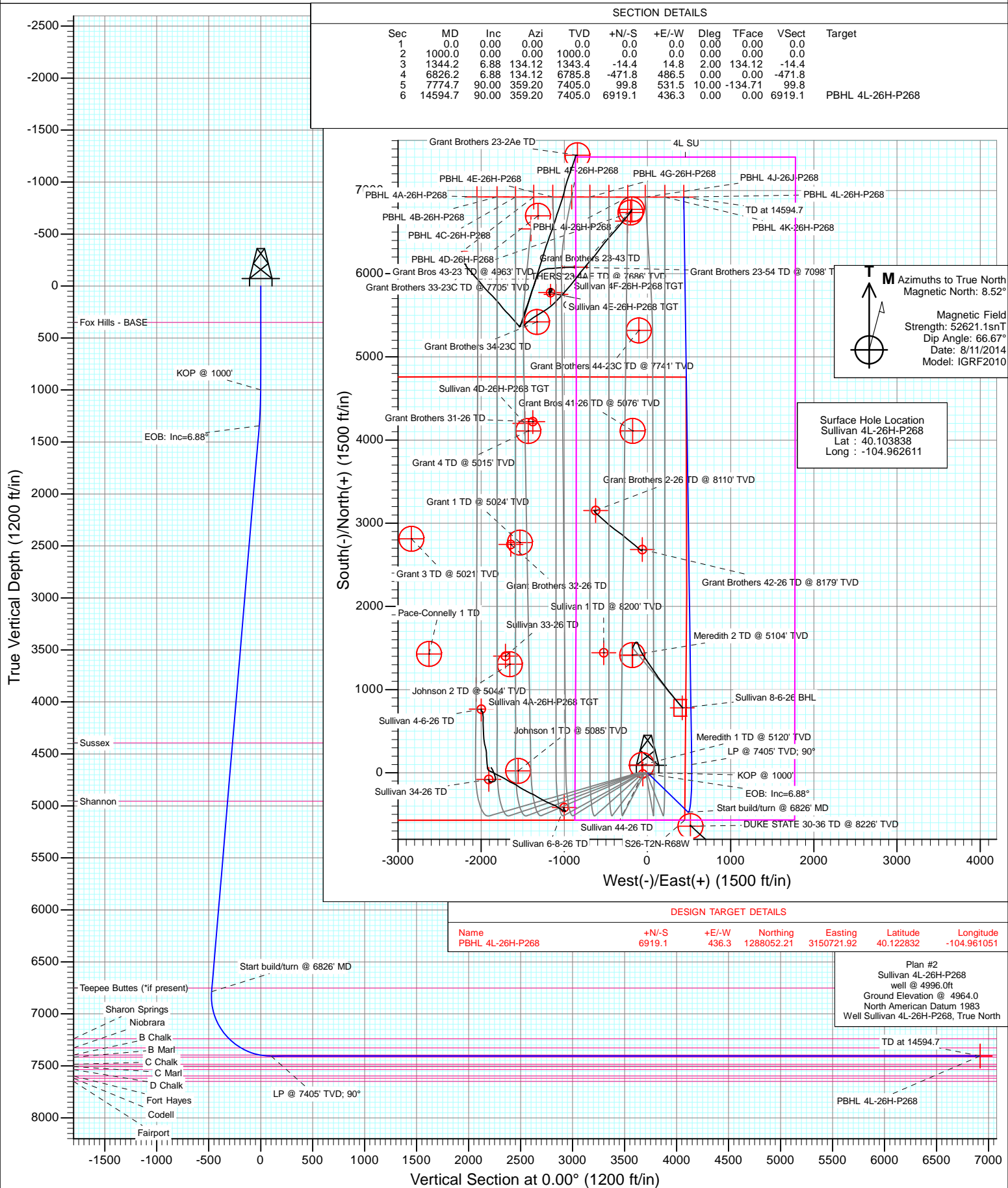




Project: DJ Wattenberg
Site: S26-T2N-R68W (Sullivan)
Well: Sullivan 4L-26H-P268
Wellbore: HZ
Design: Plan #2



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-26H-P268	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

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 4L-26H-P268					
Well Position	+N/-S	0.0 ft	Northing:	1,281,130.56 ft	Latitude:	40.103838
	+E/-W	0.0 ft	Easting:	3,150,327.61 ft	Longitude:	-104.962611
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 #2			
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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,344.2	6.88	134.12	1,343.4	-14.4	14.8	2.00	2.00	0.00	134.12	
6,826.2	6.88	134.12	6,785.8	-471.8	486.5	0.00	0.00	0.00	0.00	
7,774.7	90.00	359.20	7,405.0	99.8	531.5	10.00	8.76	-14.22	-134.71	
14,594.7	90.00	359.20	7,405.0	6,919.1	436.3	0.00	0.00	0.00	0.00	PBHL 4L-26H-P268

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-26H-P268	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

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	
350.0	0.00	0.00	350.0	0.0	0.0	0.0	0.00	0.00	Fox Hills - BASE
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	KOP @ 1000'
1,100.0	2.00	134.12	1,100.0	-1.2	1.3	-1.2	2.00	2.00	
1,200.0	4.00	134.12	1,199.8	-4.9	5.0	-4.9	2.00	2.00	
1,300.0	6.00	134.12	1,299.5	-10.9	11.3	-10.9	2.00	2.00	
1,344.2	6.88	134.12	1,343.4	-14.4	14.8	-14.4	2.00	2.00	EOB: Inc=6.88°
1,400.0	6.88	134.12	1,398.8	-19.0	19.6	-19.0	0.00	0.00	
1,500.0	6.88	134.12	1,498.1	-27.4	28.2	-27.4	0.00	0.00	
1,600.0	6.88	134.12	1,597.3	-35.7	36.8	-35.7	0.00	0.00	
1,700.0	6.88	134.12	1,696.6	-44.1	45.4	-44.1	0.00	0.00	
1,800.0	6.88	134.12	1,795.9	-52.4	54.0	-52.4	0.00	0.00	
1,900.0	6.88	134.12	1,895.2	-60.8	62.7	-60.8	0.00	0.00	
2,000.0	6.88	134.12	1,994.4	-69.1	71.3	-69.1	0.00	0.00	
2,100.0	6.88	134.12	2,093.7	-77.4	79.9	-77.4	0.00	0.00	
2,200.0	6.88	134.12	2,193.0	-85.8	88.5	-85.8	0.00	0.00	
2,300.0	6.88	134.12	2,292.3	-94.1	97.1	-94.1	0.00	0.00	
2,400.0	6.88	134.12	2,391.6	-102.5	105.7	-102.5	0.00	0.00	
2,500.0	6.88	134.12	2,490.8	-110.8	114.3	-110.8	0.00	0.00	
2,600.0	6.88	134.12	2,590.1	-119.2	122.9	-119.2	0.00	0.00	
2,700.0	6.88	134.12	2,689.4	-127.5	131.5	-127.5	0.00	0.00	
2,800.0	6.88	134.12	2,788.7	-135.8	140.1	-135.8	0.00	0.00	
2,900.0	6.88	134.12	2,888.0	-144.2	148.7	-144.2	0.00	0.00	
3,000.0	6.88	134.12	2,987.2	-152.5	157.3	-152.5	0.00	0.00	
3,100.0	6.88	134.12	3,086.5	-160.9	165.9	-160.9	0.00	0.00	
3,200.0	6.88	134.12	3,185.8	-169.2	174.5	-169.2	0.00	0.00	
3,300.0	6.88	134.12	3,285.1	-177.6	183.1	-177.6	0.00	0.00	
3,400.0	6.88	134.12	3,384.4	-185.9	191.7	-185.9	0.00	0.00	
3,500.0	6.88	134.12	3,483.6	-194.3	200.3	-194.3	0.00	0.00	
3,600.0	6.88	134.12	3,582.9	-202.6	208.9	-202.6	0.00	0.00	
3,700.0	6.88	134.12	3,682.2	-210.9	217.5	-210.9	0.00	0.00	
3,800.0	6.88	134.12	3,781.5	-219.3	226.1	-219.3	0.00	0.00	
3,900.0	6.88	134.12	3,880.8	-227.6	234.7	-227.6	0.00	0.00	
4,000.0	6.88	134.12	3,980.0	-236.0	243.3	-236.0	0.00	0.00	
4,100.0	6.88	134.12	4,079.3	-244.3	251.9	-244.3	0.00	0.00	
4,200.0	6.88	134.12	4,178.6	-252.7	260.6	-252.7	0.00	0.00	
4,300.0	6.88	134.12	4,277.9	-261.0	269.2	-261.0	0.00	0.00	
4,400.0	6.88	134.12	4,377.2	-269.4	277.8	-269.4	0.00	0.00	
4,417.0	6.88	134.12	4,394.0	-270.8	279.2	-270.8	0.00	0.00	Sussex
4,500.0	6.88	134.12	4,476.4	-277.7	286.4	-277.7	0.00	0.00	
4,600.0	6.88	134.12	4,575.7	-286.0	295.0	-286.0	0.00	0.00	
4,700.0	6.88	134.12	4,675.0	-294.4	303.6	-294.4	0.00	0.00	
4,800.0	6.88	134.12	4,774.3	-302.7	312.2	-302.7	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-26H-P268	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

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	6.88	134.12	4,873.5	-311.1	320.8	-311.1	0.00	0.00	
4,982.1	6.88	134.12	4,955.0	-317.9	327.8	-317.9	0.00	0.00	Shannon
5,000.0	6.88	134.12	4,972.8	-319.4	329.4	-319.4	0.00	0.00	
5,100.0	6.88	134.12	5,072.1	-327.8	338.0	-327.8	0.00	0.00	
5,200.0	6.88	134.12	5,171.4	-336.1	346.6	-336.1	0.00	0.00	
5,300.0	6.88	134.12	5,270.7	-344.4	355.2	-344.4	0.00	0.00	
5,400.0	6.88	134.12	5,369.9	-352.8	363.8	-352.8	0.00	0.00	
5,500.0	6.88	134.12	5,469.2	-361.1	372.4	-361.1	0.00	0.00	
5,600.0	6.88	134.12	5,568.5	-369.5	381.0	-369.5	0.00	0.00	
5,700.0	6.88	134.12	5,667.8	-377.8	389.6	-377.8	0.00	0.00	
5,800.0	6.88	134.12	5,767.1	-386.2	398.2	-386.2	0.00	0.00	
5,900.0	6.88	134.12	5,866.3	-394.5	406.8	-394.5	0.00	0.00	
6,000.0	6.88	134.12	5,965.6	-402.9	415.4	-402.9	0.00	0.00	
6,100.0	6.88	134.12	6,064.9	-411.2	424.0	-411.2	0.00	0.00	
6,200.0	6.88	134.12	6,164.2	-419.5	432.6	-419.5	0.00	0.00	
6,300.0	6.88	134.12	6,263.5	-427.9	441.2	-427.9	0.00	0.00	
6,400.0	6.88	134.12	6,362.7	-436.2	449.9	-436.2	0.00	0.00	
6,500.0	6.88	134.12	6,462.0	-444.6	458.5	-444.6	0.00	0.00	
6,600.0	6.88	134.12	6,561.3	-452.9	467.1	-452.9	0.00	0.00	
6,700.0	6.88	134.12	6,660.6	-461.3	475.7	-461.3	0.00	0.00	
6,791.1	6.88	134.12	6,751.0	-468.9	483.5	-468.9	0.00	0.00	Teepee Buttes (*if present)
6,800.0	6.88	134.12	6,759.9	-469.6	484.3	-469.6	0.00	0.00	
6,826.2	6.88	134.12	6,785.8	-471.8	486.5	-471.8	0.00	0.00	Start build/turn @ 6826' MD
6,900.0	5.50	61.79	6,859.3	-473.2	492.8	-473.2	10.00	-1.87	
7,000.0	13.43	20.17	6,958.0	-460.0	501.1	-460.0	10.00	7.93	
7,100.0	23.03	10.80	7,052.9	-429.8	508.8	-429.8	10.00	9.59	
7,200.0	32.85	6.81	7,141.1	-383.5	515.7	-383.5	10.00	9.83	
7,300.0	42.76	4.51	7,220.0	-322.6	521.6	-322.6	10.00	9.90	
7,326.4	45.38	4.04	7,239.0	-304.3	522.9	-304.3	10.01	9.93	Sharon Springs
7,400.0	52.69	2.94	7,287.2	-248.9	526.3	-248.9	10.00	9.93	
7,471.7	59.82	2.05	7,327.0	-189.4	528.8	-189.4	10.00	9.95	Niobrara
7,500.0	62.64	1.74	7,340.6	-164.5	529.7	-164.5	9.99	9.95	
7,600.0	72.60	0.74	7,378.7	-72.2	531.6	-72.2	10.00	9.96	
7,667.3	79.30	0.13	7,395.0	-7.0	532.1	-7.0	10.00	9.96	B Chalk
7,700.0	82.56	359.84	7,400.2	25.3	532.1	25.3	10.00	9.96	
7,774.7	90.00	359.20	7,405.0	99.8	531.5	99.8	10.00	9.97	LP @ 7405' TVD; 90°
7,800.0	90.00	359.20	7,405.0	125.1	531.1	125.1	0.00	0.00	
7,900.0	90.00	359.20	7,405.0	225.1	529.7	225.1	0.00	0.00	
8,000.0	90.00	359.20	7,405.0	325.1	528.3	325.1	0.00	0.00	
8,100.0	90.00	359.20	7,405.0	425.1	526.9	425.1	0.00	0.00	
8,200.0	90.00	359.20	7,405.0	525.1	525.5	525.1	0.00	0.00	
8,300.0	90.00	359.20	7,405.0	625.1	524.1	625.1	0.00	0.00	
8,400.0	90.00	359.20	7,405.0	725.0	522.7	725.0	0.00	0.00	
8,500.0	90.00	359.20	7,405.0	825.0	521.3	825.0	0.00	0.00	
8,600.0	90.00	359.20	7,405.0	925.0	520.0	925.0	0.00	0.00	
8,700.0	90.00	359.20	7,405.0	1,025.0	518.6	1,025.0	0.00	0.00	
8,800.0	90.00	359.20	7,405.0	1,125.0	517.2	1,125.0	0.00	0.00	
8,900.0	90.00	359.20	7,405.0	1,225.0	515.8	1,225.0	0.00	0.00	
9,000.0	90.00	359.20	7,405.0	1,325.0	514.4	1,325.0	0.00	0.00	
9,100.0	90.00	359.20	7,405.0	1,425.0	513.0	1,425.0	0.00	0.00	
9,200.0	90.00	359.20	7,405.0	1,525.0	511.6	1,525.0	0.00	0.00	
9,300.0	90.00	359.20	7,405.0	1,625.0	510.2	1,625.0	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-26H-P268	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
9,400.0	90.00	359.20	7,405.0	1,725.0	508.8	1,725.0	0.00	0.00	
9,500.0	90.00	359.20	7,405.0	1,824.9	507.4	1,824.9	0.00	0.00	
9,600.0	90.00	359.20	7,405.0	1,924.9	506.0	1,924.9	0.00	0.00	
9,700.0	90.00	359.20	7,405.0	2,024.9	504.6	2,024.9	0.00	0.00	
9,800.0	90.00	359.20	7,405.0	2,124.9	503.2	2,124.9	0.00	0.00	
9,900.0	90.00	359.20	7,405.0	2,224.9	501.8	2,224.9	0.00	0.00	
10,000.0	90.00	359.20	7,405.0	2,324.9	500.4	2,324.9	0.00	0.00	
10,100.0	90.00	359.20	7,405.0	2,424.9	499.0	2,424.9	0.00	0.00	
10,200.0	90.00	359.20	7,405.0	2,524.9	497.6	2,524.9	0.00	0.00	
10,300.0	90.00	359.20	7,405.0	2,624.9	496.2	2,624.9	0.00	0.00	
10,400.0	90.00	359.20	7,405.0	2,724.9	494.8	2,724.9	0.00	0.00	
10,500.0	90.00	359.20	7,405.0	2,824.8	493.4	2,824.8	0.00	0.00	
10,600.0	90.00	359.20	7,405.0	2,924.8	492.0	2,924.8	0.00	0.00	
10,700.0	90.00	359.20	7,405.0	3,024.8	490.6	3,024.8	0.00	0.00	
10,800.0	90.00	359.20	7,405.0	3,124.8	489.2	3,124.8	0.00	0.00	
10,900.0	90.00	359.20	7,405.0	3,224.8	487.8	3,224.8	0.00	0.00	
11,000.0	90.00	359.20	7,405.0	3,324.8	486.4	3,324.8	0.00	0.00	
11,100.0	90.00	359.20	7,405.0	3,424.8	485.0	3,424.8	0.00	0.00	
11,200.0	90.00	359.20	7,405.0	3,524.8	483.7	3,524.8	0.00	0.00	
11,300.0	90.00	359.20	7,405.0	3,624.8	482.3	3,624.8	0.00	0.00	
11,400.0	90.00	359.20	7,405.0	3,724.8	480.9	3,724.8	0.00	0.00	
11,500.0	90.00	359.20	7,405.0	3,824.8	479.5	3,824.8	0.00	0.00	
11,600.0	90.00	359.20	7,405.0	3,924.7	478.1	3,924.7	0.00	0.00	
11,700.0	90.00	359.20	7,405.0	4,024.7	476.7	4,024.7	0.00	0.00	
11,800.0	90.00	359.20	7,405.0	4,124.7	475.3	4,124.7	0.00	0.00	
11,900.0	90.00	359.20	7,405.0	4,224.7	473.9	4,224.7	0.00	0.00	
12,000.0	90.00	359.20	7,405.0	4,324.7	472.5	4,324.7	0.00	0.00	
12,100.0	90.00	359.20	7,405.0	4,424.7	471.1	4,424.7	0.00	0.00	
12,200.0	90.00	359.20	7,405.0	4,524.7	469.7	4,524.7	0.00	0.00	
12,300.0	90.00	359.20	7,405.0	4,624.7	468.3	4,624.7	0.00	0.00	
12,400.0	90.00	359.20	7,405.0	4,724.7	466.9	4,724.7	0.00	0.00	
12,500.0	90.00	359.20	7,405.0	4,824.7	465.5	4,824.7	0.00	0.00	
12,600.0	90.00	359.20	7,405.0	4,924.6	464.1	4,924.6	0.00	0.00	
12,700.0	90.00	359.20	7,405.0	5,024.6	462.7	5,024.6	0.00	0.00	
12,800.0	90.00	359.20	7,405.0	5,124.6	461.3	5,124.6	0.00	0.00	
12,900.0	90.00	359.20	7,405.0	5,224.6	459.9	5,224.6	0.00	0.00	
13,000.0	90.00	359.20	7,405.0	5,324.6	458.5	5,324.6	0.00	0.00	
13,100.0	90.00	359.20	7,405.0	5,424.6	457.1	5,424.6	0.00	0.00	
13,200.0	90.00	359.20	7,405.0	5,524.6	455.7	5,524.6	0.00	0.00	
13,300.0	90.00	359.20	7,405.0	5,624.6	454.3	5,624.6	0.00	0.00	
13,400.0	90.00	359.20	7,405.0	5,724.6	452.9	5,724.6	0.00	0.00	
13,500.0	90.00	359.20	7,405.0	5,824.6	451.5	5,824.6	0.00	0.00	
13,600.0	90.00	359.20	7,405.0	5,924.6	450.1	5,924.6	0.00	0.00	
13,700.0	90.00	359.20	7,405.0	6,024.5	448.7	6,024.5	0.00	0.00	
13,800.0	90.00	359.20	7,405.0	6,124.5	447.3	6,124.5	0.00	0.00	
13,900.0	90.00	359.20	7,405.0	6,224.5	446.0	6,224.5	0.00	0.00	
14,000.0	90.00	359.20	7,405.0	6,324.5	444.6	6,324.5	0.00	0.00	
14,100.0	90.00	359.20	7,405.0	6,424.5	443.2	6,424.5	0.00	0.00	
14,200.0	90.00	359.20	7,405.0	6,524.5	441.8	6,524.5	0.00	0.00	
14,300.0	90.00	359.20	7,405.0	6,624.5	440.4	6,624.5	0.00	0.00	
14,400.0	90.00	359.20	7,405.0	6,724.5	439.0	6,724.5	0.00	0.00	
14,500.0	90.00	359.20	7,405.0	6,824.5	437.6	6,824.5	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-26H-P268	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

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
14,594.7	90.00	359.20	7,405.0	6,919.1	436.3	6,919.1	0.00	0.00	TD at 14594.7 - PBHL 4L-26H-P268

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 4L-26H-P268 - plan hits target center - Point	0.00	0.00	7,405.0	6,919.1	436.3	1,288,052.21	3,150,721.92	40.122832	-104.961051

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
350.0	350.0	Fox Hills - BASE			
4,417.0	4,394.0	Sussex			
4,982.1	4,955.0	Shannon			
6,791.1	6,751.0	Teepee Buttes (*if present)			
7,326.4	7,239.0	Sharon Springs			
7,471.7	7,327.0	Niobrara			
7,667.3	7,395.0	B Chalk			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,000.0	1,000.0	0.0	0.0	KOP @ 1000'
1,344.2	1,343.4	-14.4	14.8	EOB: Inc=6.88°
6,826.2	6,785.8	-471.8	486.5	Start build/turn @ 6826' MD
7,774.7	7,405.0	99.8	531.5	LP @ 7405' TVD; 90°
14,594.7	7,405.0	6,919.1	436.3	TD at 14594.7

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S26-T2N-R68W (Sullivan)

Sullivan 4L-26H-P268

HZ

Plan #2

Anticollision Report

07 October, 2014

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	Offset TVD Reference:	Offset Datum

Reference	Plan #2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	10/7/2014		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	14,594.7	Plan #2 (HZ)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	Offset TVD Reference:	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance		Separation Factor	Warning
			Between Centres (ft)	Between Ellipses (ft)		
S26-T2N-R68W (Sullivan)						
BERGER 32-23 - SUNDANCE WELL - NO SURVEYS						Out of range
BERGER 42-23C - SUNDANCE WELL - NO SURVEYS						Out of range
Duke State 30-36 - KMG WELL - SURVEYS	6,900.0	6,924.1	162.5	133.7	5.639	CC, ES, SF
GRANT 1 - KPK WELL - NO SURVEYS						Out of range
GRANT 3 - KPK WELL - NO SURVEYS						Out of range
GRANT 4 - KPK WELL - NO SURVEYS						Out of range
GRANT BROS 41-26 - SUNDANCE WELL - NO SURVE						Out of range
GRANT BROS 43-23 - SUNDANCE WELL - NO SURVE						Out of range
GRANT BROTHERS 2-26 - ENCANA WELL - NO SURV						Out of range
GRANT BROTHERS 23-2Ae - SUNDANCE WELL - SUR						Out of range
GRANT BROTHERS 23-43 - SUNDANCE WELL - SURV	14,449.2	7,631.1	627.6	478.5	4.210	CC, ES
GRANT BROTHERS 23-43 - SUNDANCE WELL - SURV	14,500.0	7,632.0	629.6	479.6	4.198	SF
GRANT BROTHERS 23-4AE - SUNDANCE WELL - SUR						Out of range
GRANT BROTHERS 23-54 - SUNDANCE WELL - SURV						Out of range
GRANT BROTHERS 31-26 - ENCANA WELL - NO SUR						Out of range
GRANT BROTHERS 32-26 - ENCANA WELL - NO SUR						Out of range
GRANT BROTHERS 3-23 - ENCANA WELL - SURVEYS						Out of range
GRANT BROTHERS 33-23C - SUNDANCE WELL - NO						Out of range
GRANT BROTHERS 34-23C - SUNDANCE WELL - NO						Out of range
GRANT BROTHERS 42-26 - ENCANA WELL - Existing	10,362.3	7,422.2	561.3	495.2	8.492	CC, ES
GRANT BROTHERS 42-26 - ENCANA WELL - Existing	10,400.0	7,422.4	562.6	495.9	8.429	SF
GRANT BROTHERS 44-23C - SUNDANCE WELL - NO	13,001.0	7,366.0	563.2	454.4	5.177	CC, ES
GRANT BROTHERS 44-23C - SUNDANCE WELL - NO	13,100.0	7,366.0	571.8	461.3	5.174	SF
JOHNSON 1 - KPK WELL - NO SURVEYS						Out of range
JOHNSON 2 - KPK WELL - NO SURVEYS						Out of range
MEREDITH 1 - KPK WELL - NO SURVEYS	1,000.0	963.0	115.5	112.2	34.276	CC, ES
MEREDITH 1 - KPK WELL - NO SURVEYS	1,300.0	1,262.5	131.0	126.6	29.753	SF
MEREDITH 2 - KPK WELL - NO SURVEYS						Out of range
PACE-CONNELLY 1 - FOUNDATION WELL - NO SURV						Out of range
SULLIVAN 1 - ENCANA WELL - NO SURVEYS						Out of range
SULLIVAN 33-26 - ENCANA WELL - NO SURVEYS						Out of range
SULLIVAN 34-26 - ENCANA WELL - SURVEYS						Out of range
SULLIVAN 44-26 - ENCANA WELL - NO SURVEYS	1,000.0	965.0	58.5	55.2	17.350	CC, ES
SULLIVAN 44-26 - ENCANA WELL - NO SURVEYS	1,200.0	1,164.8	62.5	58.4	15.338	SF
SULLIVAN 4-6-26 - ENCANA WELL - SURVEYS						Out of range
Sullivan 4A-26H-P268 - HZ - Plan #2	200.0	199.0	109.9	109.4	188.025	CC, ES
Sullivan 4A-26H-P268 - HZ - Plan #2	1,000.0	952.8	213.3	209.3	53.747	SF
Sullivan 4B-26H-P268 - HZ - Plan #1	300.0	300.0	99.9	98.9	106.751	CC, ES
Sullivan 4B-26H-P268 - HZ - Plan #1	1,000.0	965.4	179.1	175.3	47.392	SF
Sullivan 4C-26H-P268 - HZ - Plan #1	400.0	400.0	89.8	88.5	69.903	CC, ES
Sullivan 4C-26H-P268 - HZ - Plan #1	1,000.0	975.1	147.7	144.1	40.720	SF
Sullivan 4D-26H-P268 - HZ - Plan #2	500.0	500.0	80.0	78.4	48.974	CC, ES
Sullivan 4D-26H-P268 - HZ - Plan #2	900.0	887.7	105.4	102.3	34.019	SF
Sullivan 4E-26H-P268 - HZ - Plan #1	600.0	600.0	69.9	68.0	35.273	CC, ES
Sullivan 4E-26H-P268 - HZ - Plan #1	900.0	892.7	83.6	80.6	27.389	SF
Sullivan 4F-26H-P268 - HZ - Plan #1	700.0	700.0	59.9	57.5	25.673	CC, ES
Sullivan 4F-26H-P268 - HZ - Plan #1	1,000.0	993.8	73.4	70.0	21.565	SF
Sullivan 4G-26H-P268 - HZ - Plan #1	800.0	800.0	49.8	47.1	18.574	CC, ES
Sullivan 4G-26H-P268 - HZ - Plan #1	1,000.0	997.1	55.1	51.7	16.284	SF
Sullivan 4H-26H-P268 - HZ - Plan #1	866.3	867.3	40.0	37.1	13.727	CC
Sullivan 4H-26H-P268 - HZ - Plan #1	1,000.0	1,000.7	40.3	37.0	11.930	ES
Sullivan 4H-26H-P268 - HZ - Plan #1	14,594.7	14,856.8	928.5	687.8	3.858	SF
Sullivan 4I-26H-P268 - HZ - Plan #1	966.3	967.3	29.9	26.7	9.173	CC

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 4L-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 4L-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 #2	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
S26-T2N-R68W (Sullivan)						
Sullivan 4I-26H-P268 - HZ - Plan #1	1,000.0	1,001.0	29.9	26.6	8.854	ES
Sullivan 4I-26H-P268 - HZ - Plan #1	14,316.3	14,337.4	681.4	443.8	2.868	SF
Sullivan 4J-26H-P268 - HZ - Plan #1	1,000.0	1,000.0	19.9	16.5	5.879	CC, ES
Sullivan 4J-26H-P268 - HZ - Plan #1	14,594.7	14,684.1	471.7	229.0	1.944	SF
Sullivan 4K-26H-P268 - HZ - Plan #1	1,000.0	1,000.0	9.8	6.4	2.899	CC, ES
Sullivan 4K-26H-P268 - HZ - Plan #1	14,594.7	14,847.2	319.5	140.4	1.784	SF
SULLIVAN 6-8-26 - ENCANA WELL - SURVEYS						Out of range
SULLIVAN 8-6-26 - ENCANA WELL - Plan #2	8,456.7	7,472.6	104.9	66.4	2.726	CC, ES, SF
SULLIVAN 8-6-26 - ENCANA WELL - SURVEYS	8,457.2	7,484.4	100.3	62.4	2.645	CC, ES, SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Duke State 30-36 - KMG WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 40-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			
3,500.0	3,483.6	3,732.5	3,687.5	7.8	9.5	5.67	-922.5	820.6	985.2	972.7	12.55	78.520		
3,600.0	3,582.9	3,821.8	3,774.2	8.1	9.9	5.94	-908.4	804.4	950.0	937.2	12.89	73.713		
3,700.0	3,682.2	3,913.9	3,863.6	8.4	10.3	6.27	-894.4	787.7	915.2	902.0	13.24	69.140		
3,800.0	3,781.5	4,019.1	3,965.8	8.6	10.8	6.56	-876.8	769.4	879.9	866.3	13.61	64.675		
3,900.0	3,880.7	4,111.6	4,055.4	8.9	11.2	6.77	-860.3	753.7	843.9	830.0	13.95	60.503		
4,000.0	3,980.0	4,204.9	4,145.9	9.2	11.6	7.02	-843.8	737.7	808.1	793.8	14.30	56.529		
4,100.0	4,079.3	4,306.4	4,244.1	9.5	12.1	7.29	-825.4	720.3	771.8	757.1	14.66	52.654		
4,200.0	4,178.6	4,398.4	4,333.1	9.7	12.5	7.52	-807.9	704.5	735.0	720.0	15.00	48.993		
4,300.0	4,277.9	4,480.0	4,412.1	10.0	12.8	7.78	-793.2	690.7	699.0	683.7	15.33	45.591		
4,400.0	4,377.1	4,585.3	4,514.2	10.3	13.3	8.36	-775.9	671.4	663.4	647.7	15.73	42.172		
4,500.0	4,476.4	4,681.7	4,607.2	10.5	13.8	9.00	-759.2	652.3	626.3	610.1	16.12	38.840		
4,600.0	4,575.7	4,773.0	4,695.2	10.8	14.2	9.66	-743.1	634.4	589.1	572.6	16.52	35.669		
4,700.0	4,675.0	4,856.9	4,776.4	11.1	14.6	10.36	-729.0	618.1	552.8	535.9	16.90	32.702		
4,800.0	4,774.3	4,948.1	4,864.8	11.3	15.0	11.17	-714.3	601.6	517.8	500.5	17.32	29.895		
4,900.0	4,873.5	5,041.7	4,955.7	11.6	15.5	12.01	-698.7	585.2	482.9	465.2	17.75	27.202		
5,000.0	4,972.8	5,127.9	5,039.4	11.9	15.8	12.84	-684.5	570.8	448.7	430.5	18.18	24.683		
5,100.0	5,072.1	5,206.5	5,116.3	12.2	16.1	13.68	-673.1	558.9	417.0	398.4	18.60	22.424		
5,200.0	5,171.4	5,284.7	5,193.5	12.4	16.4	14.43	-664.1	549.9	389.6	370.6	19.01	20.501		
5,300.0	5,270.7	5,370.3	5,278.3	12.7	16.6	15.27	-656.6	542.1	366.0	346.5	19.45	18.820		
5,400.0	5,369.9	5,462.8	5,370.3	13.0	16.9	16.25	-649.9	534.8	344.3	324.4	19.92	17.284		
5,500.0	5,469.2	5,551.8	5,459.0	13.2	17.0	17.23	-644.9	529.1	324.8	304.4	20.40	15.924		
5,600.0	5,568.5	5,640.0	5,547.1	13.5	17.2	18.06	-641.6	525.8	308.4	287.6	20.85	14.794		
5,700.0	5,667.8	5,728.7	5,635.8	13.8	17.3	18.64	-640.2	525.5	295.5	274.2	21.25	13.902		
5,800.0	5,767.1	5,826.0	5,733.0	14.1	17.4	19.29	-640.5	526.1	284.7	263.0	21.69	13.124		
5,900.0	5,866.3	5,928.8	5,835.8	14.3	17.5	20.32	-641.0	525.5	273.5	251.3	22.21	12.317		
6,000.0	5,965.6	6,027.9	5,934.9	14.6	17.6	21.32	-640.7	524.9	261.8	239.1	22.71	11.529		
6,100.0	6,064.9	6,128.5	6,035.5	14.9	17.7	22.25	-639.8	524.9	249.9	226.7	23.21	10.767		
6,200.0	6,164.2	6,226.7	6,133.7	15.1	17.8	23.59	-639.6	523.6	238.1	214.3	23.79	10.007		
6,300.0	6,263.4	6,327.1	6,234.1	15.4	18.0	25.15	-639.2	522.0	226.3	201.8	24.42	9.264		
6,400.0	6,362.7	6,426.7	6,333.7	15.7	18.1	26.99	-638.6	519.9	214.2	189.1	25.12	8.526		
6,500.0	6,462.0	6,525.6	6,432.5	16.0	18.2	28.70	-637.5	518.9	202.2	176.4	25.79	7.837		
6,600.0	6,561.3	6,624.1	6,531.1	16.2	18.3	30.34	-636.5	518.9	190.8	164.3	26.46	7.212		
6,700.0	6,660.6	6,723.2	6,630.2	16.5	18.4	32.18	-635.3	518.8	179.3	152.2	27.17	6.600		
6,800.0	6,759.8	6,821.7	6,728.6	16.8	18.6	34.15	-634.8	519.2	168.9	141.0	27.91	6.052		
6,895.8	6,855.2	6,919.8	6,826.7	17.0	18.7	105.95	-633.6	519.1	164.2	135.4	28.81	5.699		
6,900.0	6,859.3	6,924.1	6,831.0	17.0	18.7	108.95	-633.6	519.1	162.5	133.7	28.83	5.639 CC, ES, SF		
7,000.0	6,958.0	7,021.3	6,928.2	17.0	18.8	153.95	-631.4	517.1	172.2	142.9	29.32	5.873		
7,100.0	7,052.9	7,111.9	7,018.8	17.0	19.0	166.34	-631.7	514.9	202.1	173.1	28.96	6.976		
7,200.0	7,141.1	7,198.7	7,105.6	16.8	19.1	172.42	-632.9	513.6	249.4	221.7	27.70	9.004		
7,300.0	7,220.0	7,276.3	7,183.2	16.6	19.1	175.92	-634.0	513.1	311.5	285.9	25.69	12.127		
7,400.0	7,287.2	7,340.4	7,247.2	16.4	19.2	178.32	-635.2	513.2	386.6	363.4	23.21	16.654		
7,500.0	7,340.6	7,392.1	7,298.9	16.2	19.2	-179.45	-636.3	513.4	472.1	451.5	20.62	22.895		
7,600.0	7,378.7	7,429.0	7,335.8	16.2	19.3	-176.09	-637.0	513.5	565.2	546.8	18.39	30.736		
7,700.0	7,400.2	7,449.0	7,355.8	16.3	19.3	-164.56	-637.4	513.6	663.1	645.0	18.06	36.713		
7,800.0	7,405.0	7,452.0	7,358.8	16.7	19.3	-63.28	-637.5	513.6	762.9	735.1	27.81	27.432		
7,900.0	7,405.0	7,450.1	7,356.9	17.1	19.3	-60.26	-637.4	513.6	862.8	835.0	27.83	31.002		
8,000.0	7,405.0	7,448.2	7,355.0	17.8	19.3	-57.41	-637.4	513.6	962.7	934.8	27.96	34.431		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	Offset TVD Reference:	Offset Datum

Offset Design											S26-T2N-R68W (Sullivan) - GRANT BROTHERS 23-43 - SUNDANCE WELL - SURVEYS			Offset Site Error:		0.0 ft
Survey Program:											177-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				
13,700.0	7,405.0	7,617.9	7,315.1	108.5	36.6	-88.82	6,764.7	-189.2	977.2	841.3	135.96	7.188				
13,800.0	7,405.0	7,619.6	7,316.8	110.2	36.6	-88.98	6,764.7	-189.2	902.9	765.2	137.71	6.556				
13,900.0	7,405.0	7,621.4	7,318.6	112.0	36.6	-89.14	6,764.7	-189.2	833.9	694.4	139.46	5.979				
14,000.0	7,405.0	7,623.1	7,320.4	113.7	36.6	-89.30	6,764.8	-189.2	771.7	630.5	141.21	5.465				
14,100.0	7,405.0	7,624.9	7,322.1	115.4	36.6	-89.46	6,764.8	-189.2	718.2	575.2	142.96	5.023				
14,200.0	7,405.0	7,626.7	7,323.9	117.2	36.6	-89.63	6,764.8	-189.2	675.2	530.5	144.71	4.666				
14,300.0	7,405.0	7,628.4	7,325.7	118.9	36.6	-89.79	6,764.9	-189.2	645.0	498.6	146.46	4.404				
14,400.0	7,405.0	7,630.2	7,327.4	120.6	36.6	-89.95	6,764.9	-189.2	629.5	481.3	148.21	4.247				
14,449.2	7,405.0	7,631.1	7,328.3	121.5	36.6	-90.03	6,764.9	-189.2	627.6	478.5	149.07	4.210 CC, ES				
14,500.0	7,405.0	7,632.0	7,329.2	122.4	36.6	-90.11	6,764.9	-189.2	629.6	479.6	149.96	4.198 SF				
14,594.7	7,405.0	7,633.7	7,330.9	124.0	36.6	-90.27	6,764.9	-189.2	644.2	492.6	151.61	4.249				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - GRANT BROTHERS 42-26 - ENCANA WELL - Existing												Offset Site Error:	0.0 ft
Survey Program: 951-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
9,600.0	7,405.0	7,418.5	7,353.3	38.9	18.6	-89.63	2,679.3	-65.9	946.7	893.3	53.35	17.744	
9,700.0	7,405.0	7,419.0	7,353.8	40.5	18.6	-89.68	2,679.3	-65.9	868.2	813.2	55.00	15.785	
9,800.0	7,405.0	7,419.5	7,354.3	42.1	18.6	-89.73	2,679.3	-65.9	794.5	737.9	56.66	14.023	
9,900.0	7,405.0	7,419.9	7,354.8	43.7	18.6	-89.78	2,679.3	-65.9	727.2	668.9	58.32	12.468	
10,000.0	7,405.0	7,420.4	7,355.3	45.4	18.6	-89.83	2,679.3	-65.9	668.1	608.1	60.00	11.135	
10,100.0	7,405.0	7,420.9	7,355.8	47.0	18.6	-89.88	2,679.3	-65.9	619.6	557.9	61.68	10.046	
10,200.0	7,405.0	7,421.4	7,356.3	48.7	18.6	-89.93	2,679.3	-65.9	584.3	521.0	63.36	9.222	
10,300.0	7,405.0	7,421.9	7,356.8	50.3	18.6	-89.98	2,679.3	-65.9	564.8	499.7	65.05	8.682	
10,362.3	7,405.0	7,422.2	7,357.1	51.4	18.6	-90.01	2,679.3	-65.9	561.3	495.2	66.10	8.492 CC, ES	
10,400.0	7,405.0	7,422.4	7,357.3	52.0	18.6	-90.03	2,679.3	-65.9	562.6	495.9	66.74	8.429 SF	
10,500.0	7,405.0	7,422.9	7,357.8	53.6	18.6	-90.08	2,679.3	-65.9	578.0	509.5	68.44	8.445	
10,600.0	7,405.0	7,423.4	7,358.3	55.3	18.6	-90.13	2,679.3	-65.9	609.6	539.4	70.14	8.691	
10,700.0	7,405.0	7,423.9	7,358.7	57.0	18.6	-90.18	2,679.3	-65.9	655.1	583.2	71.85	9.118	
10,800.0	7,405.0	7,424.4	7,359.2	58.7	18.6	-90.23	2,679.3	-65.9	711.8	638.3	73.55	9.677	
10,900.0	7,405.0	7,424.8	7,359.7	60.4	18.6	-90.28	2,679.3	-65.9	777.3	702.0	75.26	10.328	
11,000.0	7,405.0	7,425.3	7,360.2	62.1	18.6	-90.33	2,679.3	-65.9	849.6	772.6	76.98	11.037	
11,100.0	7,405.0	7,425.8	7,360.7	63.8	18.7	-90.38	2,679.3	-65.9	927.0	848.3	78.69	11.780	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - GRANT BROTHERS 44-23C - SUNDANCE WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8150-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		
12,200.0	7,405.0	7,366.0	7,366.0	82.6	12.9	-90.00	5,317.7	-104.6	979.2	884.3	94.89	10.319		
12,300.0	7,405.0	7,366.0	7,366.0	84.3	12.9	-90.00	5,317.7	-104.6	899.2	802.6	96.62	9.306		
12,400.0	7,405.0	7,366.0	7,366.0	86.0	12.9	-90.00	5,317.7	-104.6	823.6	725.3	98.35	8.374		
12,500.0	7,405.0	7,366.0	7,366.0	87.7	12.9	-90.00	5,317.7	-104.6	753.8	653.7	100.09	7.531		
12,600.0	7,405.0	7,366.0	7,366.0	89.5	12.9	-90.00	5,317.7	-104.6	691.3	589.5	101.82	6.790		
12,700.0	7,405.0	7,366.0	7,366.0	91.2	12.9	-90.00	5,317.7	-104.6	638.6	535.0	103.56	6.166		
12,800.0	7,405.0	7,366.0	7,366.0	92.9	12.9	-90.00	5,317.7	-104.6	598.0	492.7	105.29	5.679		
12,900.0	7,405.0	7,366.0	7,366.0	94.6	12.9	-90.00	5,317.7	-104.6	572.1	465.1	107.03	5.346		
13,000.0	7,405.0	7,366.0	7,366.0	96.4	12.9	-90.00	5,317.7	-104.6	563.2	454.4	108.77	5.178		
13,001.0	7,405.0	7,366.0	7,366.0	96.4	12.9	-90.00	5,317.7	-104.6	563.2	454.4	108.78	5.177 CC, ES		
13,100.0	7,405.0	7,366.0	7,366.0	98.1	12.9	-90.00	5,317.7	-104.6	571.8	461.3	110.50	5.174 SF		
13,200.0	7,405.0	7,366.0	7,366.0	99.8	12.9	-90.00	5,317.7	-104.6	597.3	485.0	112.24	5.321		
13,300.0	7,405.0	7,366.0	7,366.0	101.6	12.9	-90.00	5,317.7	-104.6	637.6	523.6	113.98	5.594		
13,400.0	7,405.0	7,366.0	7,366.0	103.3	12.9	-90.00	5,317.7	-104.6	690.2	574.4	115.72	5.964		
13,500.0	7,405.0	7,366.0	7,366.0	105.0	12.9	-90.00	5,317.7	-104.6	752.4	635.0	117.46	6.406		
13,600.0	7,405.0	7,366.0	7,366.0	106.8	12.9	-90.00	5,317.7	-104.6	822.1	702.9	119.20	6.897		
13,700.0	7,405.0	7,366.0	7,366.0	108.5	12.9	-90.00	5,317.7	-104.6	897.6	776.7	120.94	7.422		
13,800.0	7,405.0	7,366.0	7,366.0	110.2	12.9	-90.00	5,317.7	-104.6	977.5	854.8	122.68	7.968		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - MEREDITH 1 - 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			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	-35.87	93.6	-67.7	121.3					
100.0	100.0	63.0	63.0	0.1	0.1	-35.87	93.6	-67.7	115.5	115.3	0.23	504.829		
200.0	200.0	163.0	163.0	0.3	0.3	-35.87	93.6	-67.7	115.5	114.9	0.58	199.902		
300.0	300.0	263.0	263.0	0.5	0.5	-35.87	93.6	-67.7	115.5	114.6	0.93	124.626		
400.0	400.0	363.0	363.0	0.6	0.6	-35.87	93.6	-67.7	115.5	114.2	1.28	90.534		
500.0	500.0	463.0	463.0	0.8	0.8	-35.87	93.6	-67.7	115.5	113.9	1.63	71.087		
600.0	600.0	563.0	563.0	1.0	1.0	-35.87	93.6	-67.7	115.5	113.5	1.97	58.518		
700.0	700.0	663.0	663.0	1.2	1.2	-35.87	93.6	-67.7	115.5	113.2	2.32	49.726		
800.0	800.0	763.0	763.0	1.3	1.3	-35.87	93.6	-67.7	115.5	112.9	2.67	43.230		
900.0	900.0	863.0	863.0	1.5	1.5	-35.87	93.6	-67.7	115.5	112.5	3.02	38.236		
1,000.0	1,000.0	963.0	963.0	1.7	1.7	-35.87	93.6	-67.7	115.5	112.2	3.37	34.276	CC, ES	
1,100.0	1,100.0	1,063.0	1,063.0	1.9	1.9	-170.13	93.6	-67.7	117.2	113.5	3.72	31.534		
1,200.0	1,199.8	1,162.8	1,162.8	2.0	2.0	-170.54	93.6	-67.7	122.4	118.3	4.06	30.130		
1,300.0	1,299.5	1,262.5	1,262.5	2.2	2.2	-171.14	93.6	-67.7	131.0	126.6	4.40	29.753	SF	
1,400.0	1,398.8	1,361.8	1,361.8	2.5	2.4	-171.84	93.6	-67.7	142.5	137.8	4.75	30.027		
1,500.0	1,498.0	1,461.0	1,461.0	2.7	2.6	-172.47	93.6	-67.7	154.4	149.3	5.09	30.305		
1,600.0	1,597.3	1,560.3	1,560.3	2.9	2.7	-173.02	93.6	-67.7	166.3	160.9	5.44	30.551		
1,700.0	1,696.6	1,659.6	1,659.6	3.2	2.9	-173.48	93.6	-67.7	178.2	172.4	5.79	30.771		
1,800.0	1,795.9	1,758.9	1,758.9	3.4	3.1	-173.89	93.6	-67.7	190.1	184.0	6.14	30.967		
1,900.0	1,895.2	1,858.2	1,858.2	3.6	3.2	-174.26	93.6	-67.7	202.0	195.5	6.49	31.144		
2,000.0	1,994.4	1,957.4	1,957.4	3.9	3.4	-174.58	93.6	-67.7	214.0	207.1	6.83	31.305		
2,100.0	2,093.7	2,056.7	2,056.7	4.1	3.6	-174.86	93.6	-67.7	225.9	218.7	7.18	31.451		
2,200.0	2,193.0	2,156.0	2,156.0	4.4	3.8	-175.12	93.6	-67.7	237.8	230.3	7.53	31.585		
2,300.0	2,292.3	2,255.3	2,255.3	4.7	3.9	-175.36	93.6	-67.7	249.8	241.9	7.88	31.708		
2,400.0	2,391.6	2,354.6	2,354.6	4.9	4.1	-175.57	93.6	-67.7	261.7	253.5	8.23	31.821		
2,500.0	2,490.8	2,453.8	2,453.8	5.2	4.3	-175.76	93.6	-67.7	273.7	265.1	8.57	31.925		
2,600.0	2,590.1	2,553.1	2,553.1	5.4	4.5	-175.94	93.6	-67.7	285.6	276.7	8.92	32.021		
2,700.0	2,689.4	2,652.4	2,652.4	5.7	4.6	-176.10	93.6	-67.7	297.6	288.3	9.27	32.111		
2,800.0	2,788.7	2,751.7	2,751.7	6.0	4.8	-176.25	93.6	-67.7	309.6	299.9	9.62	32.195		
2,900.0	2,888.0	2,851.0	2,851.0	6.2	5.0	-176.39	93.6	-67.7	321.5	311.6	9.96	32.273		
3,000.0	2,987.2	2,950.2	2,950.2	6.5	5.1	-176.52	93.6	-67.7	333.5	323.2	10.31	32.346		
3,100.0	3,086.5	3,049.5	3,049.5	6.8	5.3	-176.64	93.6	-67.7	345.4	334.8	10.66	32.414		
3,200.0	3,185.8	3,148.8	3,148.8	7.0	5.5	-176.76	93.6	-67.7	357.4	346.4	11.00	32.478		
3,300.0	3,285.1	3,248.1	3,248.1	7.3	5.7	-176.86	93.6	-67.7	369.4	358.0	11.35	32.539		
3,400.0	3,384.4	3,347.4	3,347.4	7.6	5.8	-176.96	93.6	-67.7	381.3	369.6	11.70	32.596		
3,500.0	3,483.6	3,446.6	3,446.6	7.8	6.0	-177.05	93.6	-67.7	393.3	381.3	12.05	32.650		
3,600.0	3,582.9	3,545.9	3,545.9	8.1	6.2	-177.14	93.6	-67.7	405.3	392.9	12.39	32.701		
3,700.0	3,682.2	3,645.2	3,645.2	8.4	6.4	-177.22	93.6	-67.7	417.3	404.5	12.74	32.749		
3,800.0	3,781.5	3,744.5	3,744.5	8.6	6.5	-177.30	93.6	-67.7	429.2	416.1	13.09	32.795		
3,900.0	3,880.7	3,843.7	3,843.7	8.9	6.7	-177.37	93.6	-67.7	441.2	427.8	13.44	32.838		
4,000.0	3,980.0	3,943.0	3,943.0	9.2	6.9	-177.44	93.6	-67.7	453.2	439.4	13.78	32.879		
4,100.0	4,079.3	4,042.3	4,042.3	9.5	7.1	-177.51	93.6	-67.7	465.2	451.0	14.13	32.919		
4,200.0	4,178.6	4,141.6	4,141.6	9.7	7.2	-177.57	93.6	-67.7	477.1	462.7	14.48	32.956		
4,300.0	4,277.9	4,240.9	4,240.9	10.0	7.4	-177.63	93.6	-67.7	489.1	474.3	14.82	32.992		
4,400.0	4,377.1	4,340.1	4,340.1	10.3	7.6	-177.69	93.6	-67.7	501.1	485.9	15.17	33.026		
4,500.0	4,476.4	4,439.4	4,439.4	10.5	7.7	-177.74	93.6	-67.7	513.1	497.5	15.52	33.059		
4,600.0	4,575.7	4,538.7	4,538.7	10.8	7.9	-177.79	93.6	-67.7	525.0	509.2	15.87	33.090		
4,700.0	4,675.0	4,638.0	4,638.0	11.1	8.1	-177.84	93.6	-67.7	537.0	520.8	16.21	33.120		
4,800.0	4,774.3	4,737.3	4,737.3	11.3	8.3	-177.89	93.6	-67.7	549.0	532.4	16.56	33.149		
4,900.0	4,873.5	4,836.5	4,836.5	11.6	8.4	-177.93	93.6	-67.7	561.0	544.1	16.91	33.177		
5,000.0	4,972.8	4,935.8	4,935.8	11.9	8.6	-177.98	93.6	-67.7	572.9	555.7	17.26	33.203		
5,100.0	5,072.1	5,035.1	5,035.1	12.2	8.8	-178.02	93.6	-67.7	584.9	567.3	17.60	33.229		

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 4L-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 4L-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 #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - MEREDITH 1 - 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			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	5,171.4	5,120.0	5,120.0	12.4	8.9	-178.05	93.6	-67.7	597.1	579.1	17.93	33.309	
5,300.0	5,270.7	5,120.0	5,120.0	12.7	8.9	-178.05	93.6	-67.7	619.4	601.3	18.10	34.220	
5,400.0	5,369.9	5,120.0	5,120.0	13.0	8.9	-178.05	93.6	-67.7	656.4	638.1	18.28	35.915	
5,500.0	5,469.2	5,120.0	5,120.0	13.2	8.9	-178.05	93.6	-67.7	705.7	687.2	18.45	38.247	
5,600.0	5,568.5	5,120.0	5,120.0	13.5	8.9	-178.05	93.6	-67.7	764.9	746.3	18.63	41.069	
5,700.0	5,667.8	5,120.0	5,120.0	13.8	8.9	-178.05	93.6	-67.7	832.0	813.2	18.80	44.256	
5,800.0	5,767.1	5,120.0	5,120.0	14.1	8.9	-178.05	93.6	-67.7	905.2	886.2	18.98	47.705	
5,900.0	5,866.3	5,120.0	5,120.0	14.3	8.9	-178.05	93.6	-67.7	983.1	964.0	19.15	51.338	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - SULLIVAN 44-26 - 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		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	-104.05	-14.2	-56.8	68.2					
100.0	100.0	65.0	65.0	0.1	0.1	-104.05	-14.2	-56.8	58.5	58.3	0.23	251.959		
200.0	200.0	165.0	165.0	0.3	0.3	-104.05	-14.2	-56.8	58.5	58.0	0.58	100.684		
300.0	300.0	265.0	265.0	0.5	0.5	-104.05	-14.2	-56.8	58.5	57.6	0.93	62.912		
400.0	400.0	365.0	365.0	0.6	0.6	-104.05	-14.2	-56.8	58.5	57.3	1.28	45.749		
500.0	500.0	465.0	465.0	0.8	0.8	-104.05	-14.2	-56.8	58.5	56.9	1.63	35.944		
600.0	600.0	565.0	565.0	1.0	1.0	-104.05	-14.2	-56.8	58.5	56.6	1.98	29.599		
700.0	700.0	665.0	665.0	1.2	1.2	-104.05	-14.2	-56.8	58.5	56.2	2.33	25.159		
800.0	800.0	765.0	765.0	1.3	1.3	-104.05	-14.2	-56.8	58.5	55.9	2.68	21.877		
900.0	900.0	865.0	865.0	1.5	1.5	-104.05	-14.2	-56.8	58.5	55.5	3.02	19.352		
1,000.0	1,000.0	965.0	965.0	1.7	1.7	-104.05	-14.2	-56.8	58.5	55.2	3.37	17.350 CC, ES		
1,100.0	1,100.0	1,065.0	1,065.0	1.9	1.9	123.24	-14.2	-56.8	59.5	55.8	3.72	15.974		
1,200.0	1,199.8	1,164.8	1,164.8	2.0	2.0	127.20	-14.2	-56.8	62.5	58.4	4.07	15.338 SF		
1,300.0	1,299.5	1,264.5	1,264.5	2.2	2.2	132.96	-14.2	-56.8	68.1	63.7	4.43	15.381		
1,400.0	1,398.8	1,363.8	1,363.8	2.5	2.4	139.28	-14.2	-56.8	76.6	71.8	4.79	15.997		
1,500.0	1,498.0	1,463.0	1,463.0	2.7	2.6	144.49	-14.2	-56.8	86.0	80.9	5.14	16.727		
1,600.0	1,597.3	1,562.3	1,562.3	2.9	2.7	148.63	-14.2	-56.8	96.1	90.6	5.50	17.473		
1,700.0	1,696.6	1,661.6	1,661.6	3.2	2.9	151.99	-14.2	-56.8	106.5	100.6	5.85	18.203		
1,800.0	1,795.9	1,760.9	1,760.9	3.4	3.1	154.74	-14.2	-56.8	117.2	111.0	6.20	18.904		
1,900.0	1,895.2	1,860.2	1,860.2	3.6	3.2	157.02	-14.2	-56.8	128.2	121.6	6.55	19.568		
2,000.0	1,994.4	1,959.4	1,959.4	3.9	3.4	158.94	-14.2	-56.8	139.3	132.4	6.90	20.191		
2,100.0	2,093.7	2,058.7	2,058.7	4.1	3.6	160.58	-14.2	-56.8	150.6	143.3	7.25	20.775		
2,200.0	2,193.0	2,158.0	2,158.0	4.4	3.8	161.99	-14.2	-56.8	161.9	154.3	7.59	21.321		
2,300.0	2,292.3	2,257.3	2,257.3	4.7	3.9	163.21	-14.2	-56.8	173.4	165.4	7.94	21.831		
2,400.0	2,391.6	2,356.6	2,356.6	4.9	4.1	164.29	-14.2	-56.8	184.9	176.6	8.29	22.307		
2,500.0	2,490.8	2,455.8	2,455.8	5.2	4.3	165.23	-14.2	-56.8	196.5	187.8	8.63	22.751		
2,600.0	2,590.1	2,555.1	2,555.1	5.4	4.5	166.07	-14.2	-56.8	208.1	199.1	8.98	23.167		
2,700.0	2,689.4	2,654.4	2,654.4	5.7	4.6	166.83	-14.2	-56.8	219.7	210.4	9.33	23.557		
2,800.0	2,788.7	2,753.7	2,753.7	6.0	4.8	167.50	-14.2	-56.8	231.4	221.7	9.67	23.922		
2,900.0	2,888.0	2,853.0	2,853.0	6.2	5.0	168.11	-14.2	-56.8	243.1	233.1	10.02	24.265		
3,000.0	2,987.2	2,952.2	2,952.2	6.5	5.2	168.67	-14.2	-56.8	254.9	244.5	10.37	24.588		
3,100.0	3,086.5	3,051.5	3,051.5	6.8	5.3	169.17	-14.2	-56.8	266.6	255.9	10.71	24.891		
3,200.0	3,185.8	3,150.8	3,150.8	7.0	5.5	169.64	-14.2	-56.8	278.4	267.4	11.06	25.178		
3,300.0	3,285.1	3,250.1	3,250.1	7.3	5.7	170.06	-14.2	-56.8	290.2	278.8	11.40	25.448		
3,400.0	3,384.4	3,349.4	3,349.4	7.6	5.8	170.45	-14.2	-56.8	302.0	290.3	11.75	25.704		
3,500.0	3,483.6	3,448.6	3,448.6	7.8	6.0	170.82	-14.2	-56.8	313.9	301.8	12.10	25.946		
3,600.0	3,582.9	3,547.9	3,547.9	8.1	6.2	171.15	-14.2	-56.8	325.7	313.3	12.44	26.175		
3,700.0	3,682.2	3,647.2	3,647.2	8.4	6.4	171.47	-14.2	-56.8	337.6	324.8	12.79	26.393		
3,800.0	3,781.5	3,746.5	3,746.5	8.6	6.5	171.76	-14.2	-56.8	349.4	336.3	13.14	26.600		
3,900.0	3,880.7	3,845.7	3,845.7	8.9	6.7	172.03	-14.2	-56.8	361.3	347.8	13.48	26.797		
4,000.0	3,980.0	3,945.0	3,945.0	9.2	6.9	172.29	-14.2	-56.8	373.2	359.3	13.83	26.984		
4,100.0	4,079.3	4,044.3	4,044.3	9.5	7.1	172.53	-14.2	-56.8	385.1	370.9	14.18	27.163		
4,200.0	4,178.6	4,143.6	4,143.6	9.7	7.2	172.75	-14.2	-56.8	396.9	382.4	14.52	27.334		
4,300.0	4,277.9	4,242.9	4,242.9	10.0	7.4	172.96	-14.2	-56.8	408.8	394.0	14.87	27.497		
4,400.0	4,377.1	4,342.1	4,342.1	10.3	7.6	173.16	-14.2	-56.8	420.7	405.5	15.21	27.653		
4,500.0	4,476.4	4,441.4	4,441.4	10.5	7.8	173.35	-14.2	-56.8	432.6	417.1	15.56	27.802		
4,600.0	4,575.7	4,540.7	4,540.7	10.8	7.9	173.53	-14.2	-56.8	444.5	428.6	15.91	27.945		
4,700.0	4,675.0	4,640.0	4,640.0	11.1	8.1	173.70	-14.2	-56.8	456.5	440.2	16.25	28.082		
4,800.0	4,774.3	4,739.3	4,739.3	11.3	8.3	173.86	-14.2	-56.8	468.4	451.8	16.60	28.213		
4,900.0	4,873.5	4,838.5	4,838.5	11.6	8.4	174.01	-14.2	-56.8	480.3	463.3	16.95	28.340		
5,000.0	4,972.8	4,937.8	4,937.8	11.9	8.6	174.16	-14.2	-56.8	492.2	474.9	17.29	28.461		
5,100.0	5,072.1	5,037.1	5,037.1	12.2	8.8	174.30	-14.2	-56.8	504.1	486.5	17.64	28.578		

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 4L-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 4L-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 #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - SULLIVAN 44-26 - 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						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	5,171.4	5,136.4	5,136.4	12.4	9.0	174.43	-14.2	-56.8	516.1	498.1	17.99	28.690		
5,300.0	5,270.7	5,235.7	5,235.7	12.7	9.1	174.56	-14.2	-56.8	528.0	509.7	18.33	28.799		
5,400.0	5,369.9	5,334.9	5,334.9	13.0	9.3	174.68	-14.2	-56.8	539.9	521.3	18.68	28.903		
5,500.0	5,469.2	5,434.2	5,434.2	13.2	9.5	174.79	-14.2	-56.8	551.9	532.8	19.03	29.004		
5,600.0	5,568.5	5,533.5	5,533.5	13.5	9.7	174.90	-14.2	-56.8	563.8	544.4	19.37	29.101		
5,700.0	5,667.8	5,632.8	5,632.8	13.8	9.8	175.01	-14.2	-56.8	575.7	556.0	19.72	29.194		
5,800.0	5,767.1	5,732.1	5,732.1	14.1	10.0	175.11	-14.2	-56.8	587.7	567.6	20.07	29.285		
5,900.0	5,866.3	5,831.3	5,831.3	14.3	10.2	175.21	-14.2	-56.8	599.6	579.2	20.41	29.373		
6,000.0	5,965.6	5,930.6	5,930.6	14.6	10.4	175.30	-14.2	-56.8	611.6	590.8	20.76	29.457		
6,100.0	6,064.9	6,029.9	6,029.9	14.9	10.5	175.39	-14.2	-56.8	623.5	602.4	21.11	29.539		
6,200.0	6,164.2	6,129.2	6,129.2	15.1	10.7	175.48	-14.2	-56.8	635.5	614.0	21.46	29.619		
6,300.0	6,263.4	6,228.4	6,228.4	15.4	10.9	175.56	-14.2	-56.8	647.4	625.6	21.80	29.696		
6,400.0	6,362.7	6,327.7	6,327.7	15.7	11.0	175.64	-14.2	-56.8	659.4	637.2	22.15	29.770		
6,500.0	6,462.0	6,427.0	6,427.0	16.0	11.2	175.72	-14.2	-56.8	671.3	648.8	22.50	29.843		
6,600.0	6,561.3	6,526.3	6,526.3	16.2	11.4	175.80	-14.2	-56.8	683.3	660.4	22.84	29.913		
6,700.0	6,660.6	6,625.6	6,625.6	16.5	11.6	175.87	-14.2	-56.8	695.2	672.0	23.19	29.981		
6,800.0	6,759.8	6,724.8	6,724.8	16.8	11.7	175.94	-14.2	-56.8	707.2	683.7	23.54	30.047		
6,900.0	6,859.3	6,824.3	6,824.3	17.0	11.9	-111.83	-14.2	-56.8	716.1	692.1	23.92	29.941		
7,000.0	6,958.0	6,923.0	6,923.0	17.0	12.1	-72.01	-14.2	-56.8	714.1	689.9	24.16	29.561		
7,100.0	7,052.9	7,017.9	7,017.9	17.0	12.2	-66.29	-14.2	-56.8	701.8	677.5	24.31	28.869		
7,200.0	7,141.1	7,106.1	7,106.1	16.8	12.4	-67.70	-14.2	-56.8	681.2	656.7	24.53	27.772		
7,300.0	7,220.0	7,185.0	7,185.0	16.6	12.5	-72.24	-14.2	-56.8	655.4	630.5	24.91	26.309		
7,400.0	7,287.2	7,252.2	7,252.2	16.4	12.7	-78.22	-14.2	-56.8	628.5	603.1	25.39	24.758		
7,500.0	7,340.6	7,305.6	7,305.6	16.2	12.8	-84.11	-14.2	-56.8	605.4	579.6	25.77	23.492		
7,600.0	7,378.7	7,343.7	7,343.7	16.2	12.8	-88.53	-14.2	-56.8	591.3	565.2	26.02	22.728		
7,657.7	7,393.1	7,358.1	7,358.1	16.3	12.8	-90.00	-14.2	-56.8	588.9	562.7	26.17	22.501		
7,700.0	7,400.2	7,365.2	7,365.2	16.3	12.9	-90.48	-14.2	-56.8	590.2	564.0	26.26	22.478		
7,800.0	7,405.0	7,370.0	7,370.0	16.7	12.9	-90.00	-14.2	-56.8	604.2	577.6	26.63	22.688		
7,900.0	7,405.0	7,370.0	7,370.0	17.1	12.9	-90.00	-14.2	-56.8	633.4	606.2	27.21	23.279		
8,000.0	7,405.0	7,370.0	7,370.0	17.8	12.9	-90.00	-14.2	-56.8	676.4	648.4	27.97	24.179		
8,100.0	7,405.0	7,370.0	7,370.0	18.6	12.9	-90.00	-14.2	-56.8	730.5	701.6	28.89	25.284		
8,200.0	7,405.0	7,370.0	7,370.0	19.5	12.9	-90.00	-14.2	-56.8	793.7	763.7	29.94	26.506		
8,300.0	7,405.0	7,370.0	7,370.0	20.5	12.9	-90.00	-14.2	-56.8	863.8	832.7	31.10	27.772		
8,400.0	7,405.0	7,370.0	7,370.0	21.6	12.9	-90.00	-14.2	-56.8	939.3	907.0	32.35	29.036		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4A-26H-P268 - HZ - Plan #2													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		
0.0	0.0	0.0	0.0	0.0	0.0	-89.62	0.7	-109.9	109.9					
100.0	100.0	99.0	99.0	0.1	0.1	-89.62	0.7	-109.9	109.9	109.7	0.24	465.476		
200.0	200.0	199.0	199.0	0.3	0.3	-89.62	0.7	-109.9	109.9	109.4	0.58	188.025 CC, ES		
300.0	300.0	295.5	295.4	0.5	0.5	-89.85	0.3	-111.5	111.5	110.6	0.93	119.849		
400.0	400.0	391.7	391.5	0.6	0.7	-90.52	-1.1	-116.1	116.3	115.0	1.29	90.300		
500.0	500.0	487.4	486.9	0.8	0.9	-91.52	-3.3	-123.8	124.4	122.7	1.67	74.654		
600.0	600.0	582.6	581.4	1.0	1.1	-92.71	-6.4	-134.4	135.7	133.7	2.07	65.568		
700.0	700.0	676.8	674.6	1.2	1.4	-93.98	-10.3	-148.0	150.3	147.8	2.50	60.079		
800.0	800.0	770.1	766.3	1.3	1.7	-95.22	-15.0	-164.2	168.1	165.2	2.96	56.749		
900.0	900.0	862.1	856.3	1.5	2.1	-96.38	-20.5	-183.1	189.1	185.7	3.45	54.794		
1,000.0	1,000.0	952.8	944.2	1.7	2.6	-97.42	-26.6	-204.4	213.3	209.3	3.97	53.747 SF		
1,100.0	1,100.0	1,042.9	1,030.8	1.9	3.0	127.38	-33.5	-228.2	241.5	237.8	3.65	66.133		
1,200.0	1,199.8	1,137.9	1,121.9	2.0	3.5	126.92	-41.0	-254.1	272.8	268.8	3.99	68.302		
1,300.0	1,299.5	1,232.2	1,212.2	2.2	4.0	126.96	-48.5	-279.9	306.0	301.7	4.34	70.446		
1,400.0	1,398.8	1,325.7	1,301.9	2.5	4.5	127.61	-55.9	-305.5	341.0	336.3	4.71	72.325		
1,500.0	1,498.0	1,419.2	1,391.5	2.7	5.0	128.38	-63.3	-331.1	376.3	371.1	5.10	73.739		
1,600.0	1,597.3	1,512.7	1,481.1	2.9	5.5	129.03	-70.7	-356.7	411.5	406.1	5.50	74.864		
1,700.0	1,696.6	1,606.1	1,570.7	3.2	6.0	129.57	-78.2	-382.3	446.9	441.0	5.90	75.770		
1,800.0	1,795.9	1,699.6	1,660.3	3.4	6.5	130.04	-85.6	-407.8	482.2	475.9	6.30	76.511		
1,900.0	1,895.2	1,793.1	1,749.9	3.6	7.0	130.44	-93.0	-433.4	517.6	510.9	6.71	77.123		
2,000.0	1,994.4	1,886.5	1,839.5	3.9	7.5	130.79	-100.4	-459.0	553.0	545.9	7.12	77.635		
2,100.0	2,093.7	1,980.0	1,929.1	4.1	8.0	131.09	-107.8	-484.6	588.5	580.9	7.54	78.068		
2,200.0	2,193.0	2,073.5	2,018.7	4.4	8.5	131.37	-115.2	-510.2	623.9	616.0	7.95	78.436		
2,300.0	2,292.3	2,167.0	2,108.3	4.7	9.0	131.61	-122.6	-535.7	659.4	651.0	8.37	78.752		
2,400.0	2,391.6	2,260.4	2,197.9	4.9	9.5	131.83	-130.0	-561.3	694.8	686.0	8.79	79.026		
2,500.0	2,490.8	2,353.9	2,287.5	5.2	10.0	132.02	-137.4	-586.9	730.3	721.1	9.21	79.265		
2,600.0	2,590.1	2,447.4	2,377.1	5.4	10.6	132.20	-144.8	-612.5	765.7	756.1	9.64	79.474		
2,700.0	2,689.4	2,540.8	2,466.7	5.7	11.1	132.37	-152.2	-638.1	801.2	791.2	10.06	79.659		
2,800.0	2,788.7	2,634.3	2,556.3	6.0	11.6	132.52	-159.6	-663.6	836.7	826.2	10.48	79.823		
2,900.0	2,888.0	2,727.8	2,645.9	6.2	12.1	132.65	-167.1	-689.2	872.2	861.3	10.91	79.969		
3,000.0	2,987.2	2,821.3	2,735.5	6.5	12.6	132.78	-174.5	-714.8	907.7	896.4	11.33	80.099		
3,100.0	3,086.5	2,914.7	2,825.1	6.8	13.1	132.90	-181.9	-740.4	943.2	931.4	11.76	80.217		
3,200.0	3,185.8	3,008.2	2,914.7	7.0	13.6	133.00	-189.3	-765.9	978.7	966.5	12.18	80.323		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4B-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		
0.0	0.0	0.0	0.0	0.0	0.0	-89.59	0.7	-99.9	99.9					
100.0	100.0	100.0	100.0	0.1	0.1	-89.59	0.7	-99.9	99.9	99.6	0.24	420.725		
200.0	200.0	200.0	200.0	0.3	0.3	-89.59	0.7	-99.9	99.9	99.3	0.59	170.293		
300.0	300.0	300.0	300.0	0.5	0.5	-89.59	0.7	-99.9	99.9	98.9	0.94	106.751 CC, ES		
400.0	400.0	396.8	396.7	0.6	0.6	-89.88	0.2	-101.4	101.5	100.2	1.28	79.198		
500.0	500.0	493.3	493.2	0.8	0.8	-90.72	-1.3	-106.1	106.3	104.6	1.64	64.916		
600.0	600.0	589.4	588.9	1.0	1.0	-91.95	-3.9	-113.7	114.3	112.3	2.01	56.828		
700.0	700.0	684.9	683.7	1.2	1.3	-93.41	-7.4	-124.4	125.6	123.2	2.41	52.108		
800.0	800.0	779.5	777.3	1.3	1.6	-94.92	-11.9	-137.9	140.2	137.4	2.84	49.402		
900.0	900.0	873.1	869.2	1.5	1.9	-96.39	-17.3	-154.1	158.1	154.8	3.29	47.976		
1,000.0	1,000.0	965.4	959.4	1.7	2.3	-97.74	-23.5	-172.9	179.1	175.3	3.78	47.392 SF		
1,100.0	1,100.0	1,058.4	1,049.6	1.9	2.7	126.91	-30.6	-194.4	204.2	200.5	3.68	55.483		
1,200.0	1,199.8	1,154.4	1,142.6	2.0	3.1	126.46	-38.2	-217.2	231.9	227.9	4.03	57.588		
1,300.0	1,299.5	1,249.9	1,235.0	2.2	3.5	126.62	-45.7	-239.9	261.6	257.2	4.38	59.684		
1,400.0	1,398.8	1,344.7	1,326.8	2.5	4.0	127.39	-53.2	-262.4	293.1	288.3	4.76	61.575		
1,500.0	1,498.0	1,439.4	1,418.5	2.7	4.4	128.25	-60.6	-284.9	324.8	319.6	5.15	63.050		
1,600.0	1,597.3	1,534.2	1,510.2	2.9	4.9	128.95	-68.1	-307.4	356.6	351.0	5.55	64.243		
1,700.0	1,696.6	1,628.9	1,602.0	3.2	5.3	129.54	-75.6	-329.9	388.4	382.4	5.95	65.221		
1,800.0	1,795.9	1,723.6	1,693.7	3.4	5.8	130.05	-83.0	-352.4	420.2	413.9	6.36	66.033		
1,900.0	1,895.2	1,818.4	1,785.4	3.6	6.2	130.48	-90.5	-374.9	452.1	445.3	6.78	66.716		
2,000.0	1,994.4	1,913.1	1,877.1	3.9	6.7	130.85	-97.9	-397.4	484.0	476.8	7.19	67.295		
2,100.0	2,093.7	2,007.8	1,968.8	4.1	7.1	131.18	-105.4	-419.9	515.9	508.3	7.61	67.791		
2,200.0	2,193.0	2,102.6	2,060.6	4.4	7.6	131.47	-112.9	-442.4	547.8	539.8	8.03	68.220		
2,300.0	2,292.3	2,197.3	2,152.3	4.7	8.0	131.73	-120.3	-464.9	579.8	571.3	8.45	68.594		
2,400.0	2,391.6	2,292.0	2,244.0	4.9	8.5	131.96	-127.8	-487.4	611.7	602.8	8.88	68.922		
2,500.0	2,490.8	2,386.8	2,335.7	5.2	8.9	132.16	-135.2	-509.9	643.7	634.4	9.30	69.211		
2,600.0	2,590.1	2,481.5	2,427.4	5.4	9.4	132.35	-142.7	-532.4	675.6	665.9	9.73	69.469		
2,700.0	2,689.4	2,576.2	2,519.2	5.7	9.8	132.52	-150.2	-554.9	707.6	697.4	10.15	69.699		
2,800.0	2,788.7	2,671.0	2,610.9	6.0	10.3	132.68	-157.6	-577.4	739.6	729.0	10.58	69.905		
2,900.0	2,888.0	2,765.7	2,702.6	6.2	10.8	132.82	-165.1	-599.9	771.5	760.5	11.01	70.091		
3,000.0	2,987.2	2,860.4	2,794.3	6.5	11.2	132.96	-172.5	-622.4	803.5	792.1	11.44	70.260		
3,100.0	3,086.5	2,955.2	2,886.0	6.8	11.7	133.08	-180.0	-644.9	835.5	823.6	11.87	70.413		
3,200.0	3,185.8	3,049.9	2,977.7	7.0	12.1	133.19	-187.5	-667.4	867.5	855.2	12.30	70.553		
3,300.0	3,285.1	3,144.6	3,069.5	7.3	12.6	133.30	-194.9	-689.9	899.5	886.7	12.73	70.681		
3,400.0	3,384.4	3,239.4	3,161.2	7.6	13.0	133.39	-202.4	-712.4	931.4	918.3	13.16	70.799		
3,500.0	3,483.6	3,334.1	3,252.9	7.8	13.5	133.48	-209.9	-735.0	963.4	949.9	13.59	70.908		
3,600.0	3,582.9	3,428.8	3,344.6	8.1	13.9	133.57	-217.3	-757.5	995.4	981.4	14.02	71.008		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	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		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	-89.55	0.7	-89.8	89.8					
100.0	100.0	100.0	100.0	0.1	0.1	-89.55	0.7	-89.8	89.8	89.6	0.24	378.301		
200.0	200.0	200.0	200.0	0.3	0.3	-89.55	0.7	-89.8	89.8	89.2	0.59	153.122		
300.0	300.0	300.0	300.0	0.5	0.5	-89.55	0.7	-89.8	89.8	88.9	0.94	95.987		
400.0	400.0	400.0	400.0	0.6	0.6	-89.55	0.7	-89.8	89.8	88.5	1.28	69.903 CC, ES		
500.0	500.0	497.1	497.1	0.8	0.8	-89.92	0.1	-91.3	91.4	89.7	1.63	56.044		
600.0	600.0	594.0	593.9	1.0	1.0	-90.97	-1.6	-95.9	96.1	94.2	1.99	48.424		
700.0	700.0	690.5	690.0	1.2	1.2	-92.50	-4.5	-103.5	104.1	101.8	2.36	44.166		
800.0	800.0	786.3	785.1	1.3	1.4	-94.28	-8.5	-114.1	115.4	112.6	2.75	41.904		
900.0	900.0	881.2	879.0	1.5	1.7	-96.10	-13.6	-127.5	129.9	126.7	3.18	40.901		
1,000.0	1,000.0	975.1	971.3	1.7	2.0	-97.83	-19.8	-143.6	147.7	144.1	3.63	40.720 SF		
1,100.0	1,100.0	1,067.6	1,061.6	1.9	2.4	126.58	-26.8	-162.2	169.8	166.1	3.70	45.948		
1,200.0	1,199.8	1,163.7	1,155.0	2.0	2.8	126.01	-34.8	-183.1	195.7	191.7	4.05	48.378		
1,300.0	1,299.5	1,259.7	1,248.4	2.2	3.2	126.18	-42.8	-204.1	223.6	219.2	4.41	50.751		
1,400.0	1,398.8	1,355.1	1,341.1	2.5	3.6	127.01	-50.7	-224.9	253.3	248.5	4.79	52.913		
1,500.0	1,498.0	1,450.5	1,433.8	2.7	4.0	127.90	-58.6	-245.8	283.1	278.0	5.18	54.650		
1,600.0	1,597.3	1,545.8	1,526.6	2.9	4.4	128.62	-66.6	-266.6	313.1	307.5	5.58	56.076		
1,700.0	1,696.6	1,641.2	1,619.3	3.2	4.9	129.22	-74.5	-287.4	343.1	337.1	5.99	57.261		
1,800.0	1,795.9	1,736.5	1,712.0	3.4	5.3	129.72	-82.4	-308.2	373.1	366.7	6.40	58.258		
1,900.0	1,895.2	1,831.8	1,804.7	3.6	5.7	130.14	-90.3	-329.0	403.1	396.3	6.82	59.106		
2,000.0	1,994.4	1,927.2	1,897.4	3.9	6.1	130.51	-98.3	-349.9	433.1	425.9	7.24	59.834		
2,100.0	2,093.7	2,022.5	1,990.1	4.1	6.5	130.83	-106.2	-370.7	463.2	455.5	7.66	60.464		
2,200.0	2,193.0	2,117.9	2,082.8	4.4	7.0	131.11	-114.1	-391.5	493.3	485.2	8.08	61.014		
2,300.0	2,292.3	2,213.2	2,175.5	4.7	7.4	131.35	-122.0	-412.3	523.3	514.8	8.51	61.497		
2,400.0	2,391.6	2,308.6	2,268.2	4.9	7.8	131.58	-130.0	-433.1	553.4	544.5	8.94	61.925		
2,500.0	2,490.8	2,403.9	2,360.9	5.2	8.3	131.77	-137.9	-454.0	583.5	574.2	9.37	62.306		
2,600.0	2,590.1	2,499.3	2,453.6	5.4	8.7	131.95	-145.8	-474.8	613.6	603.8	9.80	62.647		
2,700.0	2,689.4	2,594.6	2,546.3	5.7	9.1	132.11	-153.7	-495.6	643.7	633.5	10.23	62.954		
2,800.0	2,788.7	2,690.0	2,639.0	6.0	9.5	132.26	-161.7	-516.4	673.8	663.2	10.66	63.231		
2,900.0	2,888.0	2,785.3	2,731.7	6.2	10.0	132.40	-169.6	-537.2	704.0	692.9	11.09	63.483		
3,000.0	2,987.2	2,880.7	2,824.4	6.5	10.4	132.52	-177.5	-558.1	734.1	722.5	11.52	63.713		
3,100.0	3,086.5	2,976.0	2,917.2	6.8	10.8	132.63	-185.4	-578.9	764.2	752.2	11.95	63.923		
3,200.0	3,185.8	3,071.3	3,009.9	7.0	11.3	132.74	-193.3	-599.7	794.3	781.9	12.39	64.116		
3,300.0	3,285.1	3,166.7	3,102.6	7.3	11.7	132.84	-201.3	-620.5	824.4	811.6	12.82	64.293		
3,400.0	3,384.4	3,262.0	3,195.3	7.6	12.1	132.93	-209.2	-641.3	854.6	841.3	13.26	64.457		
3,500.0	3,483.6	3,357.4	3,288.0	7.8	12.5	133.01	-217.1	-662.2	884.7	871.0	13.69	64.609		
3,600.0	3,582.9	3,452.7	3,380.7	8.1	13.0	133.09	-225.0	-683.0	914.8	900.7	14.13	64.751		
3,700.0	3,682.2	3,548.1	3,473.4	8.4	13.4	133.17	-233.0	-703.8	944.9	930.4	14.56	64.882		
3,800.0	3,781.5	3,643.4	3,566.1	8.6	13.8	133.23	-240.9	-724.6	975.1	960.1	15.00	65.005		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4D-26H-P268 - HZ - Plan #2													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	-89.50	0.7	-80.0	80.0					
100.0	100.0	100.0	100.0	0.1	0.1	-89.50	0.7	-80.0	80.0	79.8	0.24	337.055		
200.0	200.0	200.0	200.0	0.3	0.3	-89.50	0.7	-80.0	80.0	79.4	0.59	136.427		
300.0	300.0	300.0	300.0	0.5	0.5	-89.50	0.7	-80.0	80.0	79.1	0.94	85.522		
400.0	400.0	400.0	400.0	0.6	0.6	-89.50	0.7	-80.0	80.0	78.7	1.28	62.282		
500.0	500.0	500.0	500.0	0.8	0.8	-89.50	0.7	-80.0	80.0	78.4	1.63	48.974 CC, ES		
600.0	600.0	597.5	597.5	1.0	1.0	-89.97	0.0	-81.5	81.6	79.6	1.98	41.197		
700.0	700.0	694.7	694.6	1.2	1.2	-91.28	-1.9	-86.1	86.3	83.9	2.33	36.958		
800.0	800.0	791.5	791.0	1.3	1.4	-93.16	-5.2	-93.6	94.2	91.5	2.70	34.823		
900.0	900.0	887.7	886.5	1.5	1.6	-95.32	-9.7	-104.0	105.4	102.3	3.10	34.019 SF		
1,000.0	1,000.0	982.9	980.6	1.7	1.9	-97.48	-15.4	-117.3	119.9	116.3	3.52	34.086		
1,100.0	1,100.0	1,077.0	1,073.1	1.9	2.2	126.65	-22.3	-133.2	138.7	135.0	3.71	37.379		
1,200.0	1,199.8	1,173.0	1,167.0	2.0	2.5	125.95	-30.2	-151.5	161.9	157.8	4.06	39.855		
1,300.0	1,299.5	1,269.7	1,261.6	2.2	2.9	126.18	-38.2	-170.0	187.2	182.7	4.43	42.291		
1,400.0	1,398.8	1,365.9	1,355.7	2.5	3.3	127.13	-46.1	-188.4	214.2	209.4	4.81	44.547		
1,500.0	1,498.0	1,462.1	1,449.7	2.7	3.6	128.08	-54.1	-206.9	241.5	236.3	5.21	46.395		
1,600.0	1,597.3	1,558.2	1,543.7	2.9	4.0	128.85	-62.1	-225.3	268.9	263.2	5.61	47.927		
1,700.0	1,696.6	1,654.3	1,637.7	3.2	4.4	129.47	-70.0	-243.7	296.2	290.2	6.02	49.213		
1,800.0	1,795.9	1,750.5	1,731.7	3.4	4.8	129.98	-78.0	-262.2	323.7	317.2	6.43	50.303		
1,900.0	1,895.2	1,846.6	1,825.8	3.6	5.1	130.42	-85.9	-280.6	351.1	344.2	6.85	51.236		
2,000.0	1,994.4	1,942.7	1,919.8	3.9	5.5	130.79	-93.9	-299.0	378.5	371.3	7.27	52.043		
2,100.0	2,093.7	2,038.9	2,013.8	4.1	5.9	131.11	-101.9	-317.4	406.0	398.3	7.70	52.746		
2,200.0	2,193.0	2,135.0	2,107.8	4.4	6.3	131.39	-109.8	-335.9	433.5	425.3	8.12	53.363		
2,300.0	2,292.3	2,231.1	2,201.8	4.7	6.7	131.64	-117.8	-354.3	460.9	452.4	8.55	53.908		
2,400.0	2,391.6	2,327.3	2,295.8	4.9	7.1	131.86	-125.8	-372.7	488.4	479.5	8.98	54.393		
2,500.0	2,490.8	2,423.4	2,389.8	5.2	7.5	132.06	-133.7	-391.1	515.9	506.5	9.41	54.827		
2,600.0	2,590.1	2,519.5	2,483.8	5.4	7.9	132.24	-141.7	-409.6	543.4	533.6	9.84	55.217		
2,700.0	2,689.4	2,615.6	2,577.9	5.7	8.3	132.39	-149.6	-428.0	570.9	560.7	10.27	55.570		
2,800.0	2,788.7	2,711.8	2,671.9	6.0	8.6	132.54	-157.6	-446.4	598.4	587.7	10.71	55.890		
2,900.0	2,888.0	2,807.9	2,765.9	6.2	9.0	132.67	-165.6	-464.9	625.9	614.8	11.14	56.181		
3,000.0	2,987.2	2,904.0	2,859.9	6.5	9.4	132.79	-173.5	-483.3	653.5	641.9	11.58	56.448		
3,100.0	3,086.5	3,000.2	2,953.9	6.8	9.8	132.90	-181.5	-501.7	681.0	669.0	12.01	56.693		
3,200.0	3,185.8	3,096.3	3,047.9	7.0	10.2	133.01	-189.4	-520.1	708.5	696.0	12.45	56.918		
3,300.0	3,285.1	3,192.4	3,141.9	7.3	10.6	133.10	-197.4	-538.6	736.0	723.1	12.88	57.126		
3,400.0	3,384.4	3,288.6	3,236.0	7.6	11.0	133.19	-205.4	-557.0	763.5	750.2	13.32	57.319		
3,500.0	3,483.6	3,384.7	3,330.0	7.8	11.4	133.27	-213.3	-575.4	791.0	777.3	13.76	57.498		
3,600.0	3,582.9	3,480.8	3,424.0	8.1	11.8	133.35	-221.3	-593.8	818.6	804.4	14.20	57.665		
3,700.0	3,682.2	3,577.0	3,518.0	8.4	12.2	133.42	-229.2	-612.3	846.1	831.5	14.63	57.821		
3,800.0	3,781.5	3,673.1	3,612.0	8.6	12.6	133.49	-237.2	-630.7	873.6	858.5	15.07	57.966		
3,900.0	3,880.7	3,769.2	3,706.0	8.9	13.0	133.55	-245.2	-649.1	901.1	885.6	15.51	58.103		
4,000.0	3,980.0	3,865.4	3,800.0	9.2	13.3	133.61	-253.1	-667.6	928.7	912.7	15.95	58.231		
4,100.0	4,079.3	3,961.5	3,894.0	9.5	13.7	133.66	-261.1	-686.0	956.2	939.8	16.39	58.351		
4,200.0	4,178.6	4,057.6	3,988.1	9.7	14.1	133.72	-269.0	-704.4	983.7	966.9	16.83	58.465		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	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 Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.43	0.7	-69.9	69.9					
100.0	100.0	100.0	100.0	0.1	0.1	-89.43	0.7	-69.9	69.9	69.7	0.24	294.632		
200.0	200.0	200.0	200.0	0.3	0.3	-89.43	0.7	-69.9	69.9	69.3	0.59	119.256		
300.0	300.0	300.0	300.0	0.5	0.5	-89.43	0.7	-69.9	69.9	69.0	0.94	74.757		
400.0	400.0	400.0	400.0	0.6	0.6	-89.43	0.7	-69.9	69.9	68.7	1.28	54.443		
500.0	500.0	500.0	500.0	0.8	0.8	-89.43	0.7	-69.9	69.9	68.3	1.63	42.810		
600.0	600.0	600.0	600.0	1.0	1.0	-89.43	0.7	-69.9	69.9	68.0	1.98	35.273 CC, ES		
700.0	700.0	697.9	697.9	1.2	1.2	-90.09	-0.1	-71.4	71.4	69.1	2.33	30.663		
800.0	800.0	795.5	795.4	1.3	1.3	-91.91	-2.5	-75.8	76.0	73.3	2.68	28.301		
900.0	900.0	892.7	892.2	1.5	1.5	-94.49	-6.5	-83.0	83.6	80.6	3.05	27.389 SF		
1,000.0	1,000.0	989.3	988.1	1.7	1.8	-97.38	-12.0	-93.1	94.6	91.1	3.45	27.454		
1,100.0	1,100.0	1,084.8	1,082.5	1.9	2.0	126.14	-19.1	-105.8	109.9	106.2	3.72	29.525		
1,200.0	1,199.8	1,182.7	1,178.9	2.0	2.3	125.22	-27.1	-120.4	129.1	125.0	4.08	31.638		
1,300.0	1,299.5	1,280.4	1,275.2	2.2	2.6	125.52	-35.2	-135.0	150.3	145.8	4.45	33.771		
1,400.0	1,398.8	1,377.7	1,371.1	2.5	2.9	126.66	-43.2	-149.6	173.1	168.3	4.84	35.800		
1,500.0	1,498.0	1,474.9	1,466.9	2.7	3.2	127.74	-51.2	-164.1	196.3	191.1	5.24	37.485		
1,600.0	1,597.3	1,572.1	1,562.7	2.9	3.6	128.60	-59.2	-178.7	219.5	213.9	5.64	38.890		
1,700.0	1,696.6	1,669.3	1,658.4	3.2	3.9	129.29	-67.2	-193.2	242.8	236.7	6.06	40.074		
1,800.0	1,795.9	1,766.6	1,754.2	3.4	4.2	129.86	-75.2	-207.7	266.1	259.6	6.48	41.082		
1,900.0	1,895.2	1,863.8	1,850.0	3.6	4.5	130.33	-83.2	-222.3	289.4	282.5	6.90	41.949		
2,000.0	1,994.4	1,961.0	1,945.8	3.9	4.9	130.74	-91.2	-236.8	312.7	305.3	7.32	42.701		
2,100.0	2,093.7	2,058.2	2,041.6	4.1	5.2	131.09	-99.3	-251.4	336.0	328.2	7.75	43.359		
2,200.0	2,193.0	2,155.5	2,137.4	4.4	5.5	131.40	-107.3	-265.9	359.3	351.2	8.18	43.938		
2,300.0	2,292.3	2,252.7	2,233.2	4.7	5.9	131.66	-115.3	-280.4	382.7	374.1	8.61	44.452		
2,400.0	2,391.6	2,349.9	2,329.0	4.9	6.2	131.90	-123.3	-295.0	406.0	397.0	9.04	44.910		
2,500.0	2,490.8	2,447.1	2,424.8	5.2	6.5	132.11	-131.3	-309.5	429.4	419.9	9.47	45.320		
2,600.0	2,590.1	2,544.3	2,520.6	5.4	6.9	132.30	-139.3	-324.1	452.8	442.9	9.91	45.691		
2,700.0	2,689.4	2,641.6	2,616.4	5.7	7.2	132.47	-147.3	-338.6	476.1	465.8	10.34	46.026		
2,800.0	2,788.7	2,738.8	2,712.2	6.0	7.5	132.63	-155.3	-353.1	499.5	488.7	10.78	46.331		
2,900.0	2,888.0	2,836.0	2,808.0	6.2	7.9	132.77	-163.3	-367.7	522.9	511.7	11.22	46.610		
3,000.0	2,987.2	2,933.2	2,903.8	6.5	8.2	132.90	-171.4	-382.2	546.3	534.6	11.66	46.865		
3,100.0	3,086.5	3,030.4	2,999.6	6.8	8.5	133.01	-179.4	-396.8	569.6	557.6	12.09	47.100		
3,200.0	3,185.8	3,127.7	3,095.4	7.0	8.9	133.12	-187.4	-411.3	593.0	580.5	12.53	47.316		
3,300.0	3,285.1	3,224.9	3,191.1	7.3	9.2	133.22	-195.4	-425.8	616.4	603.4	12.97	47.517		
3,400.0	3,384.4	3,322.1	3,286.9	7.6	9.5	133.32	-203.4	-440.4	639.8	626.4	13.41	47.702		
3,500.0	3,483.6	3,419.3	3,382.7	7.8	9.9	133.40	-211.4	-454.9	663.2	649.3	13.85	47.875		
3,600.0	3,582.9	3,516.6	3,478.5	8.1	10.2	133.48	-219.4	-469.5	686.6	672.3	14.29	48.037		
3,700.0	3,682.2	3,613.8	3,574.3	8.4	10.5	133.56	-227.4	-484.0	710.0	695.2	14.73	48.187		
3,800.0	3,781.5	3,711.0	3,670.1	8.6	10.9	133.63	-235.4	-498.6	733.4	718.2	15.17	48.328		
3,900.0	3,880.7	3,808.2	3,765.9	8.9	11.2	133.70	-243.4	-513.1	756.8	741.1	15.62	48.461		
4,000.0	3,980.0	3,905.4	3,861.7	9.2	11.6	133.76	-251.5	-527.6	780.2	764.1	16.06	48.585		
4,100.0	4,079.3	4,002.7	3,957.5	9.5	11.9	133.82	-259.5	-542.2	803.6	787.1	16.50	48.702		
4,200.0	4,178.6	4,099.9	4,053.3	9.7	12.2	133.87	-267.5	-556.7	826.9	810.0	16.94	48.813		
4,300.0	4,277.9	4,197.1	4,149.1	10.0	12.6	133.93	-275.5	-571.3	850.3	833.0	17.38	48.917		
4,400.0	4,377.1	4,294.3	4,244.9	10.3	12.9	133.97	-283.5	-585.8	873.7	855.9	17.83	49.016		
4,500.0	4,476.4	4,391.5	4,340.7	10.5	13.2	134.02	-291.5	-600.3	897.1	878.9	18.27	49.109		
4,600.0	4,575.7	4,488.8	4,436.5	10.8	13.6	134.07	-299.5	-614.9	920.5	901.8	18.71	49.198		
4,700.0	4,675.0	4,586.0	4,532.3	11.1	13.9	134.11	-307.5	-629.4	943.9	924.8	19.15	49.283		
4,800.0	4,774.3	4,683.2	4,628.1	11.3	14.2	134.15	-315.5	-644.0	967.3	947.7	19.60	49.363		
4,900.0	4,873.5	4,780.4	4,723.8	11.6	14.6	134.19	-323.6	-658.5	990.7	970.7	20.04	49.440		

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 4L-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 4L-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 #2	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: 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)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.65	0.4	-59.9	59.9					
100.0	100.0	100.0	100.0	0.1	0.1	-89.65	0.4	-59.9	59.9	59.6	0.24	252.197		
200.0	200.0	200.0	200.0	0.3	0.3	-89.65	0.4	-59.9	59.9	59.3	0.59	102.080		
300.0	300.0	300.0	300.0	0.5	0.5	-89.65	0.4	-59.9	59.9	58.9	0.94	63.990		
400.0	400.0	400.0	400.0	0.6	0.6	-89.65	0.4	-59.9	59.9	58.6	1.28	46.602		
500.0	500.0	500.0	500.0	0.8	0.8	-89.65	0.4	-59.9	59.9	58.2	1.63	36.644		
600.0	600.0	600.0	600.0	1.0	1.0	-89.65	0.4	-59.9	59.9	57.9	1.98	30.193		
700.0	700.0	700.0	700.0	1.2	1.2	-89.65	0.4	-59.9	59.9	57.5	2.33	25.673	CC, ES	
800.0	800.0	798.2	798.2	1.3	1.3	-90.49	-0.5	-61.3	61.3	58.6	2.68	22.890		
900.0	900.0	896.2	896.1	1.5	1.5	-92.77	-3.2	-65.6	65.8	62.7	3.03	21.682		
1,000.0	1,000.0	993.8	993.2	1.7	1.7	-95.94	-7.6	-72.6	73.4	70.0	3.40	21.565	SF	
1,100.0	1,100.0	1,090.5	1,089.3	1.9	1.9	127.22	-13.6	-82.4	85.3	81.6	3.73	22.892		
1,200.0	1,199.8	1,186.5	1,184.2	2.0	2.2	125.94	-21.3	-94.9	102.4	98.3	4.08	25.103		
1,300.0	1,299.5	1,284.5	1,280.8	2.2	2.5	126.01	-29.8	-108.6	122.7	118.3	4.45	27.578		
1,400.0	1,398.8	1,381.9	1,376.9	2.5	2.8	127.11	-38.3	-122.2	144.8	140.0	4.84	29.926		
1,500.0	1,498.0	1,479.4	1,473.1	2.7	3.1	128.12	-46.8	-135.9	167.1	161.9	5.24	31.893		
1,600.0	1,597.3	1,576.8	1,569.2	2.9	3.4	128.90	-55.2	-149.5	189.4	183.8	5.65	33.542		
1,700.0	1,696.6	1,674.3	1,665.3	3.2	3.7	129.51	-63.7	-163.1	211.8	205.8	6.06	34.937		
1,800.0	1,795.9	1,771.7	1,761.4	3.4	4.0	130.01	-72.1	-176.8	234.2	227.7	6.48	36.130		
1,900.0	1,895.2	1,869.2	1,857.5	3.6	4.3	130.42	-80.6	-190.4	256.6	249.7	6.91	37.159		
2,000.0	1,994.4	1,966.6	1,953.6	3.9	4.6	130.76	-89.0	-204.0	279.0	271.7	7.33	38.053		
2,100.0	2,093.7	2,064.1	2,049.7	4.1	4.9	131.05	-97.5	-217.7	301.4	293.7	7.76	38.837		
2,200.0	2,193.0	2,161.5	2,145.9	4.4	5.2	131.31	-105.9	-231.3	323.9	315.7	8.19	39.529		
2,300.0	2,292.3	2,258.9	2,242.0	4.7	5.6	131.52	-114.4	-245.0	346.3	337.7	8.63	40.143		
2,400.0	2,391.6	2,356.4	2,338.1	4.9	5.9	131.72	-122.9	-258.6	368.7	359.7	9.06	40.692		
2,500.0	2,490.8	2,453.8	2,434.2	5.2	6.2	131.89	-131.3	-272.2	391.2	381.7	9.50	41.184		
2,600.0	2,590.1	2,551.3	2,530.3	5.4	6.5	132.04	-139.8	-285.9	413.6	403.7	9.94	41.629		
2,700.0	2,689.4	2,648.7	2,626.4	5.7	6.8	132.18	-148.2	-299.5	436.1	425.7	10.37	42.032		
2,800.0	2,788.7	2,746.2	2,722.5	6.0	7.2	132.30	-156.7	-313.1	458.5	447.7	10.81	42.399		
2,900.0	2,888.0	2,843.6	2,818.6	6.2	7.5	132.41	-165.1	-326.8	481.0	469.7	11.25	42.734		
3,000.0	2,987.2	2,941.0	2,914.8	6.5	7.8	132.51	-173.6	-340.4	503.4	491.7	11.70	43.042		
3,100.0	3,086.5	3,038.5	3,010.9	6.8	8.1	132.60	-182.1	-354.1	525.9	513.7	12.14	43.325		
3,200.0	3,185.8	3,135.9	3,107.0	7.0	8.5	132.69	-190.5	-367.7	548.3	535.7	12.58	43.586		
3,300.0	3,285.1	3,233.4	3,203.1	7.3	8.8	132.77	-199.0	-381.3	570.8	557.7	13.02	43.828		
3,400.0	3,384.4	3,330.8	3,299.2	7.6	9.1	132.84	-207.4	-395.0	593.2	579.8	13.47	44.053		
3,500.0	3,483.6	3,428.3	3,395.3	7.8	9.5	132.91	-215.9	-408.6	615.7	601.8	13.91	44.262		
3,600.0	3,582.9	3,525.7	3,491.4	8.1	9.8	132.97	-224.3	-422.2	638.1	623.8	14.35	44.457		
3,700.0	3,682.2	3,623.2	3,587.6	8.4	10.1	133.03	-232.8	-435.9	660.6	645.8	14.80	44.639		
3,800.0	3,781.5	3,720.6	3,683.7	8.6	10.4	133.08	-241.2	-449.5	683.0	667.8	15.24	44.810		
3,900.0	3,880.7	3,818.0	3,779.8	8.9	10.8	133.14	-249.7	-463.2	705.5	689.8	15.69	44.970		
4,000.0	3,980.0	3,915.5	3,875.9	9.2	11.1	133.18	-258.2	-476.8	728.0	711.8	16.13	45.121		
4,100.0	4,079.3	4,012.9	3,972.0	9.5	11.4	133.23	-266.6	-490.4	750.4	733.8	16.58	45.263		
4,200.0	4,178.6	4,110.4	4,068.1	9.7	11.7	133.27	-275.1	-504.1	772.9	755.9	17.03	45.397		
4,300.0	4,277.9	4,207.8	4,164.2	10.0	12.1	133.31	-283.5	-517.7	795.3	777.9	17.47	45.523		
4,400.0	4,377.1	4,305.3	4,260.3	10.3	12.4	133.35	-292.0	-531.3	817.8	799.9	17.92	45.643		
4,500.0	4,476.4	4,402.7	4,356.5	10.5	12.7	133.38	-300.4	-545.0	840.3	821.9	18.36	45.757		
4,600.0	4,575.7	4,500.1	4,452.6	10.8	13.1	133.42	-308.9	-558.6	862.7	843.9	18.81	45.864		
4,700.0	4,675.0	4,597.6	4,548.7	11.1	13.4	133.45	-317.3	-572.3	885.2	865.9	19.26	45.967		
4,800.0	4,774.3	4,695.0	4,644.8	11.3	13.7	133.48	-325.8	-585.9	907.6	887.9	19.70	46.064		
4,900.0	4,873.5	4,792.5	4,740.9	11.6	14.0	133.51	-334.3	-599.5	930.1	910.0	20.15	46.157		
5,000.0	4,972.8	4,889.9	4,837.0	11.9	14.4	133.54	-342.7	-613.2	952.6	932.0	20.60	46.246		
5,100.0	5,072.1	4,987.4	4,933.1	12.2	14.7	133.56	-351.2	-626.8	975.0	954.0	21.05	46.330		

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 4L-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 4L-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 #2	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	5,171.4	5,084.8	5,029.3	12.4	15.0	133.59	-359.6	-640.4	997.5	976.0	21.49	46.411	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	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				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.59	0.4	-49.8	49.8					
100.0	100.0	100.0	100.0	0.1	0.1	-89.59	0.4	-49.8	49.8	49.6	0.24	209.773		
200.0	200.0	200.0	200.0	0.3	0.3	-89.59	0.4	-49.8	49.8	49.2	0.59	84.908		
300.0	300.0	300.0	300.0	0.5	0.5	-89.59	0.4	-49.8	49.8	48.9	0.94	53.226		
400.0	400.0	400.0	400.0	0.6	0.6	-89.59	0.4	-49.8	49.8	48.5	1.28	38.762		
500.0	500.0	500.0	500.0	0.8	0.8	-89.59	0.4	-49.8	49.8	48.2	1.63	30.480		
600.0	600.0	600.0	600.0	1.0	1.0	-89.59	0.4	-49.8	49.8	47.8	1.98	25.114		
700.0	700.0	700.0	700.0	1.2	1.2	-89.59	0.4	-49.8	49.8	47.5	2.33	21.354		
800.0	800.0	800.0	800.0	1.3	1.3	-89.59	0.4	-49.8	49.8	47.1	2.68	18.574 CC, ES		
900.0	900.0	898.7	898.7	1.5	1.5	-90.87	-0.8	-51.1	51.1	48.1	3.03	16.866		
1,000.0	1,000.0	997.1	997.0	1.7	1.7	-94.33	-4.2	-54.9	55.1	51.7	3.38	16.284 SF		
1,100.0	1,100.0	1,095.1	1,094.6	1.9	1.9	127.95	-9.7	-61.1	63.2	59.5	3.73	16.944		
1,200.0	1,199.8	1,192.6	1,191.3	2.0	2.1	125.89	-17.5	-69.8	76.4	72.3	4.09	18.675		
1,300.0	1,299.5	1,291.2	1,289.2	2.2	2.3	125.71	-26.1	-79.5	92.6	88.1	4.46	20.744		
1,400.0	1,398.8	1,389.6	1,386.7	2.5	2.6	126.91	-34.6	-89.1	110.5	105.7	4.85	22.770		
1,500.0	1,498.0	1,487.9	1,484.1	2.7	2.8	127.98	-43.2	-98.8	128.7	123.5	5.26	24.482		
1,600.0	1,597.3	1,586.2	1,581.6	2.9	3.1	128.79	-51.8	-108.4	147.0	141.3	5.67	25.919		
1,700.0	1,696.6	1,684.5	1,679.0	3.2	3.4	129.42	-60.3	-118.0	165.2	159.1	6.09	27.138		
1,800.0	1,795.9	1,782.8	1,776.5	3.4	3.6	129.92	-68.9	-127.6	183.5	177.0	6.51	28.182		
1,900.0	1,895.2	1,881.1	1,873.9	3.6	3.9	130.34	-77.5	-137.3	201.7	194.8	6.94	29.083		
2,000.0	1,994.4	1,979.4	1,971.4	3.9	4.2	130.68	-86.0	-146.9	220.0	212.7	7.37	29.868		
2,100.0	2,093.7	2,077.7	2,068.9	4.1	4.4	130.97	-94.6	-156.5	238.3	230.5	7.80	30.556		
2,200.0	2,193.0	2,176.0	2,166.3	4.4	4.7	131.22	-103.2	-166.2	256.6	248.4	8.23	31.164		
2,300.0	2,292.3	2,274.3	2,263.8	4.7	5.0	131.44	-111.8	-175.8	274.9	266.2	8.67	31.705		
2,400.0	2,391.6	2,372.6	2,361.2	4.9	5.2	131.63	-120.3	-185.4	293.2	284.1	9.11	32.188		
2,500.0	2,490.8	2,470.9	2,458.7	5.2	5.5	131.80	-128.9	-195.1	311.5	302.0	9.55	32.622		
2,600.0	2,590.1	2,569.3	2,556.1	5.4	5.8	131.95	-137.5	-204.7	329.8	319.8	9.99	33.014		
2,700.0	2,689.4	2,667.6	2,653.6	5.7	6.1	132.08	-146.0	-214.3	348.1	337.7	10.43	33.370		
2,800.0	2,788.7	2,765.9	2,751.1	6.0	6.4	132.20	-154.6	-223.9	366.5	355.6	10.88	33.694		
2,900.0	2,888.0	2,864.2	2,848.5	6.2	6.6	132.31	-163.2	-233.6	384.8	373.4	11.32	33.991		
3,000.0	2,987.2	2,962.5	2,946.0	6.5	6.9	132.41	-171.7	-243.2	403.1	391.3	11.76	34.263		
3,100.0	3,086.5	3,060.8	3,043.4	6.8	7.2	132.50	-180.3	-252.8	421.4	409.2	12.21	34.513		
3,200.0	3,185.8	3,159.1	3,140.9	7.0	7.5	132.58	-188.9	-262.5	439.7	427.1	12.66	34.745		
3,300.0	3,285.1	3,257.4	3,238.3	7.3	7.7	132.65	-197.4	-272.1	458.0	444.9	13.10	34.959		
3,400.0	3,384.4	3,355.7	3,335.8	7.6	8.0	132.72	-206.0	-281.7	476.3	462.8	13.55	35.158		
3,500.0	3,483.6	3,454.0	3,433.3	7.8	8.3	132.79	-214.6	-291.4	494.7	480.7	14.00	35.343		
3,600.0	3,582.9	3,552.3	3,530.7	8.1	8.6	132.85	-223.1	-301.0	513.0	498.5	14.44	35.516		
3,700.0	3,682.2	3,650.6	3,628.2	8.4	8.9	132.91	-231.7	-310.6	531.3	516.4	14.89	35.678		
3,800.0	3,781.5	3,748.9	3,725.6	8.6	9.2	132.96	-240.3	-320.2	549.6	534.3	15.34	35.829		
3,900.0	3,880.7	3,847.2	3,823.1	8.9	9.4	133.01	-248.8	-329.9	567.9	552.2	15.79	35.971		
4,000.0	3,980.0	3,945.5	3,920.5	9.2	9.7	133.05	-257.4	-339.5	586.3	570.0	16.24	36.105		
4,100.0	4,079.3	4,043.8	4,018.0	9.5	10.0	133.10	-266.0	-349.1	604.6	587.9	16.69	36.231		
4,200.0	4,178.6	4,142.2	4,115.5	9.7	10.3	133.14	-274.6	-358.8	622.9	605.8	17.14	36.350		
4,300.0	4,277.9	4,240.5	4,212.9	10.0	10.6	133.18	-283.1	-368.4	641.2	623.6	17.59	36.463		
4,400.0	4,377.1	4,338.8	4,310.4	10.3	10.8	133.21	-291.7	-378.0	659.6	641.5	18.04	36.570		
4,500.0	4,476.4	4,437.1	4,407.8	10.5	11.1	133.25	-300.3	-387.7	677.9	659.4	18.49	36.671		
4,600.0	4,575.7	4,535.4	4,505.3	10.8	11.4	133.28	-308.8	-397.3	696.2	677.3	18.94	36.767		
4,700.0	4,675.0	4,633.7	4,602.8	11.1	11.7	133.31	-317.4	-406.9	714.5	695.1	19.39	36.858		
4,800.0	4,774.3	4,732.0	4,700.2	11.3	12.0	133.34	-326.0	-416.5	732.8	713.0	19.84	36.945		
4,900.0	4,873.5	4,830.3	4,797.7	11.6	12.3	133.37	-334.5	-426.2	751.2	730.9	20.29	37.027		
5,000.0	4,972.8	4,928.6	4,895.1	11.9	12.5	133.39	-343.1	-435.8	769.5	748.8	20.74	37.106		
5,100.0	5,072.1	5,026.9	4,992.6	12.2	12.8	133.42	-351.7	-445.4	787.8	766.6	21.19	37.182		

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 4L-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 4L-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 #2	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							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)						
5,200.0	5,171.4	5,125.2	5,090.0	12.4	13.1	133.44	-360.2	-455.1	806.1	784.5	21.64	37.254				
5,300.0	5,270.7	5,223.5	5,187.5	12.7	13.4	133.46	-368.8	-464.7	824.5	802.4	22.09	37.322				
5,400.0	5,369.9	5,321.8	5,285.0	13.0	13.7	133.49	-377.4	-474.3	842.8	820.2	22.54	37.388				
5,500.0	5,469.2	5,420.1	5,382.4	13.2	13.9	133.51	-385.9	-484.0	861.1	838.1	22.99	37.452				
5,600.0	5,568.5	5,518.4	5,479.9	13.5	14.2	133.53	-394.5	-493.6	879.4	856.0	23.44	37.512				
5,700.0	5,667.8	5,616.7	5,577.3	13.8	14.5	133.55	-403.1	-503.2	897.8	873.9	23.90	37.571				
5,800.0	5,767.1	5,715.1	5,674.8	14.1	14.8	133.57	-411.6	-512.8	916.1	891.7	24.35	37.627				
5,900.0	5,866.3	5,813.4	5,772.2	14.3	15.1	133.58	-420.2	-522.5	934.4	909.6	24.80	37.681				
6,000.0	5,965.6	5,911.7	5,869.7	14.6	15.4	133.60	-428.8	-532.1	952.7	927.5	25.25	37.732				
6,100.0	6,064.9	6,010.0	5,967.2	14.9	15.6	133.62	-437.4	-541.7	971.1	945.4	25.70	37.782				
6,200.0	6,164.2	6,108.3	6,064.6	15.1	15.9	133.63	-445.9	-551.4	989.4	963.2	26.15	37.830				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	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	-89.50	0.3	-40.0	40.0					
100.0	100.0	101.0	101.0	0.1	0.1	-89.50	0.3	-40.0	40.0	39.8	0.24	167.297		
200.0	200.0	201.0	201.0	0.3	0.3	-89.50	0.3	-40.0	40.0	39.4	0.59	68.011		
300.0	300.0	301.0	301.0	0.5	0.5	-89.50	0.3	-40.0	40.0	39.1	0.94	42.681		
400.0	400.0	401.0	401.0	0.6	0.6	-89.50	0.3	-40.0	40.0	38.7	1.29	31.099		
500.0	500.0	501.0	501.0	0.8	0.8	-89.50	0.3	-40.0	40.0	38.4	1.64	24.461		
600.0	600.0	601.0	601.0	1.0	1.0	-89.50	0.3	-40.0	40.0	38.0	1.98	20.158		
700.0	700.0	701.0	701.0	1.2	1.2	-89.50	0.3	-40.0	40.0	37.7	2.33	17.143		
800.0	800.0	801.0	801.0	1.3	1.3	-89.50	0.3	-40.0	40.0	37.3	2.68	14.912		
866.3	866.3	867.3	867.3	1.5	1.5	-89.50	0.3	-40.0	40.0	37.1	2.91	13.727 CC		
900.0	900.0	901.0	901.0	1.5	1.5	-89.50	0.3	-40.0	40.0	37.0	3.03	13.195		
1,000.0	1,000.0	1,000.7	1,000.7	1.7	1.7	-91.98	-1.4	-40.3	40.3	37.0	3.38	11.930 ES		
1,100.0	1,100.0	1,100.0	1,099.8	1.9	1.9	129.01	-6.3	-41.5	43.1	39.3	3.73	11.537		
1,200.0	1,199.8	1,198.0	1,197.5	2.0	2.1	126.24	-13.2	-45.3	51.1	47.0	4.09	12.475		
1,300.0	1,299.5	1,296.5	1,295.4	2.2	2.3	125.80	-21.5	-51.4	63.8	59.3	4.47	14.271		
1,400.0	1,398.8	1,395.4	1,393.8	2.5	2.5	127.22	-30.0	-57.8	78.5	73.6	4.86	16.147		
1,500.0	1,498.0	1,494.2	1,492.1	2.7	2.7	128.43	-38.5	-64.3	93.4	88.1	5.26	17.748		
1,600.0	1,597.3	1,593.1	1,590.3	2.9	2.9	129.31	-47.0	-70.7	108.4	102.7	5.67	19.100		
1,700.0	1,696.6	1,691.9	1,688.6	3.2	3.2	129.97	-55.5	-77.1	123.4	117.3	6.09	20.251		
1,800.0	1,795.9	1,790.8	1,786.9	3.4	3.4	130.49	-64.0	-83.5	138.4	131.9	6.52	21.240		
1,900.0	1,895.2	1,889.7	1,885.2	3.6	3.6	130.91	-72.5	-89.9	153.4	146.5	6.94	22.097		
2,000.0	1,994.4	1,988.5	1,983.5	3.9	3.9	131.25	-81.0	-96.3	168.4	161.0	7.37	22.845		
2,100.0	2,093.7	2,087.4	2,081.8	4.1	4.1	131.54	-89.5	-102.7	183.4	175.6	7.81	23.503		
2,200.0	2,193.0	2,186.2	2,180.1	4.4	4.3	131.78	-98.0	-109.1	198.5	190.2	8.24	24.085		
2,300.0	2,292.3	2,285.1	2,278.3	4.7	4.6	131.99	-106.5	-115.6	213.5	204.8	8.68	24.604		
2,400.0	2,391.6	2,384.0	2,376.6	4.9	4.8	132.17	-115.0	-122.0	228.5	219.4	9.12	25.068		
2,500.0	2,490.8	2,482.8	2,474.9	5.2	5.1	132.33	-123.5	-128.4	243.6	234.0	9.56	25.486		
2,600.0	2,590.1	2,581.7	2,573.2	5.4	5.3	132.47	-132.0	-134.8	258.6	248.6	10.00	25.865		
2,700.0	2,689.4	2,680.5	2,671.5	5.7	5.6	132.60	-140.5	-141.2	273.7	263.2	10.44	26.208		
2,800.0	2,788.7	2,779.4	2,769.8	6.0	5.8	132.71	-149.0	-147.6	288.7	277.8	10.89	26.522		
2,900.0	2,888.0	2,878.3	2,868.1	6.2	6.1	132.81	-157.5	-154.0	303.8	292.4	11.33	26.809		
3,000.0	2,987.2	2,977.1	2,966.3	6.5	6.3	132.90	-166.0	-160.5	318.8	307.0	11.78	27.072		
3,100.0	3,086.5	3,076.0	3,064.6	6.8	6.6	132.99	-174.5	-166.9	333.8	321.6	12.22	27.315		
3,200.0	3,185.8	3,174.9	3,162.9	7.0	6.8	133.06	-183.0	-173.3	348.9	336.2	12.67	27.540		
3,300.0	3,285.1	3,273.7	3,261.2	7.3	7.1	133.13	-191.5	-179.7	363.9	350.8	13.12	27.748		
3,400.0	3,384.4	3,372.6	3,359.5	7.6	7.3	133.20	-200.0	-186.1	379.0	365.4	13.56	27.942		
3,500.0	3,483.6	3,471.4	3,457.8	7.8	7.6	133.26	-208.5	-192.5	394.0	380.0	14.01	28.122		
3,600.0	3,582.9	3,570.3	3,556.1	8.1	7.8	133.31	-217.0	-198.9	409.1	394.6	14.46	28.290		
3,700.0	3,682.2	3,669.2	3,654.3	8.4	8.1	133.36	-225.5	-205.4	424.1	409.2	14.91	28.448		
3,800.0	3,781.5	3,768.0	3,752.6	8.6	8.3	133.41	-234.0	-211.8	439.2	423.8	15.36	28.596		
3,900.0	3,880.7	3,866.9	3,850.9	8.9	8.6	133.46	-242.5	-218.2	454.2	438.4	15.81	28.734		
4,000.0	3,980.0	3,965.7	3,949.2	9.2	8.8	133.50	-251.0	-224.6	469.3	453.0	16.26	28.865		
4,100.0	4,079.3	4,064.6	4,047.5	9.5	9.1	133.54	-259.5	-231.0	484.3	467.6	16.71	28.988		
4,200.0	4,178.6	4,163.5	4,145.8	9.7	9.3	133.57	-268.0	-237.4	499.4	482.2	17.16	29.105		
4,300.0	4,277.9	4,262.3	4,244.1	10.0	9.6	133.61	-276.5	-243.8	514.4	496.8	17.61	29.215		
4,400.0	4,377.1	4,361.2	4,342.3	10.3	9.8	133.64	-285.0	-250.3	529.5	511.4	18.06	29.319		
4,500.0	4,476.4	4,460.0	4,440.6	10.5	10.1	133.67	-293.5	-256.7	544.5	526.0	18.51	29.418		
4,600.0	4,575.7	4,558.9	4,538.9	10.8	10.3	133.70	-302.0	-263.1	559.6	540.6	18.96	29.512		
4,700.0	4,675.0	4,657.8	4,637.2	11.1	10.6	133.73	-310.5	-269.5	574.6	555.2	19.41	29.601		
4,800.0	4,774.3	4,756.6	4,735.5	11.3	10.8	133.75	-319.0	-275.9	589.7	569.8	19.86	29.686		
4,900.0	4,873.5	4,855.5	4,833.8	11.6	11.1	133.78	-327.5	-282.3	604.7	584.4	20.31	29.767		
5,000.0	4,972.8	4,954.3	4,932.0	11.9	11.3	133.80	-336.0	-288.7	619.8	599.0	20.77	29.845		

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 4L-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 4L-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 #2	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							
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
5,100.0	5,072.1	5,053.2	5,030.3	12.2	11.6	133.83	-344.5	-295.1	634.8	613.6	21.22	29.919	
5,200.0	5,171.4	5,152.1	5,128.6	12.4	11.8	133.85	-353.0	-301.6	649.9	628.2	21.67	29.989	
5,300.0	5,270.7	5,250.9	5,226.9	12.7	12.1	133.87	-361.5	-308.0	664.9	642.8	22.12	30.057	
5,400.0	5,369.9	5,349.8	5,325.2	13.0	12.3	133.89	-370.0	-314.4	680.0	657.4	22.57	30.122	
5,500.0	5,469.2	5,448.7	5,423.5	13.2	12.6	133.91	-378.5	-320.8	695.0	672.0	23.03	30.184	
5,600.0	5,568.5	5,547.5	5,521.8	13.5	12.8	133.92	-387.0	-327.2	710.1	686.6	23.48	30.244	
5,700.0	5,667.8	5,646.4	5,620.0	13.8	13.1	133.94	-395.5	-333.6	725.1	701.2	23.93	30.301	
5,800.0	5,767.1	5,745.2	5,718.3	14.1	13.4	133.96	-404.0	-340.0	740.2	715.8	24.38	30.356	
5,900.0	5,866.3	5,844.1	5,816.6	14.3	13.6	133.97	-412.5	-346.5	755.2	730.4	24.83	30.409	
6,000.0	5,965.6	5,943.0	5,914.9	14.6	13.9	133.99	-421.0	-352.9	770.3	745.0	25.29	30.460	
6,100.0	6,064.9	6,041.8	6,013.2	14.9	14.1	134.00	-429.5	-359.3	785.3	759.6	25.74	30.509	
6,200.0	6,164.2	6,140.7	6,111.5	15.1	14.4	134.02	-438.0	-365.7	800.4	774.2	26.19	30.556	
6,300.0	6,263.4	6,239.5	6,209.8	15.4	14.6	134.03	-446.5	-372.1	815.4	788.8	26.65	30.602	
6,400.0	6,362.7	6,338.4	6,308.0	15.7	14.9	134.04	-455.0	-378.5	830.5	803.4	27.10	30.646	
6,500.0	6,462.0	6,437.3	6,406.3	16.0	15.1	134.06	-463.5	-384.9	845.5	818.0	27.55	30.689	
6,600.0	6,561.3	6,536.1	6,504.6	16.2	15.4	134.07	-472.0	-391.4	860.6	832.6	28.00	30.730	
6,700.0	6,660.6	6,635.0	6,602.9	16.5	15.6	134.08	-480.5	-397.8	875.6	847.2	28.46	30.770	
6,800.0	6,759.8	6,733.8	6,701.2	16.8	15.9	134.09	-489.0	-404.2	890.7	861.7	28.91	30.808	
6,900.0	6,859.3	6,832.5	6,799.3	17.0	16.1	-153.05	-497.5	-410.6	905.8	876.5	29.27	30.946	
7,000.0	6,958.0	6,928.9	6,895.1	17.0	16.4	-111.59	-505.8	-416.8	921.3	891.8	29.46	31.274	
7,100.0	7,052.9	7,020.1	6,985.8	17.0	16.6	-103.13	-513.6	-422.8	937.8	908.3	29.49	31.800	
7,200.0	7,141.1	7,121.9	7,087.2	16.8	16.8	-100.78	-517.0	-429.4	956.0	926.7	29.32	32.605	
7,300.0	7,220.0	7,242.0	7,205.4	16.6	16.8	-100.43	-498.4	-437.1	974.8	945.9	28.86	33.775	
7,400.0	7,287.2	7,381.1	7,333.9	16.4	16.5	-100.98	-446.7	-445.5	992.7	964.6	28.12	35.298	
9,400.0	7,405.0	9,662.6	7,630.0	35.7	35.6	-102.96	1,724.9	-464.8	999.0	931.1	67.89	14.715	
9,500.0	7,405.0	9,762.6	7,630.0	37.3	37.2	-102.98	1,824.9	-464.8	997.6	926.6	71.04	14.042	
9,600.0	7,405.0	9,862.6	7,630.0	38.9	38.8	-102.99	1,924.9	-464.8	996.3	922.1	74.22	13.423	
9,700.0	7,405.0	9,962.6	7,630.0	40.5	40.4	-103.01	2,024.9	-464.8	994.9	917.5	77.42	12.851	
9,800.0	7,405.0	10,062.5	7,630.0	42.1	42.0	-103.03	2,124.9	-464.8	993.6	912.9	80.64	12.321	
9,900.0	7,405.0	10,162.5	7,630.0	43.7	43.7	-103.05	2,224.9	-464.8	992.2	908.3	83.87	11.830	
10,000.0	7,405.0	10,262.5	7,630.0	45.4	45.3	-103.07	2,324.9	-464.8	990.8	903.7	87.11	11.374	
10,100.0	7,405.0	10,362.5	7,630.0	47.0	47.0	-103.09	2,424.9	-464.8	989.5	899.1	90.37	10.949	
10,200.0	7,405.0	10,462.5	7,630.0	48.7	48.6	-103.10	2,524.9	-464.8	988.1	894.5	93.64	10.553	
10,300.0	7,405.0	10,562.5	7,630.0	50.3	50.3	-103.12	2,624.8	-464.8	986.8	889.9	96.91	10.182	
10,400.0	7,405.0	10,662.5	7,630.0	52.0	52.0	-103.14	2,724.8	-464.8	985.4	885.2	100.20	9.835	
10,500.0	7,405.0	10,762.5	7,630.0	53.6	53.6	-103.16	2,824.8	-464.8	984.0	880.6	103.49	9.509	
10,600.0	7,405.0	10,862.5	7,630.0	55.3	55.3	-103.18	2,924.8	-464.8	982.7	875.9	106.79	9.202	
10,700.0	7,405.0	10,962.5	7,630.0	57.0	57.0	-103.20	3,024.8	-464.8	981.3	871.2	110.09	8.914	
10,800.0	7,405.0	11,062.4	7,630.0	58.7	58.7	-103.21	3,124.8	-464.8	980.0	866.6	113.41	8.641	
10,900.0	7,405.0	11,162.4	7,630.0	60.4	60.4	-103.23	3,224.8	-464.8	978.6	861.9	116.72	8.384	
11,000.0	7,405.0	11,262.4	7,630.0	62.1	62.1	-103.25	3,324.8	-464.8	977.2	857.2	120.04	8.141	
11,100.0	7,405.0	11,362.4	7,630.0	63.8	63.8	-103.27	3,424.8	-464.8	975.9	852.5	123.37	7.910	
11,200.0	7,405.0	11,462.4	7,630.0	65.5	65.5	-103.29	3,524.8	-464.8	974.5	847.8	126.70	7.692	
11,300.0	7,405.0	11,562.4	7,630.0	67.2	67.2	-103.31	3,624.8	-464.8	973.2	843.1	130.03	7.484	
11,400.0	7,405.0	11,662.4	7,630.0	68.9	68.9	-103.33	3,724.7	-464.8	971.8	838.4	133.36	7.287	
11,500.0	7,405.0	11,762.4	7,630.0	70.6	70.6	-103.35	3,824.7	-464.8	970.5	833.7	136.70	7.099	
11,600.0	7,405.0	11,862.4	7,630.0	72.3	72.3	-103.37	3,924.7	-464.8	969.1	829.0	140.04	6.920	
11,700.0	7,405.0	11,962.4	7,630.0	74.0	74.0	-103.38	4,024.7	-464.8	967.7	824.3	143.39	6.749	
11,800.0	7,405.0	12,062.4	7,630.0	75.7	75.7	-103.40	4,124.7	-464.8	966.4	819.6	146.73	6.586	
11,900.0	7,405.0	12,162.3	7,630.0	77.4	77.5	-103.42	4,224.7	-464.8	965.0	814.9	150.08	6.430	
12,000.0	7,405.0	12,262.3	7,630.0	79.1	79.2	-103.44	4,324.7	-464.8	963.7	810.2	153.43	6.281	
12,100.0	7,405.0	12,362.3	7,630.0	80.8	80.9	-103.46	4,424.7	-464.8	962.3	805.5	156.78	6.138	

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 4L-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 4L-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 #2	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		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)					
12,200.0	7,405.0	12,462.3	7,630.0	82.6	82.6	-103.48	4,524.7	-464.8	960.9	800.8	160.13	6.001	
12,300.0	7,405.0	12,562.3	7,630.0	84.3	84.3	-103.50	4,624.7	-464.8	959.6	796.1	163.49	5.870	
12,400.0	7,405.0	12,662.3	7,630.0	86.0	86.1	-103.52	4,724.6	-464.8	958.2	791.4	166.84	5.743	
12,500.0	7,405.0	12,762.3	7,630.0	87.7	87.8	-103.54	4,824.6	-464.8	956.9	786.7	170.20	5.622	
12,600.0	7,405.0	12,862.3	7,630.0	89.5	89.5	-103.56	4,924.6	-464.8	955.5	782.0	173.55	5.506	
12,700.0	7,405.0	12,962.3	7,630.0	91.2	91.2	-103.58	5,024.6	-464.8	954.2	777.2	176.91	5.393	
12,800.0	7,405.0	13,062.3	7,630.0	92.9	93.0	-103.60	5,124.6	-464.8	952.8	772.5	180.27	5.285	
12,900.0	7,405.0	13,162.2	7,630.0	94.6	94.7	-103.62	5,224.6	-464.8	951.4	767.8	183.63	5.181	
13,000.0	7,405.0	13,262.2	7,630.0	96.4	96.4	-103.64	5,324.6	-464.8	950.1	763.1	186.99	5.081	
13,100.0	7,405.0	13,362.2	7,630.0	98.1	98.2	-103.66	5,424.6	-464.8	948.7	758.4	190.35	4.984	
13,200.0	7,405.0	13,462.2	7,630.0	99.8	99.9	-103.68	5,524.6	-464.8	947.4	753.7	193.72	4.890	
13,300.0	7,405.0	13,562.2	7,630.0	101.6	101.6	-103.70	5,624.6	-464.8	946.0	748.9	197.08	4.800	
13,400.0	7,405.0	13,662.2	7,630.0	103.3	103.4	-103.72	5,724.5	-464.8	944.7	744.2	200.44	4.713	
13,500.0	7,405.0	13,762.2	7,630.0	105.0	105.1	-103.74	5,824.5	-464.8	943.3	739.5	203.80	4.628	
13,600.0	7,405.0	13,862.2	7,630.0	106.8	106.8	-103.76	5,924.5	-464.8	941.9	734.8	207.17	4.547	
13,700.0	7,405.0	13,962.2	7,630.0	108.5	108.6	-103.78	6,024.5	-464.8	940.6	730.1	210.53	4.468	
13,800.0	7,405.0	14,062.2	7,630.0	110.2	110.3	-103.80	6,124.5	-464.8	939.2	725.3	213.90	4.391	
13,900.0	7,405.0	14,162.1	7,630.0	112.0	112.0	-103.82	6,224.5	-464.8	937.9	720.6	217.26	4.317	
14,000.0	7,405.0	14,262.1	7,630.0	113.7	113.8	-103.84	6,324.5	-464.8	936.5	715.9	220.62	4.245	
14,100.0	7,405.0	14,362.1	7,630.0	115.4	115.5	-103.86	6,424.5	-464.8	935.2	711.2	223.99	4.175	
14,200.0	7,405.0	14,462.1	7,630.0	117.2	117.2	-103.88	6,524.5	-464.8	933.8	706.5	227.35	4.107	
14,300.0	7,405.0	14,562.1	7,630.0	118.9	119.0	-103.90	6,624.5	-464.8	932.5	701.7	230.72	4.042	
14,400.0	7,405.0	14,662.1	7,630.0	120.6	120.7	-103.92	6,724.4	-464.8	931.1	697.0	234.08	3.978	
14,500.0	7,405.0	14,762.1	7,630.0	122.4	122.5	-103.94	6,824.4	-464.8	929.7	692.3	237.45	3.916	
14,594.7	7,405.0	14,856.8	7,630.0	124.0	124.1	-103.96	6,919.1	-464.8	928.5	687.8	240.63	3.858 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	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				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	-89.35	0.3	-29.9	29.9					
100.0	100.0	101.0	101.0	0.1	0.1	-89.35	0.3	-29.9	29.9	29.7	0.24	125.184		
200.0	200.0	201.0	201.0	0.3	0.3	-89.35	0.3	-29.9	29.9	29.3	0.59	50.891		
300.0	300.0	301.0	301.0	0.5	0.5	-89.35	0.3	-29.9	29.9	29.0	0.94	31.937		
400.0	400.0	401.0	401.0	0.6	0.6	-89.35	0.3	-29.9	29.9	28.6	1.29	23.270		
500.0	500.0	501.0	501.0	0.8	0.8	-89.35	0.3	-29.9	29.9	28.3	1.64	18.303		
600.0	600.0	601.0	601.0	1.0	1.0	-89.35	0.3	-29.9	29.9	27.9	1.98	15.084		
700.0	700.0	701.0	701.0	1.2	1.2	-89.35	0.3	-29.9	29.9	27.6	2.33	12.827		
800.0	800.0	801.0	801.0	1.3	1.3	-89.35	0.3	-29.9	29.9	27.3	2.68	11.158		
900.0	900.0	901.0	901.0	1.5	1.5	-89.35	0.3	-29.9	29.9	26.9	3.03	9.873		
966.3	966.3	967.3	967.3	1.6	1.6	-89.35	0.3	-29.9	29.9	26.7	3.26	9.173	CC	
1,000.0	1,000.0	1,001.0	1,001.0	1.7	1.7	-89.35	0.3	-29.9	29.9	26.6	3.38	8.854	ES	
1,100.0	1,100.0	1,100.5	1,100.5	1.9	1.9	135.83	-1.2	-30.7	32.0	28.3	3.73	8.582		
1,200.0	1,199.8	1,200.0	1,199.8	2.0	2.0	134.26	-5.8	-33.2	38.2	34.1	4.08	9.354		
1,300.0	1,299.5	1,298.4	1,297.9	2.2	2.2	132.54	-13.4	-37.1	48.5	44.1	4.45	10.897		
1,400.0	1,398.8	1,397.6	1,396.5	2.5	2.4	132.25	-22.4	-41.9	61.7	56.8	4.84	12.734		
1,500.0	1,498.0	1,496.7	1,495.1	2.7	2.7	132.31	-31.4	-46.6	75.0	69.8	5.24	14.303		
1,600.0	1,597.3	1,595.8	1,593.7	2.9	2.9	132.35	-40.4	-51.3	88.4	82.7	5.66	15.624		
1,700.0	1,696.6	1,694.9	1,692.3	3.2	3.1	132.38	-49.4	-56.0	101.7	95.6	6.07	16.745		
1,800.0	1,795.9	1,794.0	1,790.8	3.4	3.3	132.40	-58.4	-60.7	115.1	108.6	6.50	17.705		
1,900.0	1,895.2	1,893.1	1,889.4	3.6	3.5	132.42	-67.4	-65.4	128.4	121.5	6.93	18.535		
2,000.0	1,994.4	1,992.2	1,988.0	3.9	3.8	132.43	-76.4	-70.1	141.8	134.4	7.36	19.257		
2,100.0	2,093.7	2,091.3	2,086.6	4.1	4.0	132.45	-85.4	-74.9	155.1	147.3	7.80	19.891		
2,200.0	2,193.0	2,190.4	2,185.2	4.4	4.2	132.46	-94.4	-79.6	168.5	160.3	8.24	20.450		
2,300.0	2,292.3	2,289.5	2,283.8	4.7	4.5	132.46	-103.5	-84.3	181.8	173.2	8.68	20.947		
2,400.0	2,391.6	2,388.6	2,382.3	4.9	4.7	132.47	-112.5	-89.0	195.2	186.1	9.13	21.391		
2,500.0	2,490.8	2,487.7	2,480.9	5.2	5.0	132.48	-121.5	-93.7	208.6	199.0	9.57	21.790		
2,600.0	2,590.1	2,586.8	2,579.5	5.4	5.2	132.48	-130.5	-98.4	221.9	211.9	10.02	22.150		
2,700.0	2,689.4	2,685.9	2,678.1	5.7	5.4	132.49	-139.5	-103.1	235.3	224.8	10.47	22.476		
2,800.0	2,788.7	2,785.0	2,776.7	6.0	5.7	132.49	-148.5	-107.9	248.6	237.7	10.92	22.774		
2,900.0	2,888.0	2,884.1	2,875.2	6.2	5.9	132.50	-157.5	-112.6	262.0	250.6	11.37	23.045		
3,000.0	2,987.2	2,983.3	2,973.8	6.5	6.2	132.50	-166.5	-117.3	275.3	263.5	11.82	23.294		
3,100.0	3,086.5	3,082.4	3,072.4	6.8	6.4	132.51	-175.5	-122.0	288.7	276.4	12.27	23.524		
3,200.0	3,185.8	3,181.5	3,171.0	7.0	6.6	132.51	-184.5	-126.7	302.0	289.3	12.73	23.735		
3,300.0	3,285.1	3,280.6	3,269.6	7.3	6.9	132.51	-193.5	-131.4	315.4	302.2	13.18	23.931		
3,400.0	3,384.4	3,379.7	3,368.2	7.6	7.1	132.51	-202.5	-136.2	328.7	315.1	13.63	24.113		
3,500.0	3,483.6	3,478.8	3,466.7	7.8	7.4	132.52	-211.5	-140.9	342.1	328.0	14.09	24.282		
3,600.0	3,582.9	3,577.9	3,565.3	8.1	7.6	132.52	-220.5	-145.6	355.4	340.9	14.54	24.440		
3,700.0	3,682.2	3,677.0	3,663.9	8.4	7.9	132.52	-229.5	-150.3	368.8	353.8	15.00	24.587		
3,800.0	3,781.5	3,776.1	3,762.5	8.6	8.1	132.52	-238.5	-155.0	382.2	366.7	15.46	24.726		
3,900.0	3,880.7	3,875.2	3,861.1	8.9	8.4	132.52	-247.5	-159.7	395.5	379.6	15.91	24.855		
4,000.0	3,980.0	3,974.3	3,959.6	9.2	8.6	132.53	-256.5	-164.4	408.9	392.5	16.37	24.977		
4,100.0	4,079.3	4,073.4	4,058.2	9.5	8.8	132.53	-265.5	-169.2	422.2	405.4	16.83	25.092		
4,200.0	4,178.6	4,172.5	4,156.8	9.7	9.1	132.53	-274.5	-173.9	435.6	418.3	17.28	25.201		
4,300.0	4,277.9	4,271.6	4,255.4	10.0	9.3	132.53	-283.5	-178.6	448.9	431.2	17.74	25.303		
4,400.0	4,377.1	4,370.7	4,354.0	10.3	9.6	132.53	-292.5	-183.3	462.3	444.1	18.20	25.400		
4,500.0	4,476.4	4,469.8	4,452.6	10.5	9.8	132.53	-301.5	-188.0	475.6	457.0	18.66	25.492		
4,600.0	4,575.7	4,568.9	4,551.1	10.8	10.1	132.53	-310.5	-192.7	489.0	469.9	19.12	25.579		
4,700.0	4,675.0	4,668.0	4,649.7	11.1	10.3	132.53	-319.5	-197.5	502.3	482.8	19.58	25.662		
4,800.0	4,774.3	4,767.1	4,748.3	11.3	10.6	132.54	-328.5	-202.2	515.7	495.7	20.03	25.741		
4,900.0	4,873.5	4,866.2	4,846.9	11.6	10.8	132.54	-337.5	-206.9	529.1	508.6	20.49	25.816		
5,000.0	4,972.8	4,965.3	4,945.5	11.9	11.1	132.54	-346.5	-211.6	542.4	521.5	20.95	25.888		

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 4L-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 4L-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 #2	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			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		
5,100.0	5,072.1	5,064.4	5,044.0	12.2	11.3	132.54	-355.5	-216.3	555.8	534.3	21.41	25.956		
5,200.0	5,171.4	5,163.5	5,142.6	12.4	11.5	132.54	-364.5	-221.0	569.1	547.2	21.87	26.022		
5,300.0	5,270.7	5,262.7	5,241.2	12.7	11.8	132.54	-373.5	-225.7	582.5	560.1	22.33	26.084		
5,400.0	5,369.9	5,361.8	5,339.8	13.0	12.0	132.54	-382.6	-230.5	595.8	573.0	22.79	26.144		
5,500.0	5,469.2	5,460.9	5,438.4	13.2	12.3	132.54	-391.6	-235.2	609.2	585.9	23.25	26.201		
5,600.0	5,568.5	5,560.0	5,537.0	13.5	12.5	132.54	-400.6	-239.9	622.5	598.8	23.71	26.256		
5,700.0	5,667.8	5,659.1	5,635.5	13.8	12.8	132.54	-409.6	-244.6	635.9	611.7	24.17	26.309		
5,800.0	5,767.1	5,758.2	5,734.1	14.1	13.0	132.54	-418.6	-249.3	649.2	624.6	24.63	26.360		
5,900.0	5,866.3	5,857.3	5,832.7	14.3	13.3	132.54	-427.6	-254.0	662.6	637.5	25.09	26.409		
6,000.0	5,965.6	5,956.4	5,931.3	14.6	13.5	132.55	-436.6	-258.7	675.9	650.4	25.55	26.456		
6,100.0	6,064.9	6,055.5	6,029.9	14.9	13.8	132.55	-445.6	-263.5	689.3	663.3	26.01	26.501		
6,200.0	6,164.2	6,154.6	6,128.4	15.1	14.0	132.55	-454.6	-268.2	702.7	676.2	26.47	26.545		
6,300.0	6,263.4	6,253.7	6,227.0	15.4	14.3	132.55	-463.6	-272.9	716.0	689.1	26.93	26.587		
6,400.0	6,362.7	6,352.8	6,325.6	15.7	14.5	132.55	-472.6	-277.6	729.4	702.0	27.39	26.627		
6,500.0	6,462.0	6,451.9	6,424.2	16.0	14.8	132.55	-481.6	-282.3	742.7	714.9	27.85	26.666		
6,600.0	6,561.3	6,551.0	6,522.8	16.2	15.0	132.55	-490.6	-287.0	756.1	727.8	28.31	26.704		
6,700.0	6,660.6	6,650.1	6,621.4	16.5	15.2	132.55	-499.6	-291.8	769.4	740.7	28.77	26.741		
6,800.0	6,759.8	6,749.2	6,719.9	16.8	15.5	132.55	-508.6	-296.5	782.8	753.5	29.23	26.776		
6,900.0	6,859.3	6,852.0	6,822.3	17.0	15.7	-154.69	-516.4	-301.3	796.3	766.7	29.56	26.934		
7,000.0	6,958.0	6,961.7	6,931.4	17.0	15.8	-112.56	-507.8	-306.3	809.3	779.8	29.51	27.421		
7,100.0	7,052.9	7,072.7	7,038.1	17.0	15.6	-102.67	-478.2	-311.0	821.3	792.2	29.13	28.191		
7,200.0	7,141.1	7,184.6	7,137.8	16.8	15.3	-98.16	-428.1	-315.0	831.9	803.4	28.51	29.177		
7,300.0	7,220.0	7,296.9	7,226.3	16.6	14.9	-95.40	-359.2	-318.3	840.7	812.9	27.77	30.268		
7,400.0	7,287.2	7,409.1	7,299.6	16.4	14.6	-93.45	-274.6	-320.7	847.4	820.3	27.09	31.286		
7,500.0	7,340.6	7,520.6	7,354.8	16.2	14.3	-92.00	-177.9	-322.1	852.0	825.3	26.62	32.001		
7,600.0	7,378.7	7,631.0	7,390.0	16.2	14.2	-90.91	-73.5	-322.5	854.1	827.6	26.53	32.196		
7,700.0	7,400.2	7,739.6	7,404.5	16.3	14.4	-90.13	34.0	-321.8	854.0	827.1	26.89	31.757		
7,800.0	7,405.0	7,841.1	7,405.0	16.7	14.8	-89.93	135.5	-320.6	851.8	824.1	27.71	30.743		
7,900.0	7,405.0	7,941.1	7,405.0	17.1	15.4	-89.93	235.5	-319.4	849.2	820.3	28.90	29.379		
8,000.0	7,405.0	8,041.1	7,405.0	17.8	16.1	-89.93	335.4	-318.2	846.6	816.1	30.46	27.792		
8,100.0	7,405.0	8,141.0	7,405.0	18.6	17.0	-89.93	435.4	-316.9	843.9	811.6	32.32	26.109		
8,200.0	7,405.0	8,241.0	7,405.0	19.5	18.0	-89.93	535.3	-315.7	841.3	806.9	34.44	24.425		
8,300.0	7,405.0	8,341.0	7,405.0	20.5	19.2	-89.93	635.3	-314.5	838.7	801.9	36.78	22.804		
8,400.0	7,405.0	8,440.9	7,405.0	21.6	20.4	-89.93	735.2	-313.3	836.1	796.8	39.29	21.282		
8,500.0	7,405.0	8,540.9	7,405.0	22.8	21.7	-89.93	835.2	-312.1	833.5	791.5	41.94	19.873		
8,600.0	7,405.0	8,640.9	7,405.0	24.1	23.0	-89.93	935.2	-310.8	830.8	786.1	44.71	18.583		
8,700.0	7,405.0	8,740.8	7,405.0	25.4	24.4	-89.93	1,035.1	-309.6	828.2	780.6	47.58	17.408		
8,800.0	7,405.0	8,840.8	7,405.0	26.8	25.8	-89.93	1,135.1	-308.4	825.6	775.1	50.53	16.340		
8,900.0	7,405.0	8,940.8	7,405.0	28.2	27.3	-89.93	1,235.0	-307.2	823.0	769.4	53.54	15.371		
9,000.0	7,405.0	9,040.7	7,405.0	29.7	28.8	-89.93	1,335.0	-305.9	820.4	763.8	56.61	14.490		
9,100.0	7,405.0	9,140.7	7,405.0	31.1	30.4	-89.93	1,435.0	-304.7	817.8	758.0	59.74	13.690		
9,200.0	7,405.0	9,240.7	7,405.0	32.6	31.9	-89.93	1,534.9	-303.5	815.1	752.2	62.90	12.960		
9,300.0	7,405.0	9,340.6	7,405.0	34.2	33.5	-89.93	1,634.9	-302.3	812.5	746.4	66.09	12.294		
9,400.0	7,405.0	9,440.6	7,405.0	35.7	35.1	-89.93	1,734.8	-301.1	809.9	740.6	69.32	11.684		
9,500.0	7,405.0	9,540.6	7,405.0	37.3	36.7	-89.93	1,834.8	-299.8	807.3	734.7	72.57	11.124		
9,600.0	7,405.0	9,640.5	7,405.0	38.9	38.3	-89.93	1,934.7	-298.6	804.7	728.8	75.85	10.609		
9,700.0	7,405.0	9,740.5	7,405.0	40.5	40.0	-89.93	2,034.7	-297.4	802.0	722.9	79.14	10.134		
9,800.0	7,405.0	9,840.5	7,405.0	42.1	41.6	-89.93	2,134.7	-296.2	799.4	717.0	82.46	9.695		
9,900.0	7,405.0	9,940.4	7,405.0	43.7	43.3	-89.93	2,234.6	-295.0	796.8	711.0	85.78	9.289		
10,000.0	7,405.0	10,040.4	7,405.0	45.4	44.9	-89.93	2,334.6	-293.7	794.2	705.1	89.13	8.911		
10,100.0	7,405.0	10,140.3	7,405.0	47.0	46.6	-89.93	2,434.5	-292.5	791.6	699.1	92.48	8.560		
10,200.0	7,405.0	10,240.3	7,405.0	48.7	48.3	-89.93	2,534.5	-291.3	789.0	693.1	95.84	8.232		

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 4L-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 4L-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 #2	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		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
10,300.0	7,405.0	10,340.3	7,405.0	50.3	49.9	-89.93	2,634.5	-290.1	786.3	687.1	99.22	7.925	
10,400.0	7,405.0	10,440.2	7,405.0	52.0	51.6	-89.93	2,734.4	-288.8	783.7	681.1	102.60	7.638	
10,500.0	7,405.0	10,540.2	7,405.0	53.6	53.3	-89.93	2,834.4	-287.6	781.1	675.1	106.00	7.369	
10,600.0	7,405.0	10,640.2	7,405.0	55.3	55.0	-89.93	2,934.3	-286.4	778.5	669.1	109.39	7.116	
10,700.0	7,405.0	10,740.1	7,405.0	57.0	56.7	-89.93	3,034.3	-285.2	775.9	663.1	112.80	6.878	
10,800.0	7,405.0	10,840.1	7,405.0	58.7	58.4	-89.93	3,134.2	-284.0	773.3	657.0	116.21	6.654	
10,900.0	7,405.0	10,940.1	7,405.0	60.4	60.1	-89.93	3,234.2	-282.7	770.6	651.0	119.63	6.442	
11,000.0	7,405.0	11,040.0	7,405.0	62.1	61.8	-89.93	3,334.2	-281.5	768.0	645.0	123.05	6.241	
11,100.0	7,405.0	11,140.0	7,405.0	63.8	63.5	-89.93	3,434.1	-280.3	765.4	638.9	126.48	6.052	
11,200.0	7,405.0	11,240.0	7,405.0	65.5	65.2	-89.92	3,534.1	-279.1	762.8	632.9	129.91	5.872	
11,300.0	7,405.0	11,339.9	7,405.0	67.2	66.9	-89.92	3,634.0	-277.9	760.2	626.8	133.34	5.701	
11,400.0	7,405.0	11,439.9	7,405.0	68.9	68.6	-89.92	3,734.0	-276.6	757.5	620.8	136.78	5.538	
11,500.0	7,405.0	11,539.9	7,405.0	70.6	70.4	-89.92	3,834.0	-275.4	754.9	614.7	140.23	5.384	
11,600.0	7,405.0	11,639.8	7,405.0	72.3	72.1	-89.92	3,933.9	-274.2	752.3	608.6	143.67	5.236	
11,700.0	7,405.0	11,739.8	7,405.0	74.0	73.8	-89.92	4,033.9	-273.0	749.7	602.6	147.12	5.096	
11,800.0	7,405.0	11,839.8	7,405.0	75.7	75.5	-89.92	4,133.8	-271.7	747.1	596.5	150.57	4.962	
11,900.0	7,405.0	11,939.7	7,405.0	77.4	77.2	-89.92	4,233.8	-270.5	744.5	590.4	154.02	4.833	
12,000.0	7,405.0	12,039.7	7,405.0	79.1	79.0	-89.92	4,333.7	-269.3	741.8	584.4	157.48	4.711	
12,100.0	7,405.0	12,139.7	7,405.0	80.8	80.7	-89.92	4,433.7	-268.1	739.2	578.3	160.94	4.593	
12,200.0	7,405.0	12,239.6	7,405.0	82.6	82.4	-89.92	4,533.7	-266.9	736.6	572.2	164.40	4.481	
12,300.0	7,405.0	12,339.6	7,405.0	84.3	84.1	-89.92	4,633.6	-265.6	734.0	566.1	167.86	4.373	
12,400.0	7,405.0	12,439.6	7,405.0	86.0	85.9	-89.92	4,733.6	-264.4	731.4	560.0	171.32	4.269	
12,500.0	7,405.0	12,539.5	7,405.0	87.7	87.6	-89.92	4,833.5	-263.2	728.8	554.0	174.79	4.169	
12,600.0	7,405.0	12,639.5	7,405.0	89.5	89.3	-89.92	4,933.5	-262.0	726.1	547.9	178.26	4.074	
12,700.0	7,405.0	12,739.5	7,405.0	91.2	91.1	-89.92	5,033.5	-260.8	723.5	541.8	181.73	3.981	
12,800.0	7,405.0	12,839.4	7,405.0	92.9	92.8	-89.92	5,133.4	-259.5	720.9	535.7	185.20	3.893	
12,900.0	7,405.0	12,939.4	7,405.0	94.6	94.5	-89.92	5,233.4	-258.3	718.3	529.6	188.67	3.807	
13,000.0	7,405.0	13,039.4	7,405.0	96.4	96.3	-89.92	5,333.3	-257.1	715.7	523.5	192.14	3.725	
13,100.0	7,405.0	13,139.3	7,405.0	98.1	98.0	-89.92	5,433.3	-255.9	713.0	517.4	195.62	3.645	
13,200.0	7,405.0	13,239.3	7,405.0	99.8	99.7	-89.92	5,533.2	-254.6	710.4	511.3	199.09	3.568	
13,300.0	7,405.0	13,339.3	7,405.0	101.6	101.5	-89.92	5,633.2	-253.4	707.8	505.2	202.57	3.494	
13,400.0	7,405.0	13,439.2	7,405.0	103.3	103.2	-89.92	5,733.2	-252.2	705.2	499.1	206.04	3.423	
13,500.0	7,405.0	13,539.2	7,405.0	105.0	104.9	-89.92	5,833.1	-251.0	702.6	493.0	209.52	3.353	
13,600.0	7,405.0	13,639.2	7,405.0	106.8	106.7	-89.92	5,933.1	-249.8	700.0	487.0	213.00	3.286	
13,700.0	7,405.0	13,739.1	7,405.0	108.5	108.4	-89.92	6,033.0	-248.5	697.3	480.9	216.48	3.221	
13,800.0	7,405.0	13,839.1	7,405.0	110.2	110.2	-89.92	6,133.0	-247.3	694.7	474.8	219.96	3.158	
13,900.0	7,405.0	13,939.0	7,405.0	112.0	111.9	-89.92	6,233.0	-246.1	692.1	468.7	223.45	3.097	
14,000.0	7,405.0	14,039.0	7,405.0	113.7	113.6	-89.92	6,332.9	-244.9	689.5	462.6	226.93	3.038	
14,100.0	7,405.0	14,139.0	7,405.0	115.4	115.4	-89.92	6,432.9	-243.7	686.9	456.5	230.41	2.981	
14,200.0	7,405.0	14,238.9	7,405.0	117.2	117.1	-89.92	6,532.8	-242.4	684.2	450.4	233.90	2.925	
14,300.0	7,405.0	14,337.4	7,405.0	118.9	118.8	-89.92	6,631.3	-241.2	681.6	444.3	237.36	2.872	
14,316.3	7,405.0	14,337.4	7,405.0	119.2	118.8	-89.92	6,631.3	-241.2	681.4	443.8	237.64	2.868 SF	
14,400.0	7,405.0	14,337.4	7,405.0	120.6	118.8	-89.92	6,631.3	-241.2	686.6	447.5	239.10	2.871	
14,500.0	7,405.0	14,337.4	7,405.0	122.4	118.8	-89.92	6,631.3	-241.2	705.8	464.9	240.84	2.930	
14,594.7	7,405.0	14,337.4	7,405.0	124.0	118.8	-89.92	6,631.3	-241.2	736.1	493.6	242.49	3.036	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	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: 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)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.05	0.3	-19.9	19.9					
100.0	100.0	100.0	100.0	0.1	0.1	-89.05	0.3	-19.9	19.9	19.6	0.24	83.683		
200.0	200.0	200.0	200.0	0.3	0.3	-89.05	0.3	-19.9	19.9	19.3	0.59	33.872		
300.0	300.0	300.0	300.0	0.5	0.5	-89.05	0.3	-19.9	19.9	18.9	0.94	21.233		
400.0	400.0	400.0	400.0	0.6	0.6	-89.05	0.3	-19.9	19.9	18.6	1.28	15.463		
500.0	500.0	500.0	500.0	0.8	0.8	-89.05	0.3	-19.9	19.9	18.2	1.63	12.159		
600.0	600.0	600.0	600.0	1.0	1.0	-89.05	0.3	-19.9	19.9	17.9	1.98	10.018		
700.0	700.0	700.0	700.0	1.2	1.2	-89.05	0.3	-19.9	19.9	17.5	2.33	8.519		
800.0	800.0	800.0	800.0	1.3	1.3	-89.05	0.3	-19.9	19.9	17.2	2.68	7.409		
900.0	900.0	900.0	900.0	1.5	1.5	-89.05	0.3	-19.9	19.9	16.8	3.03	6.556		
1,000.0	1,000.0	1,000.0	1,000.0	1.7	1.7	-89.05	0.3	-19.9	19.9	16.5	3.38	5.879	CC, ES	
1,100.0	1,100.0	1,100.0	1,100.0	1.9	1.9	140.05	0.3	-19.9	21.2	17.4	3.73	5.679		
1,200.0	1,199.8	1,200.1	1,200.1	2.0	2.0	143.87	-1.4	-19.6	24.8	20.7	4.08	6.086		
1,300.0	1,299.5	1,300.3	1,300.1	2.2	2.2	144.11	-6.6	-18.6	30.2	25.8	4.43	6.819		
1,400.0	1,398.8	1,400.3	1,399.7	2.5	2.4	142.13	-14.9	-17.2	37.0	32.2	4.81	7.697		
1,500.0	1,498.0	1,500.0	1,499.1	2.7	2.6	140.15	-24.0	-15.6	44.0	38.7	5.21	8.439		
1,600.0	1,597.3	1,599.8	1,598.4	2.9	2.8	138.71	-33.1	-14.0	50.9	45.3	5.62	9.063		
1,700.0	1,696.6	1,699.5	1,697.7	3.2	3.0	137.61	-42.2	-12.4	57.9	51.8	6.03	9.592		
1,800.0	1,795.9	1,799.3	1,797.0	3.4	3.2	136.75	-51.3	-10.8	64.9	58.4	6.46	10.043		
1,900.0	1,895.2	1,899.0	1,896.4	3.6	3.5	136.06	-60.4	-9.2	71.9	65.0	6.89	10.431		
2,000.0	1,994.4	1,998.8	1,995.7	3.9	3.7	135.49	-69.4	-7.6	78.9	71.5	7.33	10.766		
2,100.0	2,093.7	2,098.5	2,095.0	4.1	3.9	135.02	-78.5	-6.0	85.9	78.1	7.77	11.058		
2,200.0	2,193.0	2,198.3	2,194.3	4.4	4.1	134.61	-87.6	-4.4	92.9	84.7	8.21	11.314		
2,300.0	2,292.3	2,298.0	2,293.7	4.7	4.3	134.27	-96.7	-2.8	99.9	91.3	8.66	11.541		
2,400.0	2,391.6	2,397.8	2,393.0	4.9	4.6	133.96	-105.8	-1.2	106.9	97.8	9.11	11.741		
2,500.0	2,490.8	2,497.5	2,492.3	5.2	4.8	133.70	-114.9	0.4	114.0	104.4	9.56	11.921		
2,600.0	2,590.1	2,597.3	2,591.6	5.4	5.0	133.47	-124.0	2.0	121.0	111.0	10.02	12.082		
2,700.0	2,689.4	2,697.0	2,690.9	5.7	5.3	133.26	-133.0	3.6	128.0	117.6	10.47	12.227		
2,800.0	2,788.7	2,796.8	2,790.3	6.0	5.5	133.07	-142.1	5.2	135.1	124.1	10.93	12.358		
2,900.0	2,888.0	2,896.5	2,889.6	6.2	5.7	132.90	-151.2	6.8	142.1	130.7	11.39	12.478		
3,000.0	2,987.2	2,996.3	2,988.9	6.5	5.9	132.75	-160.3	8.4	149.1	137.3	11.85	12.587		
3,100.0	3,086.5	3,096.0	3,088.2	6.8	6.2	132.61	-169.4	10.0	156.2	143.9	12.31	12.686		
3,200.0	3,185.8	3,195.8	3,187.6	7.0	6.4	132.49	-178.5	11.6	163.2	150.5	12.77	12.778		
3,300.0	3,285.1	3,295.5	3,286.9	7.3	6.6	132.37	-187.5	13.2	170.3	157.0	13.24	12.863		
3,400.0	3,384.4	3,395.3	3,386.2	7.6	6.9	132.26	-196.6	14.7	177.3	163.6	13.70	12.941		
3,500.0	3,483.6	3,495.0	3,485.5	7.8	7.1	132.16	-205.7	16.3	184.3	170.2	14.17	13.013		
3,600.0	3,582.9	3,594.8	3,584.9	8.1	7.3	132.07	-214.8	17.9	191.4	176.8	14.63	13.081		
3,700.0	3,682.2	3,694.5	3,684.2	8.4	7.6	131.99	-223.9	19.5	198.4	183.3	15.10	13.144		
3,800.0	3,781.5	3,794.3	3,783.5	8.6	7.8	131.91	-233.0	21.1	205.5	189.9	15.56	13.202		
3,900.0	3,880.7	3,894.0	3,882.8	8.9	8.0	131.84	-242.0	22.7	212.5	196.5	16.03	13.257		
4,000.0	3,980.0	3,993.8	3,982.2	9.2	8.3	131.77	-251.1	24.3	219.6	203.1	16.50	13.308		
4,100.0	4,079.3	4,093.6	4,081.5	9.5	8.5	131.70	-260.2	25.9	226.6	209.6	16.96	13.357		
4,200.0	4,178.6	4,193.3	4,180.8	9.7	8.7	131.64	-269.3	27.5	233.6	216.2	17.43	13.402		
4,300.0	4,277.9	4,293.1	4,280.1	10.0	9.0	131.58	-278.4	29.1	240.7	222.8	17.90	13.445		
4,400.0	4,377.1	4,392.8	4,379.5	10.3	9.2	131.53	-287.5	30.7	247.7	229.4	18.37	13.485		
4,500.0	4,476.4	4,492.6	4,478.8	10.5	9.4	131.48	-296.6	32.3	254.8	235.9	18.84	13.524		
4,600.0	4,575.7	4,592.3	4,578.1	10.8	9.7	131.43	-305.6	33.9	261.8	242.5	19.31	13.560		
4,700.0	4,675.0	4,692.1	4,677.4	11.1	9.9	131.38	-314.7	35.5	268.9	249.1	19.78	13.594		
4,800.0	4,774.3	4,791.8	4,776.8	11.3	10.1	131.34	-323.8	37.1	275.9	255.7	20.25	13.627		
4,900.0	4,873.5	4,891.6	4,876.1	11.6	10.4	131.30	-332.9	38.7	282.9	262.2	20.72	13.658		
5,000.0	4,972.8	4,991.3	4,975.4	11.9	10.6	131.26	-342.0	40.3	290.0	268.8	21.19	13.687		
5,100.0	5,072.1	5,091.1	5,074.7	12.2	10.8	131.22	-351.1	41.9	297.0	275.4	21.66	13.715		

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 4L-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 4L-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 #2	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
5,200.0	5,171.4	5,190.8	5,174.0	12.4	11.1	131.19	-360.1	43.5	304.1	282.0	22.13	13.742	
5,300.0	5,270.7	5,290.6	5,273.4	12.7	11.3	131.15	-369.2	45.1	311.1	288.5	22.60	13.768	
5,400.0	5,369.9	5,390.3	5,372.7	13.0	11.6	131.12	-378.3	46.7	318.2	295.1	23.07	13.792	
5,500.0	5,469.2	5,490.1	5,472.0	13.2	11.8	131.09	-387.4	48.3	325.2	301.7	23.54	13.815	
5,600.0	5,568.5	5,589.8	5,571.3	13.5	12.0	131.06	-396.5	49.9	332.3	308.3	24.01	13.838	
5,700.0	5,667.8	5,689.6	5,670.7	13.8	12.3	131.03	-405.6	51.5	339.3	314.8	24.48	13.859	
5,800.0	5,767.1	5,789.3	5,770.0	14.1	12.5	131.00	-414.6	53.1	346.4	321.4	24.95	13.880	
5,900.0	5,866.3	5,889.1	5,869.3	14.3	12.7	130.98	-423.7	54.7	353.4	328.0	25.43	13.900	
6,000.0	5,965.6	5,988.8	5,968.6	14.6	13.0	130.95	-432.8	56.2	360.4	334.5	25.90	13.919	
6,100.0	6,064.9	6,088.6	6,068.0	14.9	13.2	130.93	-441.9	57.8	367.5	341.1	26.37	13.937	
6,200.0	6,164.2	6,188.3	6,167.3	15.1	13.4	130.90	-451.0	59.4	374.5	347.7	26.84	13.954	
6,300.0	6,263.4	6,288.1	6,266.6	15.4	13.7	130.88	-460.1	61.0	381.6	354.3	27.31	13.971	
6,400.0	6,362.7	6,387.8	6,365.9	15.7	13.9	130.86	-469.1	62.6	388.6	360.8	27.78	13.988	
6,500.0	6,462.0	6,487.6	6,465.3	16.0	14.1	130.84	-478.2	64.2	395.7	367.4	28.26	14.003	
6,600.0	6,561.3	6,587.3	6,564.6	16.2	14.4	130.82	-487.3	65.8	402.7	374.0	28.73	14.019	
6,700.0	6,660.6	6,687.1	6,663.9	16.5	14.6	130.80	-496.4	67.4	409.8	380.6	29.20	14.033	
6,800.0	6,759.8	6,786.8	6,763.2	16.8	14.9	130.78	-505.5	69.0	416.8	387.1	29.67	14.047	
6,900.0	6,859.3	6,886.4	6,862.3	17.0	15.1	-157.30	-514.5	70.6	424.2	394.2	30.06	14.114	
7,000.0	6,958.0	6,993.4	6,969.2	17.0	15.2	-117.23	-515.7	72.3	432.5	402.3	30.20	14.323	
7,100.0	7,052.9	7,104.2	7,078.0	17.0	15.1	-109.23	-496.0	73.9	440.5	410.6	29.92	14.726	
7,200.0	7,141.1	7,217.9	7,183.6	16.8	14.8	-106.38	-454.4	75.5	447.9	418.6	29.27	15.301	
7,300.0	7,220.0	7,334.1	7,281.0	16.6	14.5	-104.99	-391.3	76.8	454.2	425.8	28.40	15.990	
7,400.0	7,287.2	7,452.2	7,364.8	16.4	14.0	-104.09	-308.3	77.8	459.0	431.5	27.49	16.694	
7,500.0	7,340.6	7,571.4	7,430.3	16.2	13.7	-103.31	-209.1	78.5	462.2	435.4	26.79	17.253	
7,600.0	7,378.7	7,690.6	7,474.0	16.2	13.5	-102.53	-98.4	78.8	463.5	437.0	26.50	17.491	
7,700.0	7,400.2	7,809.0	7,493.8	16.3	13.7	-101.67	18.1	78.7	463.0	436.2	26.78	17.287	
7,800.0	7,405.0	7,914.4	7,495.0	16.7	14.1	-101.24	123.5	78.3	461.6	434.1	27.58	16.741	
7,900.0	7,405.0	8,014.4	7,495.0	17.1	14.7	-101.27	223.5	78.0	460.6	431.9	28.71	16.041	
8,000.0	7,405.0	8,114.4	7,495.0	17.8	15.4	-101.29	323.5	77.7	459.6	429.4	30.20	15.216	
8,100.0	7,405.0	8,214.4	7,495.0	18.6	16.4	-101.32	423.5	77.3	458.6	426.6	32.00	14.332	
8,200.0	7,405.0	8,314.4	7,495.0	19.5	17.4	-101.35	523.5	77.0	457.5	423.5	34.04	13.440	
8,300.0	7,405.0	8,414.4	7,495.0	20.5	18.5	-101.37	623.5	76.6	456.5	420.2	36.30	12.576	
8,400.0	7,405.0	8,514.4	7,495.0	21.6	19.8	-101.40	723.5	76.3	455.5	416.7	38.73	11.761	
8,500.0	7,405.0	8,614.4	7,495.0	22.8	21.1	-101.42	823.5	75.9	454.4	413.1	41.30	11.003	
8,600.0	7,405.0	8,714.4	7,495.0	24.1	22.5	-101.45	923.5	75.6	453.4	409.4	43.99	10.307	
8,700.0	7,405.0	8,814.4	7,495.0	25.4	23.9	-101.48	1,023.5	75.2	452.4	405.6	46.78	9.670	
8,800.0	7,405.0	8,914.3	7,495.0	26.8	25.4	-101.50	1,123.5	74.9	451.4	401.7	49.65	9.091	
8,900.0	7,405.0	9,014.3	7,495.0	28.2	26.9	-101.53	1,223.4	74.5	450.3	397.8	52.59	8.564	
9,000.0	7,405.0	9,114.3	7,495.0	29.7	28.4	-101.56	1,323.4	74.2	449.3	393.7	55.58	8.084	
9,100.0	7,405.0	9,214.3	7,495.0	31.1	29.9	-101.58	1,423.4	73.8	448.3	389.7	58.62	7.647	
9,200.0	7,405.0	9,314.3	7,495.0	32.6	31.5	-101.61	1,523.4	73.5	447.3	385.6	61.70	7.249	
9,300.0	7,405.0	9,414.3	7,495.0	34.2	33.1	-101.64	1,623.4	73.1	446.2	381.4	64.82	6.884	
9,400.0	7,405.0	9,514.3	7,495.0	35.7	34.7	-101.66	1,723.4	72.8	445.2	377.2	67.96	6.551	
9,500.0	7,405.0	9,614.3	7,495.0	37.3	36.3	-101.69	1,823.4	72.4	444.2	373.0	71.14	6.244	
9,600.0	7,405.0	9,714.3	7,495.0	38.9	38.0	-101.72	1,923.4	72.1	443.2	368.8	74.33	5.962	
9,700.0	7,405.0	9,814.3	7,495.0	40.5	39.6	-101.75	2,023.4	71.7	442.1	364.6	77.54	5.702	
9,800.0	7,405.0	9,914.3	7,495.0	42.1	41.3	-101.77	2,123.4	71.4	441.1	360.3	80.77	5.461	
9,900.0	7,405.0	10,014.3	7,495.0	43.7	42.9	-101.80	2,223.4	71.0	440.1	356.1	84.02	5.238	
10,000.0	7,405.0	10,114.3	7,495.0	45.4	44.6	-101.83	2,323.4	70.7	439.1	351.8	87.28	5.031	
10,100.0	7,405.0	10,214.3	7,495.0	47.0	46.3	-101.86	2,423.4	70.3	438.0	347.5	90.55	4.838	
10,200.0	7,405.0	10,314.3	7,495.0	48.7	47.9	-101.89	2,523.4	70.0	437.0	343.2	93.83	4.657	
10,300.0	7,405.0	10,414.3	7,495.0	50.3	49.6	-101.91	2,623.4	69.6	436.0	338.9	97.12	4.489	

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 4L-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 4L-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 #2	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				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	7,405.0	10,514.3	7,495.0	52.0	51.3	-101.94	2,723.4	69.3	435.0	334.5	100.42	4.331		
10,500.0	7,405.0	10,614.3	7,495.0	53.6	53.0	-101.97	2,823.3	68.9	433.9	330.2	103.72	4.184		
10,600.0	7,405.0	10,714.3	7,495.0	55.3	54.7	-102.00	2,923.3	68.6	432.9	325.9	107.04	4.045		
10,700.0	7,405.0	10,814.2	7,495.0	57.0	56.4	-102.03	3,023.3	68.2	431.9	321.5	110.35	3.914		
10,800.0	7,405.0	10,914.2	7,495.0	58.7	58.1	-102.06	3,123.3	67.9	430.9	317.2	113.68	3.790		
10,900.0	7,405.0	11,014.2	7,495.0	60.4	59.8	-102.09	3,223.3	67.5	429.8	312.8	117.01	3.674		
11,000.0	7,405.0	11,114.2	7,495.0	62.1	61.5	-102.12	3,323.3	67.2	428.8	308.5	120.34	3.563		
11,100.0	7,405.0	11,214.2	7,495.0	63.8	63.2	-102.15	3,423.3	66.8	427.8	304.1	123.68	3.459		
11,200.0	7,405.0	11,314.2	7,495.0	65.5	65.0	-102.18	3,523.3	66.5	426.8	299.7	127.02	3.360		
11,300.0	7,405.0	11,414.2	7,495.0	67.2	66.7	-102.20	3,623.3	66.1	425.7	295.4	130.36	3.266		
11,400.0	7,405.0	11,514.2	7,495.0	68.9	68.4	-102.23	3,723.3	65.8	424.7	291.0	133.71	3.177		
11,500.0	7,405.0	11,614.2	7,495.0	70.6	70.1	-102.26	3,823.3	65.4	423.7	286.6	137.05	3.091		
11,600.0	7,405.0	11,714.2	7,495.0	72.3	71.8	-102.29	3,923.3	65.1	422.7	282.3	140.41	3.010		
11,700.0	7,405.0	11,814.2	7,495.0	74.0	73.6	-102.33	4,023.3	64.7	421.6	277.9	143.76	2.933		
11,800.0	7,405.0	11,914.2	7,495.0	75.7	75.3	-102.36	4,123.3	64.4	420.6	273.5	147.11	2.859		
11,900.0	7,405.0	12,014.2	7,495.0	77.4	77.0	-102.39	4,223.3	64.0	419.6	269.1	150.47	2.789		
12,000.0	7,405.0	12,114.2	7,495.0	79.1	78.7	-102.42	4,323.3	63.7	418.6	264.8	153.83	2.721		
12,100.0	7,405.0	12,214.2	7,495.0	80.8	80.5	-102.45	4,423.2	63.3	417.6	260.4	157.19	2.656		
12,200.0	7,405.0	12,314.2	7,495.0	82.6	82.2	-102.48	4,523.2	63.0	416.5	256.0	160.55	2.594		
12,300.0	7,405.0	12,414.2	7,495.0	84.3	83.9	-102.51	4,623.2	62.6	415.5	251.6	163.91	2.535		
12,400.0	7,405.0	12,514.2	7,495.0	86.0	85.7	-102.54	4,723.2	62.3	414.5	247.2	167.27	2.478		
12,500.0	7,405.0	12,614.1	7,495.0	87.7	87.4	-102.57	4,823.2	61.9	413.5	242.8	170.64	2.423		
12,600.0	7,405.0	12,714.1	7,495.0	89.5	89.1	-102.60	4,923.2	61.6	412.4	238.4	174.00	2.370		
12,700.0	7,405.0	12,814.1	7,495.0	91.2	90.9	-102.64	5,023.2	61.3	411.4	234.1	177.37	2.320		
12,800.0	7,405.0	12,914.1	7,495.0	92.9	92.6	-102.67	5,123.2	60.9	410.4	229.7	180.73	2.271		
12,900.0	7,405.0	13,014.1	7,495.0	94.6	94.3	-102.70	5,223.2	60.6	409.4	225.3	184.10	2.224		
13,000.0	7,405.0	13,114.1	7,495.0	96.4	96.1	-102.73	5,323.2	60.2	408.4	220.9	187.46	2.178		
13,081.3	7,405.0	13,191.3	7,495.0	97.8	97.4	-102.75	5,400.3	59.6	407.9	217.7	190.14	2.145		
13,100.0	7,405.0	13,208.7	7,495.0	98.1	97.7	-102.75	5,417.8	59.3	407.9	217.1	190.75	2.138		
13,200.0	7,405.0	13,300.0	7,495.0	99.8	99.3	-102.72	5,509.0	57.1	409.0	215.0	194.02	2.108		
13,300.0	7,405.0	13,395.7	7,495.0	101.6	100.9	-102.64	5,604.6	53.1	411.7	214.3	197.39	2.085		
13,400.0	7,405.0	13,490.7	7,495.0	103.3	102.6	-102.51	5,699.5	47.7	415.9	215.1	200.79	2.071		
13,500.0	7,405.0	13,590.6	7,495.0	105.0	104.3	-102.37	5,799.2	41.5	420.5	216.3	204.29	2.059		
13,600.0	7,405.0	13,690.5	7,495.0	106.8	106.1	-102.23	5,898.9	35.4	425.2	217.4	207.79	2.046		
13,700.0	7,405.0	13,790.4	7,495.0	108.5	107.8	-102.10	5,998.6	29.2	429.9	218.6	211.29	2.034		
13,800.0	7,405.0	13,890.3	7,495.0	110.2	109.5	-101.97	6,098.3	23.0	434.5	219.7	214.80	2.023		
13,900.0	7,405.0	13,990.1	7,495.0	112.0	111.3	-101.84	6,198.0	16.9	439.2	220.9	218.30	2.012		
14,000.0	7,405.0	14,090.0	7,495.0	113.7	113.0	-101.71	6,297.7	10.7	443.9	222.1	221.80	2.001		
14,100.0	7,405.0	14,189.9	7,495.0	115.4	114.7	-101.59	6,397.4	4.6	448.6	223.2	225.31	1.991		
14,200.0	7,405.0	14,289.8	7,495.0	117.2	116.5	-101.47	6,497.1	-1.6	453.2	224.4	228.81	1.981		
14,300.0	7,405.0	14,389.7	7,495.0	118.9	118.2	-101.35	6,596.8	-7.7	457.9	225.6	232.32	1.971		
14,400.0	7,405.0	14,489.6	7,495.0	120.6	120.0	-101.23	6,696.5	-13.9	462.6	226.8	235.83	1.962		
14,500.0	7,405.0	14,589.5	7,495.0	122.4	121.7	-101.12	6,796.2	-20.1	467.3	227.9	239.33	1.952		
14,594.7	7,405.0	14,684.1	7,495.0	124.0	123.3	-101.01	6,890.6	-25.9	471.7	229.0	242.66	1.944 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	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			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	-88.11	0.3	-9.8	9.8					
100.0	100.0	100.0	100.0	0.1	0.1	-88.11	0.3	-9.8	9.8	9.6	0.24	41.269		
200.0	200.0	200.0	200.0	0.3	0.3	-88.11	0.3	-9.8	9.8	9.2	0.59	16.704		
300.0	300.0	300.0	300.0	0.5	0.5	-88.11	0.3	-9.8	9.8	8.9	0.94	10.471		
400.0	400.0	400.0	400.0	0.6	0.6	-88.11	0.3	-9.8	9.8	8.5	1.28	7.626		
500.0	500.0	500.0	500.0	0.8	0.8	-88.11	0.3	-9.8	9.8	8.2	1.63	5.996		
600.0	600.0	600.0	600.0	1.0	1.0	-88.11	0.3	-9.8	9.8	7.8	1.98	4.941		
700.0	700.0	700.0	700.0	1.2	1.2	-88.11	0.3	-9.8	9.8	7.5	2.33	4.201		
800.0	800.0	800.0	800.0	1.3	1.3	-88.11	0.3	-9.8	9.8	7.1	2.68	3.654		
900.0	900.0	900.0	900.0	1.5	1.5	-88.11	0.3	-9.8	9.8	6.8	3.03	3.233		
1,000.0	1,000.0	1,000.0	1,000.0	1.7	1.7	-88.11	0.3	-9.8	9.8	6.4	3.38	2.899	CC, ES	
1,100.0	1,100.0	1,100.1	1,100.1	1.9	1.9	135.35	-1.3	-9.2	10.4	6.7	3.73	2.794		
1,200.0	1,199.8	1,200.2	1,200.1	2.0	2.0	129.61	-6.2	-7.3	12.4	8.3	4.09	3.026		
1,300.0	1,299.5	1,300.2	1,299.7	2.2	2.2	123.90	-14.2	-4.2	15.8	11.4	4.47	3.541		
1,400.0	1,398.8	1,400.1	1,399.1	2.5	2.4	125.03	-22.9	-0.9	20.9	16.0	4.87	4.285		
1,500.0	1,498.0	1,500.0	1,498.5	2.7	2.6	126.34	-31.7	2.5	26.1	20.8	5.28	4.944		
1,600.0	1,597.3	1,599.8	1,598.0	2.9	2.9	127.22	-40.4	5.9	31.3	25.6	5.70	5.500		
1,700.0	1,696.6	1,699.7	1,697.4	3.2	3.1	127.84	-49.1	9.2	36.6	30.5	6.13	5.974		
1,800.0	1,795.9	1,799.5	1,796.8	3.4	3.3	128.31	-57.9	12.6	41.8	35.3	6.56	6.381		
1,900.0	1,895.2	1,899.4	1,896.2	3.6	3.5	128.67	-66.6	15.9	47.1	40.1	7.00	6.733		
2,000.0	1,994.4	1,999.3	1,995.7	3.9	3.7	128.96	-75.3	19.3	52.4	44.9	7.44	7.041		
2,100.0	2,093.7	2,099.1	2,095.1	4.1	4.0	129.20	-84.1	22.6	57.6	49.7	7.88	7.311		
2,200.0	2,193.0	2,199.0	2,194.5	4.4	4.2	129.39	-92.8	26.0	62.9	54.6	8.33	7.550		
2,300.0	2,292.3	2,298.8	2,293.9	4.7	4.4	129.56	-101.5	29.3	68.1	59.4	8.78	7.762		
2,400.0	2,391.6	2,398.7	2,393.3	4.9	4.7	129.70	-110.3	32.7	73.4	64.2	9.23	7.953		
2,500.0	2,490.8	2,498.6	2,492.8	5.2	4.9	129.83	-119.0	36.1	78.7	69.0	9.68	8.124		
2,600.0	2,590.1	2,598.4	2,592.2	5.4	5.1	129.94	-127.7	39.4	83.9	73.8	10.14	8.279		
2,700.0	2,689.4	2,698.3	2,691.6	5.7	5.3	130.03	-136.5	42.8	89.2	78.6	10.59	8.419		
2,800.0	2,788.7	2,798.1	2,791.0	6.0	5.6	130.12	-145.2	46.1	94.5	83.4	11.05	8.548		
2,900.0	2,888.0	2,898.0	2,890.4	6.2	5.8	130.19	-153.9	49.5	99.7	88.2	11.51	8.665		
3,000.0	2,987.2	2,997.9	2,989.9	6.5	6.0	130.26	-162.7	52.8	105.0	93.0	11.97	8.773		
3,100.0	3,086.5	3,097.7	3,089.3	6.8	6.3	130.32	-171.4	56.2	110.3	97.8	12.43	8.872		
3,200.0	3,185.8	3,197.6	3,188.7	7.0	6.5	130.38	-180.1	59.5	115.5	102.6	12.89	8.963		
3,300.0	3,285.1	3,297.5	3,288.1	7.3	6.7	130.43	-188.9	62.9	120.8	107.4	13.35	9.048		
3,400.0	3,384.4	3,397.3	3,387.6	7.6	7.0	130.48	-197.6	66.3	126.0	112.2	13.81	9.127		
3,500.0	3,483.6	3,497.2	3,487.0	7.8	7.2	130.52	-206.4	69.6	131.3	117.0	14.27	9.201		
3,600.0	3,582.9	3,597.0	3,586.4	8.1	7.5	130.56	-215.1	73.0	136.6	121.8	14.73	9.269		
3,700.0	3,682.2	3,696.9	3,685.8	8.4	7.7	130.60	-223.8	76.3	141.8	126.6	15.20	9.334		
3,800.0	3,781.5	3,796.8	3,785.2	8.6	7.9	130.63	-232.6	79.7	147.1	131.4	15.66	9.394		
3,900.0	3,880.7	3,896.6	3,884.7	8.9	8.2	130.66	-241.3	83.0	152.4	136.2	16.12	9.450		
4,000.0	3,980.0	3,996.5	3,984.1	9.2	8.4	130.69	-250.0	86.4	157.6	141.0	16.59	9.504		
4,100.0	4,079.3	4,096.3	4,083.5	9.5	8.6	130.72	-258.8	89.7	162.9	145.8	17.05	9.554		
4,200.0	4,178.6	4,196.2	4,182.9	9.7	8.9	130.75	-267.5	93.1	168.2	150.6	17.51	9.601		
4,300.0	4,277.9	4,296.1	4,282.4	10.0	9.1	130.77	-276.2	96.5	173.4	155.4	17.98	9.646		
4,400.0	4,377.1	4,395.9	4,381.8	10.3	9.3	130.80	-285.0	99.8	178.7	160.2	18.44	9.688		
4,500.0	4,476.4	4,495.8	4,481.2	10.5	9.6	130.82	-293.7	103.2	184.0	165.0	18.91	9.728		
4,600.0	4,575.7	4,595.7	4,580.6	10.8	9.8	130.84	-302.4	106.5	189.2	169.8	19.37	9.767		
4,700.0	4,675.0	4,695.5	4,680.0	11.1	10.1	130.86	-311.2	109.9	194.5	174.6	19.84	9.803		
4,800.0	4,774.3	4,795.4	4,779.5	11.3	10.3	130.88	-319.9	113.2	199.7	179.4	20.30	9.838		
4,900.0	4,873.5	4,895.2	4,878.9	11.6	10.5	130.89	-328.6	116.6	205.0	184.2	20.77	9.870		
5,000.0	4,972.8	4,995.1	4,978.3	11.9	10.8	130.91	-337.4	120.0	210.3	189.0	21.24	9.902		
5,100.0	5,072.1	5,095.0	5,077.7	12.2	11.0	130.93	-346.1	123.3	215.5	193.8	21.70	9.932		

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 4L-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 4L-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 #2	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			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	5,171.4	5,194.8	5,177.2	12.4	11.2	130.94	-354.8	126.7	220.8	198.6	22.17	9.961		
5,300.0	5,270.7	5,294.7	5,276.6	12.7	11.5	130.96	-363.6	130.0	226.1	203.4	22.63	9.988		
5,400.0	5,369.9	5,394.5	5,376.0	13.0	11.7	130.97	-372.3	133.4	231.3	208.2	23.10	10.014		
5,500.0	5,469.2	5,494.4	5,475.4	13.2	12.0	130.98	-381.0	136.7	236.6	213.0	23.57	10.040		
5,600.0	5,568.5	5,594.3	5,574.8	13.5	12.2	130.99	-389.8	140.1	241.9	217.8	24.03	10.064		
5,700.0	5,667.8	5,694.1	5,674.3	13.8	12.4	131.01	-398.5	143.4	247.1	222.6	24.50	10.087		
5,800.0	5,767.1	5,794.0	5,773.7	14.1	12.7	131.02	-407.3	146.8	252.4	227.4	24.97	10.110		
5,900.0	5,866.3	5,893.9	5,873.1	14.3	12.9	131.03	-416.0	150.2	257.7	232.2	25.43	10.131		
6,000.0	5,965.6	5,993.7	5,972.5	14.6	13.1	131.04	-424.7	153.5	262.9	237.0	25.90	10.152		
6,100.0	6,064.9	6,093.6	6,072.0	14.9	13.4	131.05	-433.5	156.9	268.2	241.8	26.37	10.172		
6,200.0	6,164.2	6,193.4	6,171.4	15.1	13.6	131.06	-442.2	160.2	273.5	246.6	26.83	10.191		
6,300.0	6,263.4	6,293.3	6,270.8	15.4	13.9	131.07	-450.9	163.6	278.7	251.4	27.30	10.209		
6,400.0	6,362.7	6,393.2	6,370.2	15.7	14.1	131.08	-459.7	166.9	284.0	256.2	27.77	10.227		
6,500.0	6,462.0	6,493.0	6,469.6	16.0	14.3	131.09	-468.4	170.3	289.3	261.0	28.23	10.245		
6,600.0	6,561.3	6,592.9	6,569.1	16.2	14.6	131.09	-477.1	173.6	294.5	265.8	28.70	10.261		
6,700.0	6,660.6	6,692.7	6,668.5	16.5	14.8	131.10	-485.9	177.0	299.8	270.6	29.17	10.277		
6,800.0	6,759.8	6,792.6	6,767.9	16.8	15.0	131.11	-494.6	180.4	305.0	275.4	29.64	10.293		
6,900.0	6,859.3	6,892.2	6,867.1	17.0	15.3	-157.31	-503.3	183.7	310.7	280.6	30.06	10.335		
7,000.0	6,958.0	6,989.6	6,964.0	17.0	15.5	-119.09	-511.8	187.0	318.4	287.9	30.50	10.438		
7,100.0	7,052.9	7,090.6	7,064.7	17.0	15.7	-115.15	-517.8	190.4	330.5	299.8	30.74	10.753		
7,200.0	7,141.1	7,205.0	7,178.2	16.8	15.7	-116.71	-504.9	194.2	345.6	315.3	30.33	11.396		
7,300.0	7,220.0	7,330.2	7,296.6	16.6	15.5	-119.38	-465.4	198.2	361.7	332.5	29.24	12.369		
7,400.0	7,287.2	7,467.3	7,413.2	16.4	15.1	-122.04	-393.8	202.1	376.7	349.1	27.68	13.610		
7,500.0	7,340.6	7,616.1	7,516.4	16.2	14.6	-124.13	-287.4	205.6	388.6	362.5	26.03	14.928		
7,600.0	7,378.7	7,773.7	7,592.1	16.2	14.2	-125.28	-149.7	208.2	395.2	370.4	24.85	15.905		
7,700.0	7,400.2	7,935.1	7,628.0	16.3	14.3	-125.26	7.0	209.4	395.5	370.7	24.71	16.006		
7,800.0	7,405.0	8,053.2	7,630.0	16.7	14.7	-124.97	125.1	209.5	392.5	367.1	25.45	15.422		
7,900.0	7,405.0	8,153.2	7,630.0	17.1	15.3	-125.09	225.1	209.5	391.4	365.0	26.42	14.816		
8,000.0	7,405.0	8,253.2	7,630.0	17.8	16.1	-125.21	325.1	209.5	390.3	362.6	27.64	14.118		
8,100.0	7,405.0	8,353.1	7,630.0	18.6	16.9	-125.33	425.1	209.5	389.1	360.0	29.10	13.373		
8,200.0	7,405.0	8,453.1	7,630.0	19.5	18.0	-125.45	525.1	209.5	388.0	357.2	30.74	12.620		
8,300.0	7,405.0	8,553.1	7,630.0	20.5	19.1	-125.57	625.0	209.5	386.8	354.3	32.55	11.884		
8,400.0	7,405.0	8,653.1	7,630.0	21.6	20.3	-125.69	725.0	209.5	385.7	351.2	34.49	11.182		
8,500.0	7,405.0	8,753.1	7,630.0	22.8	21.6	-125.81	825.0	209.5	384.6	348.0	36.55	10.523		
8,600.0	7,405.0	8,853.1	7,630.0	24.1	22.9	-125.93	925.0	209.5	383.4	344.8	38.69	9.911		
8,700.0	7,405.0	8,953.1	7,630.0	25.4	24.3	-126.05	1,025.0	209.5	382.3	341.4	40.91	9.346		
8,800.0	7,405.0	9,053.1	7,630.0	26.8	25.8	-126.18	1,125.0	209.5	381.2	338.0	43.19	8.826		
8,900.0	7,405.0	9,153.1	7,630.0	28.2	27.2	-126.30	1,225.0	209.5	380.1	334.5	45.52	8.350		
9,000.0	7,405.0	9,253.1	7,630.0	29.7	28.8	-126.43	1,325.0	209.5	378.9	331.1	47.89	7.913		
9,100.0	7,405.0	9,353.0	7,630.0	31.1	30.3	-126.55	1,425.0	209.5	377.8	327.5	50.30	7.512		
9,200.0	7,405.0	9,453.0	7,630.0	32.6	31.8	-126.68	1,525.0	209.5	376.7	324.0	52.73	7.144		
9,300.0	7,405.0	9,553.0	7,630.0	34.2	33.4	-126.81	1,624.9	209.5	375.6	320.4	55.18	6.806		
9,400.0	7,405.0	9,653.0	7,630.0	35.7	35.0	-126.93	1,724.9	209.5	374.5	316.8	57.66	6.495		
9,500.0	7,405.0	9,753.0	7,630.0	37.3	36.6	-127.06	1,824.9	209.5	373.3	313.2	60.14	6.208		
9,600.0	7,405.0	9,853.0	7,630.0	38.9	38.3	-127.19	1,924.9	209.5	372.2	309.6	62.64	5.942		
9,700.0	7,405.0	9,953.0	7,630.0	40.5	39.9	-127.32	2,024.9	209.5	371.1	306.0	65.15	5.697		
9,800.0	7,405.0	10,053.0	7,630.0	42.1	41.5	-127.45	2,124.9	209.5	370.0	302.4	67.66	5.469		
9,900.0	7,405.0	10,153.0	7,630.0	43.7	43.2	-127.59	2,224.9	209.5	368.9	298.7	70.18	5.257		
10,000.0	7,405.0	10,253.0	7,630.0	45.4	44.8	-127.72	2,324.9	209.5	367.8	295.1	72.70	5.059		
10,100.0	7,405.0	10,353.0	7,630.0	47.0	46.5	-127.85	2,424.9	209.5	366.7	291.5	75.22	4.875		
10,200.0	7,405.0	10,452.9	7,630.0	48.7	48.2	-127.99	2,524.9	209.5	365.6	287.9	77.74	4.703		
10,300.0	7,405.0	10,552.9	7,630.0	50.3	49.9	-128.12	2,624.8	209.5	364.5	284.2	80.26	4.542		

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 4L-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 4L-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 #2	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			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	7,405.0	10,652.9	7,630.0	52.0	51.5	-128.26	2,724.8	209.5	363.4	280.6	82.77	4.390		
10,500.0	7,405.0	10,752.9	7,630.0	53.6	53.2	-128.39	2,824.8	209.5	362.3	277.0	85.29	4.248		
10,600.0	7,405.0	10,852.9	7,630.0	55.3	54.9	-128.53	2,924.8	209.5	361.2	273.4	87.80	4.114		
10,700.0	7,405.0	10,952.9	7,630.0	57.0	56.6	-128.67	3,024.8	209.5	360.1	269.8	90.30	3.988		
10,800.0	7,405.0	11,052.9	7,630.0	58.7	58.3	-128.81	3,124.8	209.5	359.0	266.2	92.79	3.869		
10,900.0	7,405.0	11,152.9	7,630.0	60.4	60.0	-128.95	3,224.8	209.5	357.9	262.7	95.29	3.757		
11,000.0	7,405.0	11,252.9	7,630.0	62.1	61.7	-129.09	3,324.8	209.5	356.9	259.1	97.77	3.650		
11,100.0	7,405.0	11,352.9	7,630.0	63.8	63.4	-129.23	3,424.8	209.5	355.8	255.5	100.24	3.549		
11,200.0	7,405.0	11,452.8	7,630.0	65.5	65.1	-129.37	3,524.8	209.5	354.7	252.0	102.71	3.453		
11,300.0	7,405.0	11,552.8	7,630.0	67.2	66.9	-129.52	3,624.8	209.5	353.6	248.4	105.17	3.362		
11,400.0	7,405.0	11,652.8	7,630.0	68.9	68.6	-129.66	3,724.7	209.5	352.5	244.9	107.62	3.276		
11,500.0	7,405.0	11,752.8	7,630.0	70.6	70.3	-129.81	3,824.7	209.5	351.5	241.4	110.06	3.193		
11,600.0	7,405.0	11,852.8	7,630.0	72.3	72.0	-129.95	3,924.7	209.5	350.4	237.9	112.49	3.115		
11,700.0	7,405.0	11,952.8	7,630.0	74.0	73.7	-130.10	4,024.7	209.5	349.3	234.4	114.91	3.040		
11,800.0	7,405.0	12,052.8	7,630.0	75.7	75.5	-130.25	4,124.7	209.5	348.3	230.9	117.32	2.969		
11,900.0	7,405.0	12,152.8	7,630.0	77.4	77.2	-130.40	4,224.7	209.5	347.2	227.5	119.71	2.900		
12,000.0	7,405.0	12,252.8	7,630.0	79.1	78.9	-130.55	4,324.7	209.5	346.1	224.0	122.10	2.835		
12,100.0	7,405.0	12,352.8	7,630.0	80.8	80.6	-130.70	4,424.7	209.5	345.1	220.6	124.47	2.772		
12,200.0	7,405.0	12,452.7	7,630.0	82.6	82.4	-130.85	4,524.7	209.5	344.0	217.2	126.84	2.712		
12,300.0	7,405.0	12,552.7	7,630.0	84.3	84.1	-131.00	4,624.7	209.5	343.0	213.8	129.19	2.655		
12,400.0	7,405.0	12,652.7	7,630.0	86.0	85.8	-131.16	4,724.6	209.5	341.9	210.4	131.52	2.600		
12,500.0	7,405.0	12,752.7	7,630.0	87.7	87.5	-131.31	4,824.6	209.5	340.9	207.0	133.85	2.547		
12,600.0	7,405.0	12,852.7	7,630.0	89.5	89.3	-131.47	4,924.6	209.5	339.8	203.7	136.16	2.496		
12,700.0	7,405.0	12,952.7	7,630.0	91.2	91.0	-131.62	5,024.6	209.5	338.8	200.3	138.45	2.447		
12,800.0	7,405.0	13,052.7	7,630.0	92.9	92.7	-131.78	5,124.6	209.5	337.7	197.0	140.74	2.400		
12,900.0	7,405.0	13,152.7	7,630.0	94.6	94.5	-131.94	5,224.6	209.5	336.7	193.7	143.01	2.354		
13,000.0	7,405.0	13,252.7	7,630.0	96.4	96.2	-132.10	5,324.6	209.5	335.6	190.4	145.26	2.311		
13,100.0	7,405.0	13,352.7	7,630.0	98.1	97.9	-132.26	5,424.6	209.5	334.6	187.1	147.50	2.269		
13,200.0	7,405.0	13,452.7	7,630.0	99.8	99.7	-132.42	5,524.6	209.5	333.6	183.9	149.73	2.228		
13,300.0	7,405.0	13,552.6	7,630.0	101.6	101.4	-132.58	5,624.6	209.5	332.5	180.6	151.94	2.189		
13,400.0	7,405.0	13,652.6	7,630.0	103.3	103.1	-132.74	5,724.5	209.5	331.5	177.4	154.13	2.151		
13,500.0	7,405.0	13,752.6	7,630.0	105.0	104.9	-132.91	5,824.5	209.5	330.5	174.2	156.31	2.114		
13,600.0	7,405.0	13,852.6	7,630.0	106.8	106.6	-133.07	5,924.5	209.5	329.5	171.0	158.47	2.079		
13,700.0	7,405.0	13,952.6	7,630.0	108.5	108.4	-133.24	6,024.5	209.5	328.5	167.8	160.62	2.045		
13,800.0	7,405.0	14,052.6	7,630.0	110.2	110.1	-133.41	6,124.5	209.5	327.4	164.7	162.75	2.012		
13,900.0	7,405.0	14,152.6	7,630.0	112.0	111.8	-133.58	6,224.5	209.5	326.4	161.6	164.86	1.980		
14,000.0	7,405.0	14,252.6	7,630.0	113.7	113.6	-133.75	6,324.5	209.5	325.4	158.5	166.95	1.949		
14,100.0	7,405.0	14,352.6	7,630.0	115.4	115.3	-133.92	6,424.5	209.5	324.4	155.4	169.03	1.919		
14,200.0	7,405.0	14,452.6	7,630.0	117.2	117.1	-134.09	6,524.5	209.5	323.4	152.3	171.09	1.890		
14,300.0	7,405.0	14,552.5	7,630.0	118.9	118.8	-134.26	6,624.5	209.5	322.4	149.3	173.13	1.862		
14,400.0	7,405.0	14,652.5	7,630.0	120.6	120.5	-134.43	6,724.4	209.5	321.4	146.2	175.16	1.835		
14,500.0	7,405.0	14,752.5	7,630.0	122.4	122.3	-134.61	6,824.4	209.5	320.4	143.2	177.16	1.809		
14,594.7	7,405.0	14,847.2	7,630.0	124.0	123.9	-134.78	6,919.1	209.5	319.5	140.4	179.05	1.784 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - SULLIVAN 8-6-26 - ENCANA WELL - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
7,500.0	7,340.6	7,408.2	7,330.6	16.2	20.9	-18.08	780.3	417.1	951.5	932.9	18.60	51.161		
7,600.0	7,378.7	7,446.2	7,368.7	16.2	20.9	-26.24	780.3	417.1	860.2	841.6	18.63	46.184		
7,700.0	7,400.2	7,467.7	7,390.2	16.3	20.9	-49.09	780.3	417.1	763.7	738.8	24.92	30.645		
7,800.0	7,405.0	7,472.6	7,395.0	16.7	21.0	-90.00	780.3	417.1	665.1	633.0	32.01	20.775		
7,900.0	7,405.0	7,472.6	7,395.0	17.1	21.0	-90.00	780.3	417.1	566.5	533.9	32.59	17.382		
8,000.0	7,405.0	7,472.6	7,395.0	17.8	21.0	-90.00	780.3	417.1	468.6	435.3	33.36	14.050		
8,100.0	7,405.0	7,472.6	7,395.0	18.6	21.0	-90.00	780.3	417.1	371.8	337.6	34.27	10.849		
8,200.0	7,405.0	7,472.6	7,395.0	19.5	21.0	-90.00	780.3	417.1	277.3	242.0	35.32	7.851		
8,300.0	7,405.0	7,472.6	7,395.0	20.5	21.0	-90.00	780.3	417.1	188.6	152.1	36.48	5.169		
8,400.0	7,405.0	7,472.6	7,395.0	21.6	21.0	-90.00	780.3	417.1	119.3	81.5	37.73	3.161		
8,456.7	7,405.0	7,472.6	7,395.0	22.3	21.0	-90.00	780.3	417.1	104.9	66.4	38.48	2.726 CC, ES, SF		
8,500.0	7,405.0	7,472.6	7,395.0	22.8	21.0	-90.00	780.3	417.1	113.5	74.4	39.05	2.906		
8,600.0	7,405.0	7,472.6	7,395.0	24.1	21.0	-90.00	780.3	417.1	177.6	137.1	40.43	4.391		
8,700.0	7,405.0	7,472.6	7,395.0	25.4	21.0	-90.00	780.3	417.1	264.9	223.1	41.87	6.328		
8,800.0	7,405.0	7,472.6	7,395.0	26.8	21.0	-90.00	780.3	417.1	358.9	315.6	43.34	8.282		
8,900.0	7,405.0	7,472.6	7,395.0	28.2	21.0	-90.00	780.3	417.1	455.5	410.7	44.84	10.158		
9,000.0	7,405.0	7,472.6	7,395.0	29.7	21.0	-90.00	780.3	417.1	553.3	506.9	46.38	11.930		
9,100.0	7,405.0	7,472.6	7,395.0	31.1	21.0	-90.00	780.3	417.1	651.8	603.8	47.94	13.596		
9,200.0	7,405.0	7,472.6	7,395.0	32.6	21.0	-90.00	780.3	417.1	750.6	701.1	49.52	15.159		
9,300.0	7,405.0	7,472.6	7,395.0	34.2	21.0	-90.00	780.3	417.1	849.8	798.6	51.12	16.624		
9,400.0	7,405.0	7,472.6	7,395.0	35.7	21.0	-90.00	780.3	417.1	949.1	896.4	52.73	17.999		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - SULLIVAN 8-6-26 - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 966-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		
7,500.0	7,340.6	7,429.5	7,341.0	16.2	20.6	-17.92	781.3	421.2	952.1	933.4	18.64	51.072		
7,600.0	7,378.7	7,464.9	7,376.4	16.2	20.7	-26.08	781.0	421.5	860.3	841.8	18.48	46.547		
7,700.0	7,400.2	7,484.7	7,396.2	16.3	20.7	-49.69	780.8	421.6	763.6	738.9	24.69	30.921		
7,800.0	7,405.0	7,488.8	7,400.2	16.7	20.7	-92.98	780.8	421.7	664.8	633.3	31.48	21.119		
7,900.0	7,405.0	7,488.1	7,399.6	17.1	20.7	-92.62	780.8	421.7	566.1	534.1	32.06	17.661		
8,000.0	7,405.0	7,487.5	7,398.9	17.8	20.7	-92.25	780.8	421.7	468.1	435.2	32.82	14.263		
8,100.0	7,405.0	7,486.8	7,398.3	18.6	20.7	-91.87	780.8	421.7	371.0	337.3	33.73	10.998		
8,200.0	7,405.0	7,486.1	7,397.6	19.5	20.7	-91.49	780.8	421.7	276.1	241.3	34.78	7.937		
8,300.0	7,405.0	7,485.5	7,396.9	20.5	20.7	-91.11	780.8	421.7	186.5	150.5	35.93	5.189		
8,400.0	7,405.0	7,484.8	7,396.3	21.6	20.7	-90.72	780.8	421.6	115.5	78.3	37.18	3.106		
8,457.2	7,405.0	7,484.4	7,395.9	22.3	20.7	-90.49	780.8	421.6	100.3	62.4	37.93	2.645 CC, ES, SF		
8,500.0	7,405.0	7,484.1	7,395.6	22.8	20.7	-90.32	780.8	421.6	109.1	70.6	38.49	2.833		
8,600.0	7,405.0	7,483.4	7,394.9	24.1	20.7	-89.93	780.8	421.6	174.5	134.7	39.87	4.378		
8,700.0	7,405.0	7,482.7	7,394.2	25.4	20.7	-89.52	780.8	421.6	262.7	221.4	41.29	6.363		
8,800.0	7,405.0	7,482.0	7,393.5	26.8	20.7	-89.12	780.8	421.6	357.2	314.4	42.75	8.355		
8,900.0	7,405.0	7,481.3	7,392.7	28.2	20.7	-88.70	780.8	421.6	454.0	409.8	44.25	10.261		
9,000.0	7,405.0	7,480.5	7,392.0	29.7	20.7	-88.29	780.8	421.6	552.0	506.2	45.77	12.060		
9,100.0	7,405.0	7,479.8	7,391.3	31.1	20.7	-87.87	780.8	421.6	650.6	603.3	47.31	13.751		
9,200.0	7,405.0	7,479.0	7,390.5	32.6	20.7	-87.44	780.9	421.6	749.5	700.7	48.87	15.337		
9,300.0	7,405.0	7,478.3	7,389.8	34.2	20.7	-87.01	780.9	421.6	848.7	798.3	50.45	16.825		
9,400.0	7,405.0	7,477.5	7,389.0	35.7	20.7	-86.57	780.9	421.6	948.1	896.1	52.03	18.222		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4L-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 4L-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 #2	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 4L-26H-P268

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.35°

