544			

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 Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4G-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink 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	5,059.4	5,165.4	5,129.9	22.5	13.2	-161.00	-364.5	-359.1	722.6	700.4	22.24	32.492		
5,300.0	5,156.3	5,264.4	5,228.0	22.9	13.5	-160.95	-373.1	-368.8	736.8	714.0	22.71	32.443		
5,400.0	5,253.1	5,363.4	5,326.2	23.4	13.8	-160.90	-381.7	-378.5	750.9	727.7	23.18	32.395		
5,500.0	5,349.9	5,462.4	5,424.3	23.9	14.1	-160.86	-390.3	-388.2	765.0	741.4	23.65	32.349		
5,600.0	5,446.7	5,561.4	5,522.5	24.4	14.4	-160.82	-399.0	-397.9	779.1	755.0	24.12	32.304		
5,700.0	5,543.5	5,660.4	5,620.6	24.9	14.6	-160.77	-407.6	-407.6	793.3	768.7	24.59	32.261		
5,800.0	5,640.4	5,759.4	5,718.7	25.3	14.9	-160.73	-416.2	-417.3	807.4	782.3	25.06	32.219		
5,900.0	5,737.2	5,858.4	5,816.9	25.8	15.2	-160.69	-424.9	-427.0	821.5	796.0	25.53	32.179		
6,000.0	5,834.0	5,957.4	5,915.0	26.3	15.5	-160.66	-433.5	-436.7	835.6	809.6	26.00	32.140		
6,100.0	5,930.8	6,056.4	6,013.2	26.8	15.8	-160.62	-442.1	-446.4	849.8	823.3	26.47	32.102		
6,200.0	6,027.6	6,155.4	6,111.3	27.3	16.1	-160.58	-450.7	-456.1	863.9	836.9	26.94	32.066		
6,300.0	6,124.4	6,254.4	6,209.5	27.8	16.3	-160.55	-459.4	-465.8	878.0	850.6	27.41	32.030		
6,400.0	6,221.3	6,353.4	6,307.6	28.2	16.6	-160.52	-468.0	-475.5	892.1	864.3	27.88	31.996		
6,500.0	6,318.1	6,452.4	6,405.7	28.7	16.9	-160.48	-476.6	-485.2	906.3	877.9	28.35	31.963		
6,600.0	6,414.9	6,551.4	6,503.9	29.2	17.2	-160.45	-485.3	-494.9	920.4	891.6	28.83	31.930		
6,700.0	6,511.7	6,650.4	6,602.0	29.7	17.5	-160.42	-493.9	-504.6	934.5	905.2	29.30	31.899		
6,800.0	6,608.5	6,749.4	6,700.2	30.2	17.8	-160.39	-502.5	-514.3	948.7	918.9	29.77	31.868		
6,900.0	6,705.4	6,848.3	6,798.3	30.6	18.1	-160.37	-511.1	-524.0	962.8	932.6	30.24	31.839		
7,000.0	6,802.2	6,948.1	6,897.3	31.1	18.3	-160.36	-519.4	-533.8	976.9	946.2	30.69	31.829 SF		
7,100.0	6,899.0	7,049.1	6,997.5	31.6	18.5	-161.08	-515.4	-543.7	990.9	960.2	30.69	32.282		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4H-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
0.0	0.0	1.0	1.0	0.0	0.0	90.36	-0.4	59.9	59.9					
100.0	100.0	101.0	101.0	0.1	0.1	90.36	-0.4	59.9	59.9	59.6	0.24	250.357		
200.0	200.0	201.0	201.0	0.3	0.3	90.36	-0.4	59.9	59.9	59.3	0.59	101.777		
300.0	300.0	301.0	301.0	0.5	0.5	90.36	-0.4	59.9	59.9	58.9	0.94	63.871 CC, ES		
400.0	400.0	401.0	401.0	0.6	0.6	-161.81	-0.4	59.9	61.5	60.2	1.29	47.833		
500.0	499.8	500.8	500.8	0.8	0.8	-163.19	-0.4	59.9	66.5	64.9	1.63	40.685		
600.0	599.5	600.5	600.5	1.1	1.0	-165.07	-0.4	59.9	74.9	72.9	1.98	37.776		
700.0	698.7	699.7	699.7	1.3	1.2	-167.09	-0.4	59.9	86.7	84.4	2.33	37.249 SF		
800.0	797.5	798.5	798.5	1.6	1.3	-169.00	-0.4	59.9	102.0	99.4	2.67	38.210		
900.0	895.6	896.6	896.6	2.0	1.5	-170.66	-0.4	59.9	120.8	117.8	3.01	40.169		
1,000.0	993.1	995.7	995.7	2.4	1.7	-171.46	-1.9	59.6	142.5	139.2	3.35	42.592		
1,100.0	1,089.9	1,096.5	1,096.3	2.9	1.9	-171.14	-6.8	58.4	165.3	161.6	3.71	44.584		
1,200.0	1,186.7	1,200.3	1,199.8	3.3	2.1	-170.36	-14.1	54.5	185.2	181.2	4.09	45.267		
1,300.0	1,283.5	1,301.0	1,300.0	3.8	2.3	-169.44	-22.6	48.1	202.6	198.1	4.49	45.161		
1,400.0	1,380.4	1,399.5	1,397.9	4.2	2.5	-168.65	-31.1	41.8	219.8	214.9	4.88	44.991		
1,500.0	1,477.2	1,498.0	1,495.8	4.7	2.7	-167.97	-39.5	35.4	237.0	231.7	5.29	44.787		
1,600.0	1,574.0	1,596.5	1,593.7	5.2	2.9	-167.39	-48.0	29.0	254.2	248.5	5.70	44.567		
1,700.0	1,670.8	1,694.9	1,691.6	5.7	3.2	-166.88	-56.5	22.6	271.5	265.3	6.12	44.340		
1,800.0	1,767.6	1,793.4	1,789.5	6.1	3.4	-166.43	-64.9	16.2	288.7	282.2	6.55	44.112		
1,900.0	1,864.4	1,891.9	1,887.4	6.6	3.6	-166.03	-73.4	9.8	306.0	299.0	6.97	43.889		
2,000.0	1,961.3	1,990.4	1,985.3	7.1	3.9	-165.68	-81.9	3.4	323.3	315.9	7.40	43.673		
2,100.0	2,058.1	2,088.8	2,083.2	7.6	4.1	-165.36	-90.3	-3.0	340.6	332.8	7.84	43.464		
2,200.0	2,154.9	2,187.3	2,181.1	8.0	4.3	-165.07	-98.8	-9.4	358.0	349.7	8.27	43.266		
2,300.0	2,251.7	2,285.8	2,279.0	8.5	4.6	-164.81	-107.3	-15.7	375.3	366.6	8.71	43.076		
2,400.0	2,348.5	2,384.2	2,376.9	9.0	4.8	-164.57	-115.7	-22.1	392.6	383.5	9.15	42.896		
2,500.0	2,445.4	2,482.7	2,474.8	9.5	5.1	-164.35	-124.2	-28.5	410.0	400.4	9.60	42.725		
2,600.0	2,542.2	2,581.2	2,572.7	10.0	5.3	-164.15	-132.7	-34.9	427.3	417.3	10.04	42.564		
2,700.0	2,639.0	2,679.7	2,670.6	10.4	5.6	-163.97	-141.1	-41.3	444.7	434.2	10.48	42.410		
2,800.0	2,735.8	2,778.1	2,768.5	10.9	5.8	-163.80	-149.6	-47.7	462.0	451.1	10.93	42.265		
2,900.0	2,832.6	2,876.6	2,866.4	11.4	6.1	-163.64	-158.1	-54.1	479.4	468.0	11.38	42.127		
3,000.0	2,929.4	2,975.1	2,964.3	11.9	6.3	-163.49	-166.5	-60.5	496.7	484.9	11.83	41.996		
3,100.0	3,026.3	3,073.6	3,062.2	12.4	6.6	-163.35	-175.0	-66.9	514.1	501.8	12.28	41.873		
3,200.0	3,123.1	3,172.0	3,160.1	12.8	6.8	-163.22	-183.5	-73.2	531.5	518.8	12.73	41.755		
3,300.0	3,219.9	3,270.5	3,258.0	13.3	7.1	-163.10	-191.9	-79.6	548.9	535.7	13.18	41.643		
3,400.0	3,316.7	3,369.0	3,355.9	13.8	7.3	-162.99	-200.4	-86.0	566.2	552.6	13.63	41.537		
3,500.0	3,413.5	3,467.4	3,453.8	14.3	7.6	-162.88	-208.9	-92.4	583.6	569.5	14.08	41.436		
3,600.0	3,510.4	3,565.9	3,551.7	14.8	7.8	-162.78	-217.3	-98.8	601.0	586.4	14.54	41.339		
3,700.0	3,607.2	3,664.4	3,649.6	15.2	8.0	-162.69	-225.8	-105.2	618.4	603.4	14.99	41.248		
3,800.0	3,704.0	3,762.9	3,747.5	15.7	8.3	-162.60	-234.3	-111.6	635.7	620.3	15.45	41.160		
3,900.0	3,800.8	3,861.3	3,845.4	16.2	8.5	-162.51	-242.7	-118.0	653.1	637.2	15.90	41.076		
4,000.0	3,897.6	3,959.8	3,943.3	16.7	8.8	-162.43	-251.2	-124.3	670.5	654.2	16.36	40.996		
4,100.0	3,994.4	4,058.3	4,041.2	17.2	9.0	-162.36	-259.7	-130.7	687.9	671.1	16.81	40.920		
4,200.0	4,091.3	4,156.8	4,139.1	17.6	9.3	-162.28	-268.1	-137.1	705.3	688.0	17.27	40.847		
4,300.0	4,188.1	4,255.2	4,237.0	18.1	9.6	-162.22	-276.6	-143.5	722.7	704.9	17.72	40.777		
4,400.0	4,284.9	4,353.7	4,334.9	18.6	9.8	-162.15	-285.1	-149.9	740.1	721.9	18.18	40.709		
4,500.0	4,381.7	4,452.2	4,432.8	19.1	10.1	-162.09	-293.5	-156.3	757.4	738.8	18.64	40.645		
4,600.0	4,478.5	4,550.7	4,530.7	19.6	10.3	-162.03	-302.0	-162.7	774.8	755.7	19.09	40.583		
4,700.0	4,575.4	4,649.1	4,628.6	20.1	10.6	-161.97	-310.5	-169.1	792.2	772.7	19.55	40.524		
4,800.0	4,672.2	4,747.6	4,726.5	20.5	10.8	-161.91	-318.9	-175.5	809.6	789.6	20.01	40.466		
4,900.0	4,769.0	4,846.1	4,824.4	21.0	11.1	-161.86	-327.4	-181.8	827.0	806.5	20.46	40.411		
5,000.0	4,865.8	4,944.5	4,922.3	21.5	11.3	-161.81	-335.9	-188.2	844.4	823.5	20.92	40.358		
5,100.0	4,962.6	5,043.0	5,020.2	22.0	11.6	-161.76	-344.3	-194.6	861.8	840.4	21.38	40.307		

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 Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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													S26-T2N-R68W (Sullivan) - Sullivan 4H-26H-P268 - HZ - Plan #1		Offset Site Error:		0.0 ft	
Survey Program:													0-Geolink 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	5,059.4	5,141.5	5,118.1	22.5	11.8	-161.72	-352.8	-201.0	879.2	857.4	21.84	40.258						
5,300.0	5,156.3	5,240.0	5,216.0	22.9	12.1	-161.67	-361.3	-207.4	896.6	874.3	22.30	40.211						
5,400.0	5,253.1	5,338.4	5,313.9	23.4	12.3	-161.63	-369.7	-213.8	914.0	891.2	22.76	40.165						
5,500.0	5,349.9	5,436.9	5,411.8	23.9	12.6	-161.59	-378.2	-220.2	931.4	908.2	23.21	40.121						
5,600.0	5,446.7	5,535.4	5,509.7	24.4	12.8	-161.55	-386.7	-226.6	948.8	925.1	23.67	40.078						
5,700.0	5,543.5	5,633.9	5,607.6	24.9	13.1	-161.51	-395.1	-233.0	966.2	942.0	24.13	40.037						
5,800.0	5,640.4	5,732.3	5,705.5	25.3	13.3	-161.47	-403.6	-239.3	983.6	959.0	24.59	39.997						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4I-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink 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	90.31	-0.4	69.9	69.9					
100.0	100.0	101.0	101.0	0.1	0.1	90.31	-0.4	69.9	69.9	69.7	0.24	292.471		
200.0	200.0	201.0	201.0	0.3	0.3	90.31	-0.4	69.9	69.9	69.3	0.59	118.898		
300.0	300.0	301.0	301.0	0.5	0.5	90.31	-0.4	69.9	69.9	69.0	0.94	74.616	CC, ES	
400.0	400.0	401.0	401.0	0.6	0.6	-161.78	-0.4	69.9	71.6	70.3	1.29	55.662		
500.0	499.8	500.8	500.8	0.8	0.8	-162.98	-0.4	69.9	76.6	74.9	1.63	46.841		
600.0	599.5	600.5	600.5	1.1	1.0	-164.65	-0.4	69.9	85.0	83.0	1.98	42.840		
700.0	698.7	699.7	699.7	1.3	1.2	-166.51	-0.4	69.9	96.8	94.4	2.33	41.541	SF	
800.0	797.5	798.5	798.5	1.6	1.3	-168.31	-0.4	69.9	112.0	109.4	2.67	41.926		
900.0	895.6	896.6	896.6	2.0	1.5	-169.94	-0.4	69.9	130.8	127.8	3.01	43.442		
1,000.0	993.1	994.1	994.1	2.4	1.7	-171.34	-0.4	69.9	153.0	149.7	3.34	45.759		
1,100.0	1,089.9	1,094.5	1,094.5	2.9	1.9	-172.17	-1.8	69.2	176.8	173.1	3.69	47.870		
1,200.0	1,186.7	1,196.3	1,196.1	3.3	2.0	-172.00	-6.3	66.8	198.5	194.4	4.06	48.927		
1,300.0	1,283.5	1,298.7	1,298.1	3.8	2.2	-171.09	-14.2	62.7	218.1	213.7	4.44	49.109		
1,400.0	1,380.4	1,396.8	1,395.7	4.2	2.4	-170.06	-23.1	58.0	236.8	232.0	4.83	48.997		
1,500.0	1,477.2	1,495.0	1,493.4	4.7	2.7	-169.17	-32.0	53.4	255.6	250.3	5.23	48.822		
1,600.0	1,574.0	1,593.1	1,591.0	5.2	2.9	-168.41	-40.9	48.7	274.4	268.7	5.64	48.608		
1,700.0	1,670.8	1,691.3	1,688.7	5.7	3.1	-167.74	-49.8	44.0	293.2	287.2	6.06	48.372		
1,800.0	1,767.6	1,789.4	1,786.3	6.1	3.3	-167.15	-58.7	39.4	312.1	305.6	6.49	48.125		
1,900.0	1,864.4	1,887.6	1,883.9	6.6	3.5	-166.63	-67.7	34.7	331.0	324.1	6.91	47.876		
2,000.0	1,961.3	1,985.7	1,981.6	7.1	3.8	-166.17	-76.6	30.0	350.0	342.6	7.35	47.630		
2,100.0	2,058.1	2,083.9	2,079.2	7.6	4.0	-165.76	-85.5	25.4	368.9	361.1	7.78	47.389		
2,200.0	2,154.9	2,182.0	2,176.8	8.0	4.2	-165.38	-94.4	20.7	387.9	379.7	8.23	47.157		
2,300.0	2,251.7	2,280.2	2,274.5	8.5	4.5	-165.04	-103.3	16.0	406.9	398.2	8.67	46.934		
2,400.0	2,348.5	2,378.3	2,372.1	9.0	4.7	-164.73	-112.2	11.3	425.9	416.8	9.12	46.721		
2,500.0	2,445.4	2,476.5	2,469.7	9.5	4.9	-164.45	-121.2	6.7	444.9	435.3	9.56	46.517		
2,600.0	2,542.2	2,574.6	2,567.4	10.0	5.2	-164.19	-130.1	2.0	463.9	453.9	10.01	46.324		
2,700.0	2,639.0	2,672.8	2,665.0	10.4	5.4	-163.95	-139.0	-2.7	482.9	472.5	10.47	46.140		
2,800.0	2,735.8	2,771.0	2,762.6	10.9	5.6	-163.73	-147.9	-7.3	502.0	491.1	10.92	45.965		
2,900.0	2,832.6	2,869.1	2,860.3	11.4	5.9	-163.52	-156.8	-12.0	521.0	509.7	11.38	45.800		
3,000.0	2,929.4	2,967.3	2,957.9	11.9	6.1	-163.33	-165.7	-16.7	540.1	528.2	11.83	45.642		
3,100.0	3,026.3	3,065.4	3,055.6	12.4	6.4	-163.15	-174.7	-21.3	559.1	546.8	12.29	45.493		
3,200.0	3,123.1	3,163.6	3,153.2	12.8	6.6	-162.99	-183.6	-26.0	578.2	565.4	12.75	45.350		
3,300.0	3,219.9	3,261.7	3,250.8	13.3	6.8	-162.83	-192.5	-30.7	597.3	584.1	13.21	45.215		
3,400.0	3,316.7	3,359.9	3,348.5	13.8	7.1	-162.69	-201.4	-35.3	616.3	602.7	13.67	45.087		
3,500.0	3,413.5	3,458.0	3,446.1	14.3	7.3	-162.55	-210.3	-40.0	635.4	621.3	14.13	44.964		
3,600.0	3,510.4	3,556.2	3,543.7	14.8	7.6	-162.42	-219.2	-44.7	654.5	639.9	14.59	44.848		
3,700.0	3,607.2	3,654.3	3,641.4	15.2	7.8	-162.30	-228.2	-49.4	673.6	658.5	15.06	44.737		
3,800.0	3,704.0	3,752.5	3,739.0	15.7	8.0	-162.18	-237.1	-54.0	692.6	677.1	15.52	44.631		
3,900.0	3,800.8	3,850.6	3,836.6	16.2	8.3	-162.08	-246.0	-58.7	711.7	695.7	15.98	44.530		
4,000.0	3,897.6	3,948.8	3,934.3	16.7	8.5	-161.97	-254.9	-63.4	730.8	714.4	16.45	44.433		
4,100.0	3,994.4	4,046.9	4,031.9	17.2	8.8	-161.87	-263.8	-68.0	749.9	733.0	16.91	44.340		
4,200.0	4,091.3	4,145.1	4,129.6	17.6	9.0	-161.78	-272.7	-72.7	769.0	751.6	17.38	44.252		
4,300.0	4,188.1	4,243.3	4,227.2	18.1	9.3	-161.69	-281.7	-77.4	788.1	770.2	17.84	44.167		
4,400.0	4,284.9	4,341.4	4,324.8	18.6	9.5	-161.61	-290.6	-82.0	807.2	788.9	18.31	44.086		
4,500.0	4,381.7	4,439.6	4,422.5	19.1	9.7	-161.53	-299.5	-86.7	826.3	807.5	18.78	44.008		
4,600.0	4,478.5	4,537.7	4,520.1	19.6	10.0	-161.45	-308.4	-91.4	845.4	826.1	19.24	43.933		
4,700.0	4,575.4	4,635.9	4,617.7	20.1	10.2	-161.38	-317.3	-96.1	864.5	844.8	19.71	43.861		
4,800.0	4,672.2	4,734.0	4,715.4	20.5	10.5	-161.31	-326.2	-100.7	883.6	863.4	20.18	43.792		
4,900.0	4,769.0	4,832.2	4,813.0	21.0	10.7	-161.24	-335.2	-105.4	902.7	882.0	20.64	43.725		
5,000.0	4,865.8	4,930.3	4,910.6	21.5	11.0	-161.18	-344.1	-110.1	921.8	900.7	21.11	43.661		
5,100.0	4,962.6	5,028.5	5,008.3	22.0	11.2	-161.11	-353.0	-114.7	940.9	919.3	21.58	43.600		

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 Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4I-26H-P268 - HZ - Plan #1													Offset Site Error: 0.0 ft
Survey Program: 0-Geolink 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	5,059.4	5,126.6	5,105.9	22.5	11.5	-161.05	-361.9	-119.4	960.0	937.9	22.05	43.540	
5,300.0	5,156.3	5,224.8	5,203.5	22.9	11.7	-161.00	-370.8	-124.1	979.1	956.6	22.52	43.483	
5,400.0	5,253.1	5,322.9	5,301.2	23.4	11.9	-160.94	-379.7	-128.7	998.2	975.2	22.99	43.428	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4J-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.28	-0.4	80.0	80.0					
100.0	100.0	100.0	100.0	0.1	0.1	90.28	-0.4	80.0	80.0	79.8	0.24	337.046		
200.0	200.0	200.0	200.0	0.3	0.3	90.28	-0.4	80.0	80.0	79.4	0.59	136.424		
300.0	300.0	300.0	300.0	0.5	0.5	90.28	-0.4	80.0	80.0	79.1	0.94	85.519	CC, ES	
400.0	400.0	400.0	400.0	0.6	0.6	-161.76	-0.4	80.0	81.7	80.4	1.28	63.578		
500.0	499.8	499.8	499.8	0.8	0.8	-162.81	-0.4	80.0	86.6	85.0	1.63	53.055		
600.0	599.5	599.5	599.5	1.1	1.0	-164.32	-0.4	80.0	95.0	93.0	1.98	47.949		
700.0	698.7	698.7	698.7	1.3	1.2	-166.03	-0.4	80.0	106.8	104.5	2.33	45.871		
800.0	797.5	797.5	797.5	1.6	1.3	-167.74	-0.4	80.0	122.0	119.4	2.67	45.676	SF	
900.0	895.6	895.6	895.6	2.0	1.5	-169.31	-0.4	80.0	140.8	137.7	3.01	46.745		
1,000.0	993.1	993.1	993.1	2.4	1.7	-170.71	-0.4	80.0	162.9	159.6	3.34	48.708		
1,100.0	1,089.9	1,089.9	1,089.9	2.9	1.8	-171.92	-0.4	80.0	187.6	183.9	3.69	50.900		
1,200.0	1,186.7	1,186.9	1,186.8	3.3	2.0	-172.50	-1.7	80.2	212.4	208.3	4.03	52.671		
1,300.0	1,283.5	1,283.9	1,283.7	3.8	2.2	-172.15	-6.2	81.0	237.1	232.7	4.39	54.002		
1,400.0	1,380.4	1,380.7	1,380.3	4.2	2.4	-171.13	-13.9	82.4	261.8	257.1	4.77	54.915		
1,500.0	1,477.2	1,477.5	1,476.6	4.7	2.6	-170.06	-22.7	83.9	286.7	281.5	5.16	55.543		
1,600.0	1,574.0	1,574.2	1,572.9	5.2	2.8	-169.15	-31.5	85.5	311.6	306.0	5.56	56.003		
1,700.0	1,670.8	1,670.9	1,669.2	5.7	3.0	-168.38	-40.3	87.0	336.5	330.6	5.97	56.337		
1,800.0	1,767.6	1,767.7	1,765.6	6.1	3.2	-167.71	-49.1	88.6	361.6	355.2	6.39	56.578		
1,900.0	1,864.4	1,864.4	1,861.9	6.6	3.4	-167.13	-57.9	90.1	386.6	379.8	6.81	56.750		
2,000.0	1,961.3	1,961.2	1,958.2	7.1	3.6	-166.62	-66.7	91.7	411.7	404.5	7.24	56.871		
2,100.0	2,058.1	2,057.9	2,054.5	7.6	3.8	-166.17	-75.6	93.2	436.8	429.2	7.67	56.954		
2,200.0	2,154.9	2,154.6	2,150.9	8.0	4.0	-165.77	-84.4	94.8	462.0	453.9	8.10	57.009		
2,300.0	2,251.7	2,251.4	2,247.2	8.5	4.2	-165.41	-93.2	96.3	487.1	478.6	8.54	57.041		
2,400.0	2,348.5	2,348.1	2,343.5	9.0	4.5	-165.09	-102.0	97.9	512.3	503.3	8.98	57.057		
2,500.0	2,445.4	2,444.9	2,439.9	9.5	4.7	-164.79	-110.8	99.4	537.5	528.1	9.42	57.061		
2,600.0	2,542.2	2,541.6	2,536.2	10.0	4.9	-164.52	-119.6	100.9	562.7	552.8	9.86	57.056		
2,700.0	2,639.0	2,638.3	2,632.5	10.4	5.1	-164.28	-128.4	102.5	587.9	577.6	10.31	57.043		
2,800.0	2,735.8	2,735.1	2,728.8	10.9	5.3	-164.05	-137.2	104.0	613.1	602.4	10.75	57.025		
2,900.0	2,832.6	2,831.8	2,825.2	11.4	5.6	-163.85	-146.0	105.6	638.3	627.1	11.20	57.003		
3,000.0	2,929.4	2,928.6	2,921.5	11.9	5.8	-163.66	-154.8	107.1	663.6	651.9	11.65	56.978		
3,100.0	3,026.3	3,025.3	3,017.8	12.4	6.0	-163.48	-163.7	108.7	688.8	676.7	12.09	56.951		
3,200.0	3,123.1	3,122.0	3,114.1	12.8	6.2	-163.31	-172.5	110.2	714.1	701.5	12.54	56.923		
3,300.0	3,219.9	3,218.8	3,210.5	13.3	6.5	-163.16	-181.3	111.8	739.3	726.3	12.99	56.893		
3,400.0	3,316.7	3,315.5	3,306.8	13.8	6.7	-163.02	-190.1	113.3	764.6	751.1	13.45	56.863		
3,500.0	3,413.5	3,412.3	3,403.1	14.3	6.9	-162.88	-198.9	114.9	789.8	775.9	13.90	56.833		
3,600.0	3,510.4	3,509.0	3,499.4	14.8	7.1	-162.76	-207.7	116.4	815.1	800.8	14.35	56.802		
3,700.0	3,607.2	3,605.7	3,595.8	15.2	7.4	-162.64	-216.5	118.0	840.4	825.6	14.80	56.772		
3,800.0	3,704.0	3,702.5	3,692.1	15.7	7.6	-162.53	-225.3	119.5	865.6	850.4	15.26	56.742		
3,900.0	3,800.8	3,799.2	3,788.4	16.2	7.8	-162.42	-234.1	121.1	890.9	875.2	15.71	56.712		
4,000.0	3,897.6	3,896.0	3,884.7	16.7	8.0	-162.32	-242.9	122.6	916.2	900.0	16.16	56.683		
4,100.0	3,994.4	3,992.7	3,981.1	17.2	8.3	-162.23	-251.8	124.2	941.5	924.9	16.62	56.654		
4,200.0	4,091.3	4,089.4	4,077.4	17.6	8.5	-162.14	-260.6	125.7	966.8	949.7	17.07	56.626		
4,300.0	4,188.1	4,186.2	4,173.7	18.1	8.7	-162.05	-269.4	127.3	992.0	974.5	17.53	56.598		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4K-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	90.25	-0.4	90.1	90.1					
100.0	100.0	100.0	100.0	0.1	0.1	90.25	-0.4	90.1	90.1	89.8	0.24	379.471		
200.0	200.0	200.0	200.0	0.3	0.3	90.25	-0.4	90.1	90.1	89.5	0.59	153.595		
300.0	300.0	300.0	300.0	0.5	0.5	90.25	-0.4	90.1	90.1	89.1	0.94	96.284 CC, ES		
400.0	400.0	400.0	400.0	0.6	0.6	-161.74	-0.4	90.1	91.7	90.4	1.28	71.419		
500.0	499.8	499.8	499.8	0.8	0.8	-162.68	-0.4	90.1	96.7	95.1	1.63	59.219		
600.0	599.5	599.5	599.5	1.1	1.0	-164.05	-0.4	90.1	105.1	103.1	1.98	53.021		
700.0	698.7	698.7	698.7	1.3	1.2	-165.63	-0.4	90.1	116.8	114.5	2.33	50.172		
800.0	797.5	797.5	797.5	1.6	1.3	-167.25	-0.4	90.1	132.1	129.4	2.67	49.402 SF		
900.0	895.6	895.6	895.6	2.0	1.5	-168.78	-0.4	90.1	150.7	147.7	3.01	50.026		
1,000.0	993.1	993.1	993.1	2.4	1.7	-170.15	-0.4	90.1	172.9	169.5	3.35	51.635		
1,100.0	1,089.9	1,088.7	1,088.7	2.9	1.8	-170.95	-1.7	90.6	197.8	194.1	3.69	53.586		
1,200.0	1,186.7	1,184.0	1,183.8	3.3	2.0	-170.77	-5.9	92.2	223.4	219.4	4.05	55.199		
1,300.0	1,283.5	1,278.9	1,278.5	3.8	2.2	-169.89	-13.0	94.9	249.7	245.3	4.42	56.477		
1,400.0	1,380.4	1,375.2	1,374.3	4.2	2.4	-168.90	-21.5	98.2	276.4	271.6	4.81	57.410		
1,500.0	1,477.2	1,471.5	1,470.2	4.7	2.6	-168.09	-29.9	101.4	303.1	297.9	5.22	58.119		
1,600.0	1,574.0	1,567.8	1,566.1	5.2	2.8	-167.41	-38.3	104.6	329.9	324.2	5.62	58.660		
1,700.0	1,670.8	1,664.1	1,661.9	5.7	3.0	-166.83	-46.7	107.9	356.7	350.6	6.04	59.076		
1,800.0	1,767.6	1,760.3	1,757.8	6.1	3.2	-166.33	-55.2	111.1	383.5	377.0	6.46	59.400		
1,900.0	1,864.4	1,856.6	1,853.6	6.6	3.4	-165.89	-63.6	114.3	410.4	403.5	6.88	59.654		
2,000.0	1,961.3	1,952.9	1,949.5	7.1	3.6	-165.51	-72.0	117.6	437.2	429.9	7.30	59.854		
2,100.0	2,058.1	2,049.2	2,045.4	7.6	3.9	-165.18	-80.4	120.8	464.1	456.4	7.73	60.013		
2,200.0	2,154.9	2,145.5	2,141.2	8.0	4.1	-164.88	-88.8	124.1	491.0	482.9	8.16	60.140		
2,300.0	2,251.7	2,241.8	2,237.1	8.5	4.3	-164.61	-97.3	127.3	517.9	509.3	8.60	60.242		
2,400.0	2,348.5	2,338.0	2,332.9	9.0	4.5	-164.37	-105.7	130.5	544.9	535.8	9.03	60.324		
2,500.0	2,445.4	2,434.3	2,428.8	9.5	4.7	-164.15	-114.1	133.8	571.8	562.3	9.47	60.390		
2,600.0	2,542.2	2,530.6	2,524.7	10.0	5.0	-163.95	-122.5	137.0	598.7	588.8	9.91	60.443		
2,700.0	2,639.0	2,626.9	2,620.5	10.4	5.2	-163.77	-131.0	140.2	625.7	615.3	10.34	60.485		
2,800.0	2,735.8	2,723.2	2,716.4	10.9	5.4	-163.60	-139.4	143.5	652.6	641.8	10.78	60.520		
2,900.0	2,832.6	2,819.4	2,812.2	11.4	5.6	-163.45	-147.8	146.7	679.6	668.4	11.22	60.547		
3,000.0	2,929.4	2,915.7	2,908.1	11.9	5.9	-163.30	-156.2	149.9	706.5	694.9	11.67	60.568		
3,100.0	3,026.3	3,012.0	3,004.0	12.4	6.1	-163.17	-164.6	153.2	733.5	721.4	12.11	60.585		
3,200.0	3,123.1	3,108.3	3,099.8	12.8	6.3	-163.05	-173.1	156.4	760.5	747.9	12.55	60.598		
3,300.0	3,219.9	3,204.6	3,195.7	13.3	6.5	-162.94	-181.5	159.6	787.5	774.5	12.99	60.608		
3,400.0	3,316.7	3,300.9	3,291.5	13.8	6.8	-162.83	-189.9	162.9	814.4	801.0	13.44	60.615		
3,500.0	3,413.5	3,397.1	3,387.4	14.3	7.0	-162.73	-198.3	166.1	841.4	827.5	13.88	60.620		
3,600.0	3,510.4	3,493.4	3,483.2	14.8	7.2	-162.64	-206.7	169.4	868.4	854.1	14.32	60.623		
3,700.0	3,607.2	3,589.7	3,579.1	15.2	7.4	-162.55	-215.2	172.6	895.4	880.6	14.77	60.624		
3,800.0	3,704.0	3,686.0	3,675.0	15.7	7.7	-162.47	-223.6	175.8	922.3	907.1	15.21	60.624		
3,900.0	3,800.8	3,782.3	3,770.8	16.2	7.9	-162.39	-232.0	179.1	949.3	933.7	15.66	60.623		
4,000.0	3,897.6	3,878.6	3,866.7	16.7	8.1	-162.31	-240.4	182.3	976.3	960.2	16.11	60.621		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - Sullivan 4L-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	90.41	-0.7	99.9	99.9					
100.0	100.0	100.0	100.0	0.1	0.1	90.41	-0.7	99.9	99.9	99.6	0.24	420.725		
200.0	200.0	200.0	200.0	0.3	0.3	90.41	-0.7	99.9	99.9	99.3	0.59	170.293		
300.0	300.0	300.0	300.0	0.5	0.5	90.41	-0.7	99.9	99.9	98.9	0.94	106.751 CC, ES		
400.0	400.0	400.0	400.0	0.6	0.6	-161.55	-0.7	99.9	101.5	100.2	1.28	79.041		
500.0	499.8	499.8	499.8	0.8	0.8	-162.41	-0.7	99.9	106.5	104.9	1.63	65.207		
600.0	599.5	599.5	599.5	1.1	1.0	-163.68	-0.7	99.9	114.8	112.9	1.98	57.944		
700.0	698.7	698.7	698.7	1.3	1.2	-165.17	-0.7	99.9	126.6	124.3	2.33	54.341		
800.0	797.5	797.5	797.5	1.6	1.3	-166.71	-0.7	99.9	141.8	139.1	2.67	53.009 SF		
900.0	895.6	895.6	895.6	2.0	1.5	-168.20	-0.7	99.9	160.4	157.4	3.02	53.197		
1,000.0	993.1	993.1	993.1	2.4	1.7	-169.56	-0.7	99.9	182.5	179.2	3.35	54.461		
1,100.0	1,089.9	1,086.4	1,086.4	2.9	1.8	-170.44	-1.7	100.8	207.8	204.2	3.69	56.329		
1,200.0	1,186.7	1,178.6	1,178.5	3.3	2.0	-170.52	-4.8	103.7	235.1	231.0	4.04	58.213		
1,300.0	1,283.5	1,269.8	1,269.4	3.8	2.2	-170.03	-10.0	108.6	264.0	259.6	4.40	60.032		
1,400.0	1,380.4	1,360.7	1,359.7	4.2	2.4	-169.16	-17.2	115.4	294.7	289.9	4.77	61.736		
1,500.0	1,477.2	1,454.5	1,452.8	4.7	2.6	-168.19	-25.8	123.5	326.4	321.2	5.17	63.104		
1,600.0	1,574.0	1,549.2	1,546.8	5.2	2.8	-167.39	-34.4	131.7	358.1	352.5	5.58	64.182		
1,700.0	1,670.8	1,644.0	1,640.8	5.7	3.0	-166.72	-43.1	139.9	389.9	383.9	5.99	65.052		
1,800.0	1,767.6	1,738.7	1,734.7	6.1	3.3	-166.15	-51.7	148.0	421.7	415.3	6.41	65.763		
1,900.0	1,864.4	1,833.4	1,828.7	6.6	3.5	-165.66	-60.4	156.2	453.6	446.7	6.84	66.352		
2,000.0	1,961.3	1,928.1	1,922.7	7.1	3.7	-165.24	-69.0	164.3	485.5	478.2	7.26	66.845		
2,100.0	2,058.1	2,022.9	2,016.7	7.6	4.0	-164.87	-77.7	172.5	517.4	509.7	7.69	67.261		
2,200.0	2,154.9	2,117.6	2,110.6	8.0	4.2	-164.54	-86.3	180.7	549.3	541.2	8.12	67.617		
2,300.0	2,251.7	2,212.3	2,204.6	8.5	4.5	-164.24	-95.0	188.8	581.2	572.7	8.56	67.923		
2,400.0	2,348.5	2,307.0	2,298.6	9.0	4.7	-163.98	-103.6	197.0	613.2	604.2	8.99	68.189		
2,500.0	2,445.4	2,401.8	2,392.6	9.5	5.0	-163.74	-112.2	205.2	645.1	635.7	9.43	68.421		
2,600.0	2,542.2	2,496.5	2,486.5	10.0	5.2	-163.53	-120.9	213.3	677.1	667.2	9.87	68.625		
2,700.0	2,639.0	2,591.2	2,580.5	10.4	5.5	-163.33	-129.5	221.5	709.1	698.8	10.31	68.806		
2,800.0	2,735.8	2,685.9	2,674.5	10.9	5.8	-163.16	-138.2	229.7	741.1	730.3	10.75	68.966		
2,900.0	2,832.6	2,780.6	2,768.5	11.4	6.0	-162.99	-146.8	237.8	773.1	761.9	11.19	69.110		
3,000.0	2,929.4	2,875.4	2,862.4	11.9	6.3	-162.84	-155.5	246.0	805.0	793.4	11.63	69.239		
3,100.0	3,026.3	2,970.1	2,956.4	12.4	6.5	-162.70	-164.1	254.2	837.0	825.0	12.07	69.355		
3,200.0	3,123.1	3,064.8	3,050.4	12.8	6.8	-162.57	-172.8	262.3	869.1	856.5	12.51	69.461		
3,300.0	3,219.9	3,159.5	3,144.3	13.3	7.0	-162.45	-181.4	270.5	901.1	888.1	12.95	69.557		
3,400.0	3,316.7	3,254.3	3,238.3	13.8	7.3	-162.34	-190.1	278.7	933.1	919.7	13.40	69.644		
3,500.0	3,413.5	3,349.0	3,332.3	14.3	7.6	-162.24	-198.7	286.8	965.1	951.2	13.84	69.725		
3,600.0	3,510.4	3,443.7	3,426.3	14.8	7.8	-162.14	-207.4	295.0	997.1	982.8	14.29	69.798		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - SULLIVAN 6-8-26 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error: 0.0 ft	
Survey Program: 165-Geolink 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		
2,200.0	2,154.9	2,400.8	2,335.7	8.0	10.1	12.55	-237.4	-1,326.4	992.2	981.7	10.52	94.352		
2,300.0	2,251.7	2,491.9	2,423.6	8.5	10.6	12.04	-247.4	-1,305.0	946.8	935.8	11.00	86.090		
2,400.0	2,348.5	2,580.9	2,509.5	9.0	11.0	11.50	-257.1	-1,283.9	901.3	889.8	11.48	78.495		
2,500.0	2,445.4	2,663.3	2,589.1	9.5	11.4	10.96	-266.0	-1,264.7	856.1	844.2	11.96	71.611		
2,600.0	2,542.2	2,744.1	2,667.2	10.0	11.8	10.25	-276.3	-1,246.5	812.1	799.6	12.46	65.150		
2,700.0	2,639.0	2,839.9	2,759.5	10.4	12.3	9.21	-289.9	-1,224.6	768.0	755.0	13.06	58.810		
2,800.0	2,735.8	2,928.8	2,845.2	10.9	12.8	8.18	-301.8	-1,204.1	723.8	710.2	13.63	53.107		
2,900.0	2,832.6	3,016.3	2,929.5	11.4	13.2	7.04	-313.6	-1,184.0	679.9	665.7	14.21	47.848		
3,000.0	2,929.4	3,106.9	3,017.0	11.9	13.7	5.82	-324.6	-1,163.5	636.4	621.6	14.81	42.976		
3,100.0	3,026.3	3,199.6	3,106.4	12.4	14.1	4.32	-336.3	-1,141.9	592.6	577.1	15.47	38.313		
3,200.0	3,123.1	3,285.4	3,189.3	12.8	14.6	2.84	-346.2	-1,121.9	548.9	532.8	16.11	34.066		
3,300.0	3,219.9	3,372.9	3,273.9	13.3	15.0	0.97	-357.3	-1,102.3	506.7	489.9	16.85	30.081		
3,400.0	3,316.7	3,473.3	3,370.9	13.8	15.5	-1.32	-367.8	-1,078.6	463.5	445.8	17.70	26.186		
3,500.0	3,413.5	3,566.5	3,460.6	14.3	16.0	-3.91	-376.9	-1,055.3	419.3	400.6	18.65	22.478		
3,600.0	3,510.4	3,656.6	3,547.1	14.8	16.5	-7.15	-386.3	-1,031.7	375.3	355.5	19.80	18.953		
3,700.0	3,607.2	3,735.4	3,622.7	15.2	16.9	-10.59	-394.4	-1,011.4	332.7	311.7	21.04	15.816		
3,800.0	3,704.0	3,813.2	3,698.1	15.7	17.2	-14.76	-403.9	-994.1	295.5	272.9	22.54	13.108		
3,900.0	3,800.8	3,898.8	3,781.0	16.2	17.6	-20.42	-415.9	-976.7	263.0	238.4	24.52	10.724		
4,000.0	3,897.6	3,990.2	3,870.3	16.7	18.0	-27.07	-426.6	-960.5	234.2	207.5	26.76	8.752		
4,100.0	3,994.4	4,083.0	3,961.7	17.2	18.3	-34.41	-434.5	-946.4	208.7	179.6	29.07	7.178		
4,200.0	4,091.3	4,175.7	4,053.3	17.6	18.5	-42.70	-441.2	-934.2	187.4	156.0	31.35	5.976		
4,300.0	4,188.1	4,269.2	4,146.0	18.1	18.8	-51.96	-446.8	-924.0	170.9	137.5	33.36	5.123		
4,400.0	4,284.9	4,363.6	4,239.9	18.6	19.0	-61.96	-452.0	-915.9	160.1	125.3	34.77	4.603		
4,500.0	4,381.7	4,459.6	4,335.7	19.1	19.2	-72.37	-456.8	-909.7	154.6	119.3	35.39	4.370		
4,567.8	4,447.3	4,526.0	4,401.8	19.4	19.3	-79.72	-459.7	-905.7	153.7	118.5	35.26	4.360	CC, ES, SF	
4,600.0	4,478.5	4,557.8	4,433.7	19.6	19.3	-83.18	-460.8	-904.1	153.9	118.9	35.06	4.391		
4,700.0	4,575.4	4,656.7	4,532.4	20.1	19.4	-93.49	-463.1	-899.9	156.8	122.8	33.90	4.623		
4,800.0	4,672.2	4,753.9	4,629.5	20.5	19.6	-102.85	-464.4	-896.9	163.2	130.9	32.28	5.055		
4,900.0	4,769.0	4,851.3	4,726.9	21.0	19.7	-111.35	-465.3	-894.4	173.1	142.6	30.50	5.676		
5,000.0	4,865.8	4,948.3	4,823.9	21.5	19.8	-118.96	-465.4	-892.0	185.9	157.1	28.83	6.448		
5,100.0	4,962.6	5,044.3	4,919.9	22.0	19.9	-125.66	-464.8	-889.2	201.5	174.1	27.48	7.334		
5,200.0	5,059.4	5,142.2	5,017.7	22.5	20.0	-131.58	-463.9	-886.4	219.5	193.0	26.49	8.284		
5,300.0	5,156.3	5,242.6	5,118.1	22.9	20.0	-136.41	-463.4	-885.4	237.8	211.9	25.94	9.168		
5,400.0	5,253.1	5,340.6	5,216.1	23.4	20.1	-140.28	-463.1	-885.8	256.3	230.6	25.70	9.972		
5,500.0	5,349.9	5,437.7	5,313.2	23.9	20.2	-143.68	-462.4	-886.2	275.6	250.0	25.60	10.766		
5,600.0	5,446.7	5,534.9	5,410.3	24.4	20.2	-146.70	-461.4	-886.7	295.6	270.0	25.59	11.552		
5,700.0	5,543.5	5,631.0	5,506.4	24.9	20.3	-149.34	-460.2	-887.1	316.3	290.7	25.66	12.327		
5,800.0	5,640.4	5,723.4	5,598.8	25.3	20.4	-151.49	-459.7	-886.8	338.5	312.7	25.80	13.118		
5,900.0	5,737.2	5,819.0	5,694.4	25.8	20.5	-153.36	-459.8	-885.6	362.1	336.1	25.98	13.937		
6,000.0	5,834.0	5,922.2	5,797.7	26.3	20.6	-155.20	-459.4	-885.2	385.1	358.9	26.17	14.716		
6,100.0	5,930.8	6,023.2	5,898.7	26.8	20.6	-156.92	-458.0	-886.3	406.9	380.5	26.36	15.436		
6,200.0	6,027.6	6,123.0	5,998.4	27.3	20.7	-158.48	-456.2	-888.1	428.3	401.7	26.56	16.126		
6,300.0	6,124.4	6,221.1	6,096.5	27.8	20.7	-159.92	-454.0	-890.3	449.5	422.7	26.76	16.797		
6,400.0	6,221.3	6,319.0	6,194.3	28.2	20.8	-161.27	-451.5	-892.6	470.8	443.9	26.97	17.459		
6,500.0	6,318.1	6,416.9	6,292.1	28.7	20.8	-162.53	-448.9	-895.1	492.2	465.0	27.19	18.107		
6,600.0	6,414.9	6,514.2	6,389.3	29.2	20.8	-163.67	-446.3	-897.8	513.7	486.3	27.41	18.742		
6,700.0	6,511.7	6,610.0	6,485.0	29.7	20.9	-164.71	-443.6	-900.2	535.5	507.9	27.64	19.375		
6,800.0	6,608.5	6,705.4	6,580.4	30.2	20.9	-165.67	-440.9	-902.3	557.7	529.9	27.87	20.010		
6,900.0	6,705.4	6,800.6	6,675.5	30.6	21.0	-166.56	-438.1	-904.2	580.4	552.3	28.11	20.645		
7,000.0	6,802.2	6,895.0	6,769.9	31.1	21.1	-167.37	-435.5	-905.7	603.6	575.2	28.36	21.280		
7,100.0	6,899.0	6,988.9	6,863.7	31.6	21.1	-168.09	-433.0	-906.7	627.3	598.7	28.62	21.918		
7,200.0	6,995.8	7,084.9	6,959.7	32.1	21.2	-168.76	-430.6	-907.4	651.4	622.6	28.88	22.554		

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 Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 S26-T2N-R68W (Sullivan) - SULLIVAN 6-8-26 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error: 0.0 ft
Survey Program: 165-Geolink MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
7,300.0	7,092.8	7,181.6	7,056.4	32.5	21.3	163.55	-428.3	-908.1	675.2	646.1	29.13	23.176	
7,400.0	7,189.1	7,278.3	7,153.1	32.9	21.4	130.24	-426.1	-908.7	696.8	667.4	29.39	23.706	
7,500.0	7,281.8	7,371.0	7,245.7	33.2	21.4	114.03	-424.2	-909.2	716.3	686.7	29.56	24.234	
7,600.0	7,368.3	7,453.8	7,328.5	33.3	21.5	106.75	-423.0	-909.4	735.4	705.8	29.61	24.834	
7,700.0	7,445.7	7,531.0	7,405.7	33.5	21.6	103.59	-422.3	-909.0	756.3	726.8	29.57	25.578	
7,800.0	7,511.9	7,592.4	7,467.1	33.6	21.7	101.64	-422.1	-908.6	781.1	751.6	29.48	26.497	
7,900.0	7,564.8	7,644.2	7,519.0	33.6	21.8	99.95	-422.0	-908.1	811.5	782.1	29.43	27.577	
8,000.0	7,602.7	7,681.2	7,555.9	33.7	21.8	97.41	-422.1	-907.8	848.7	819.1	29.51	28.760	
8,100.0	7,624.6	7,702.3	7,577.0	33.8	21.8	93.52	-422.1	-907.5	892.5	862.9	29.66	30.094	
8,200.0	7,630.0	7,707.4	7,582.2	33.9	21.8	89.34	-422.1	-907.5	942.2	912.5	29.69	31.733	
8,300.0	7,630.0	7,707.3	7,582.0	34.1	21.8	89.33	-422.1	-907.5	998.4	968.2	30.17	33.092	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4B-26H-P268
Project:	DJ Wattenberg	TVD Reference:	Well @ 4996.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	Well @ 4996.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4B-26H-P268	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 @ 4996.0ft

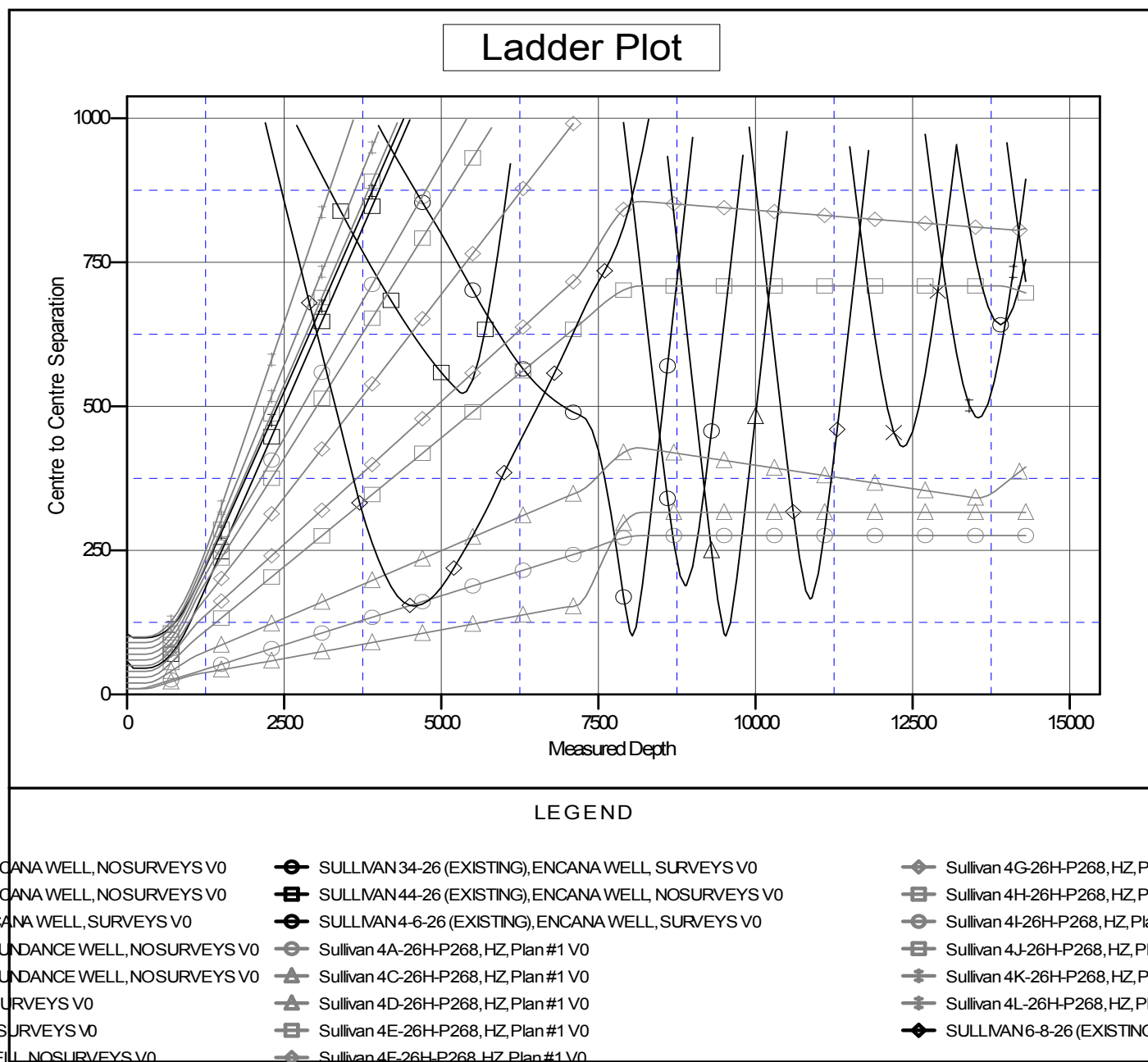
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Sullivan 4B-26H-P268

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.35°



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