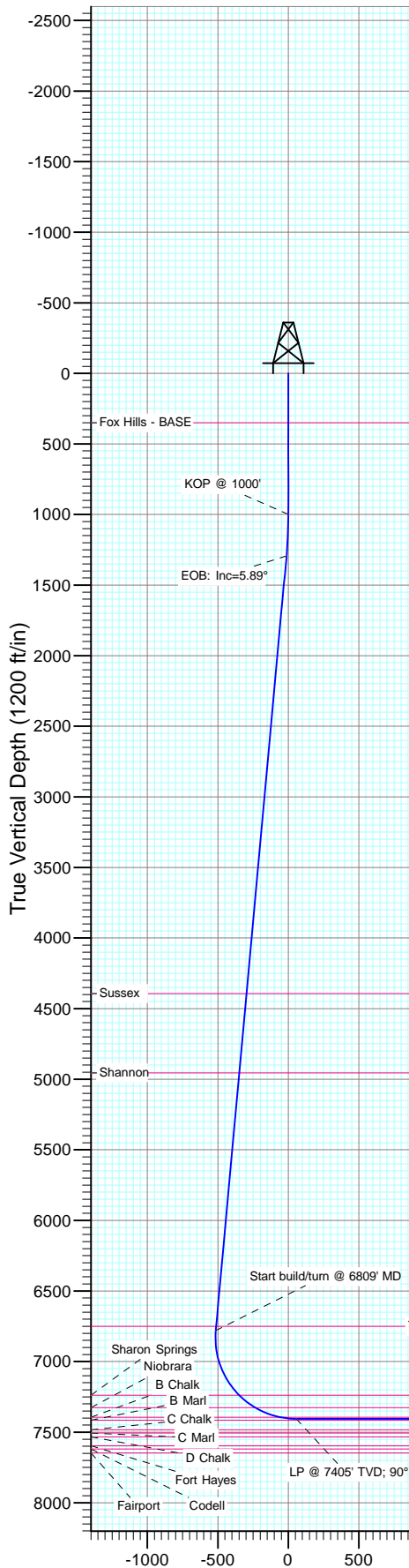
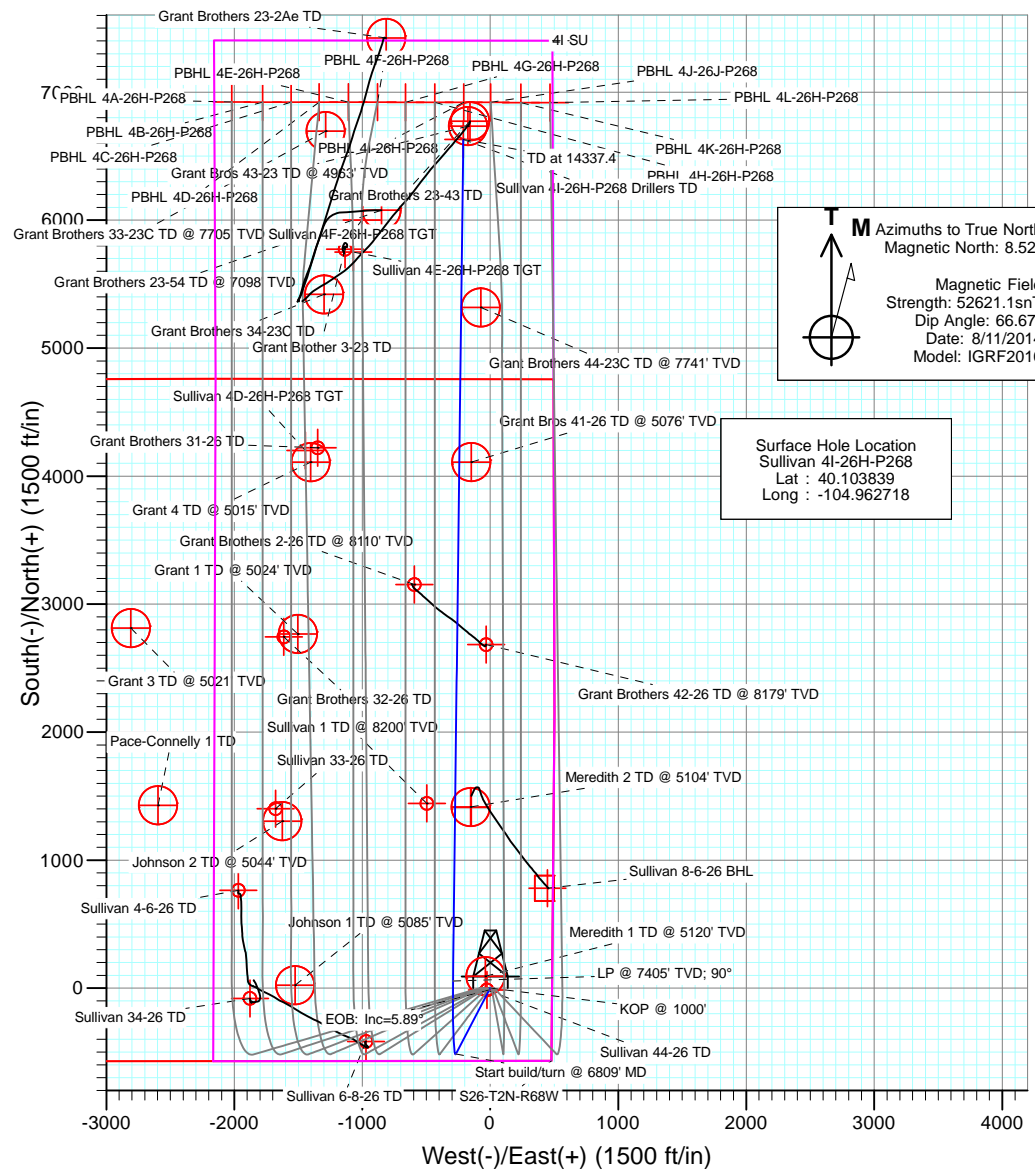




Project: DJ Wattenberg
Site: S26-T2N-R68W (Sullivan)
Well: Sullivan 4I-26H-P268
Wellbore: HZ
Design: Plan #1



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1294.3	5.89	207.64	1293.8	-13.4	-7.0	2.00	207.64	-13.4	
4	6809.9	5.89	207.64	6780.3	-514.5	-269.4	0.00	0.00	-514.5	
5	7762.4	90.00	0.70	7405.0	56.4	-291.6	10.00	152.94	56.4	
6	14337.4	90.00	0.70	7405.0	6630.9	-211.3	0.00	0.00	6630.9	Sullivan 4I-26H-P268 Drillers TD



DESIGN TARGET DETAILS						
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL 4I-26H-P268	6919.5	-207.8	1288048.85	3150047.97	40.122834	-104.963461
Sullivan 4I-26H-P268 Drillers TD	6630.9	-211.3	1287760.24	3150046.20	40.122042	-104.963474

Plan #1
Sullivan 4I-26H-P268
well @ 4997.0ft
Ground Elevation @ 4965.0
North American Datum 1983
Well Sullivan 4I-26H-P268, True North

Vertical Section at 0.00° (1200 ft/in)

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	well @ 4997.0ft
Project:	DJ Wattenberg	MD Reference:	well @ 4997.0ft
Site:	S26-T2N-R68W (Sullivan)	North Reference:	True
Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

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

Site		S26-T2N-R68W (Sullivan)			
Site Position:		Northing:	1,282,631.01 ft	Latitude:	40.107960
From:	Lat/Long	Easting:	3,150,139.78 ft	Longitude:	-104.963250
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.35 °

Well	Sullivan 4I-26H-P268					
Well Position	+N/-S	0.0 ft	Northing:	1,281,130.72 ft	Latitude:	40.103839
	+E/-W	0.0 ft	Easting:	3,150,297.67 ft	Longitude:	-104.962718
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level:	4,965.0 ft

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

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

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,294.3	5.89	207.64	1,293.8	-13.4	-7.0	2.00	2.00	0.00	207.64	
6,809.9	5.89	207.64	6,780.3	-514.5	-269.4	0.00	0.00	0.00	0.00	
7,762.4	90.00	0.70	7,405.0	56.4	-291.6	10.00	8.83	16.07	152.94	
14,337.4	90.00	0.70	7,405.0	6,630.9	-211.3	0.00	0.00	0.00	0.00	Sullivan 4I-26H-P268

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	well @ 4997.0ft
Project:	DJ Wattenberg	MD Reference:	well @ 4997.0ft
Site:	S26-T2N-R68W (Sullivan)	North Reference:	True
Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
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	207.64	1,100.0	-1.5	-0.8	-1.5	2.00	2.00	
1,200.0	4.00	207.64	1,199.8	-6.2	-3.2	-6.2	2.00	2.00	
1,294.3	5.89	207.64	1,293.8	-13.4	-7.0	-13.4	2.00	2.00	EOB: Inc=5.89°
1,300.0	5.89	207.64	1,299.5	-13.9	-7.3	-13.9	0.00	0.00	
1,400.0	5.89	207.64	1,398.9	-23.0	-12.0	-23.0	0.00	0.00	
1,500.0	5.89	207.64	1,498.4	-32.1	-16.8	-32.1	0.00	0.00	
1,600.0	5.89	207.64	1,597.9	-41.2	-21.6	-41.2	0.00	0.00	
1,700.0	5.89	207.64	1,697.3	-50.2	-26.3	-50.2	0.00	0.00	
1,800.0	5.89	207.64	1,796.8	-59.3	-31.1	-59.3	0.00	0.00	
1,900.0	5.89	207.64	1,896.3	-68.4	-35.8	-68.4	0.00	0.00	
2,000.0	5.89	207.64	1,995.8	-77.5	-40.6	-77.5	0.00	0.00	
2,100.0	5.89	207.64	2,095.2	-86.6	-45.3	-86.6	0.00	0.00	
2,200.0	5.89	207.64	2,194.7	-95.7	-50.1	-95.7	0.00	0.00	
2,300.0	5.89	207.64	2,294.2	-104.7	-54.9	-104.7	0.00	0.00	
2,400.0	5.89	207.64	2,393.7	-113.8	-59.6	-113.8	0.00	0.00	
2,500.0	5.89	207.64	2,493.1	-122.9	-64.4	-122.9	0.00	0.00	
2,600.0	5.89	207.64	2,592.6	-132.0	-69.1	-132.0	0.00	0.00	
2,700.0	5.89	207.64	2,692.1	-141.1	-73.9	-141.1	0.00	0.00	
2,800.0	5.89	207.64	2,791.5	-150.2	-78.6	-150.2	0.00	0.00	
2,900.0	5.89	207.64	2,891.0	-159.3	-83.4	-159.3	0.00	0.00	
3,000.0	5.89	207.64	2,990.5	-168.3	-88.2	-168.3	0.00	0.00	
3,100.0	5.89	207.64	3,090.0	-177.4	-92.9	-177.4	0.00	0.00	
3,200.0	5.89	207.64	3,189.4	-186.5	-97.7	-186.5	0.00	0.00	
3,300.0	5.89	207.64	3,288.9	-195.6	-102.4	-195.6	0.00	0.00	
3,400.0	5.89	207.64	3,388.4	-204.7	-107.2	-204.7	0.00	0.00	
3,500.0	5.89	207.64	3,487.9	-213.8	-111.9	-213.8	0.00	0.00	
3,600.0	5.89	207.64	3,587.3	-222.8	-116.7	-222.8	0.00	0.00	
3,700.0	5.89	207.64	3,686.8	-231.9	-121.5	-231.9	0.00	0.00	
3,800.0	5.89	207.64	3,786.3	-241.0	-126.2	-241.0	0.00	0.00	
3,900.0	5.89	207.64	3,885.8	-250.1	-131.0	-250.1	0.00	0.00	
4,000.0	5.89	207.64	3,985.2	-259.2	-135.7	-259.2	0.00	0.00	
4,100.0	5.89	207.64	4,084.7	-268.3	-140.5	-268.3	0.00	0.00	
4,200.0	5.89	207.64	4,184.2	-277.4	-145.3	-277.4	0.00	0.00	
4,300.0	5.89	207.64	4,283.6	-286.4	-150.0	-286.4	0.00	0.00	
4,400.0	5.89	207.64	4,383.1	-295.5	-154.8	-295.5	0.00	0.00	
4,409.9	5.89	207.64	4,393.0	-296.4	-155.2	-296.4	0.00	0.00	Sussex
4,500.0	5.89	207.64	4,482.6	-304.6	-159.5	-304.6	0.00	0.00	
4,600.0	5.89	207.64	4,582.1	-313.7	-164.3	-313.7	0.00	0.00	
4,700.0	5.89	207.64	4,681.5	-322.8	-169.0	-322.8	0.00	0.00	
4,800.0	5.89	207.64	4,781.0	-331.9	-173.8	-331.9	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	well @ 4997.0ft
Project:	DJ Wattenberg	MD Reference:	well @ 4997.0ft
Site:	S26-T2N-R68W (Sullivan)	North Reference:	True
Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,900.0	5.89	207.64	4,880.5	-340.9	-178.6	-340.9	0.00	0.00	
4,973.9	5.89	207.64	4,954.0	-347.7	-182.1	-347.7	0.00	0.00	Shannon
5,000.0	5.89	207.64	4,980.0	-350.0	-183.3	-350.0	0.00	0.00	
5,100.0	5.89	207.64	5,079.4	-359.1	-188.1	-359.1	0.00	0.00	
5,200.0	5.89	207.64	5,178.9	-368.2	-192.8	-368.2	0.00	0.00	
5,300.0	5.89	207.64	5,278.4	-377.3	-197.6	-377.3	0.00	0.00	
5,400.0	5.89	207.64	5,377.8	-386.4	-202.3	-386.4	0.00	0.00	
5,500.0	5.89	207.64	5,477.3	-395.5	-207.1	-395.5	0.00	0.00	
5,600.0	5.89	207.64	5,576.8	-404.5	-211.9	-404.5	0.00	0.00	
5,700.0	5.89	207.64	5,676.3	-413.6	-216.6	-413.6	0.00	0.00	
5,800.0	5.89	207.64	5,775.7	-422.7	-221.4	-422.7	0.00	0.00	
5,900.0	5.89	207.64	5,875.2	-431.8	-226.1	-431.8	0.00	0.00	
6,000.0	5.89	207.64	5,974.7	-440.9	-230.9	-440.9	0.00	0.00	
6,100.0	5.89	207.64	6,074.2	-450.0	-235.7	-450.0	0.00	0.00	
6,200.0	5.89	207.64	6,173.6	-459.0	-240.4	-459.0	0.00	0.00	
6,300.0	5.89	207.64	6,273.1	-468.1	-245.2	-468.1	0.00	0.00	
6,400.0	5.89	207.64	6,372.6	-477.2	-249.9	-477.2	0.00	0.00	
6,500.0	5.89	207.64	6,472.1	-486.3	-254.7	-486.3	0.00	0.00	
6,600.0	5.89	207.64	6,571.5	-495.4	-259.4	-495.4	0.00	0.00	
6,700.0	5.89	207.64	6,671.0	-504.5	-264.2	-504.5	0.00	0.00	
6,779.4	5.89	207.64	6,750.0	-511.7	-268.0	-511.7	0.00	0.00	Teepee Buttes (*if present)
6,800.0	5.89	207.64	6,770.5	-513.6	-269.0	-513.6	0.00	0.00	
6,809.9	5.89	207.64	6,780.3	-514.5	-269.4	-514.5	0.00	0.00	Start build/turn @ 6809' MD
6,900.0	4.61	325.33	6,870.2	-515.6	-273.6	-515.6	10.00	-1.41	
7,000.0	14.01	349.91	6,968.8	-500.3	-278.1	-500.3	10.00	9.40	
7,100.0	23.90	354.65	7,063.3	-468.1	-282.1	-468.1	10.00	9.89	
7,200.0	33.85	356.71	7,150.7	-420.0	-285.6	-420.0	10.00	9.95	
7,300.0	43.83	357.91	7,228.5	-357.4	-288.4	-357.4	10.00	9.97	
7,313.3	45.15	358.04	7,238.0	-348.2	-288.8	-348.2	10.01	9.99	Sharon Springs
7,400.0	53.81	358.74	7,294.3	-282.3	-290.6	-282.3	10.00	9.98	
7,457.8	59.58	359.13	7,326.0	-234.1	-291.5	-234.1	10.00	9.99	Niobrara
7,500.0	63.79	359.38	7,346.0	-196.9	-292.0	-196.9	10.00	9.98	
7,600.0	73.78	359.92	7,382.2	-103.8	-292.5	-103.8	10.00	9.99	
7,649.9	78.76	0.17	7,394.0	-55.4	-292.5	-55.4	10.00	9.99	B Chalk
7,700.0	83.77	0.41	7,401.6	-5.8	-292.2	-5.8	10.00	9.99	
7,762.4	90.00	0.70	7,405.0	56.4	-291.6	56.4	10.00	9.99	LP @ 7405' TVD; 90°
7,800.0	90.00	0.70	7,405.0	94.0	-291.2	94.0	0.00	0.00	
7,900.0	90.00	0.70	7,405.0	194.0	-290.0	194.0	0.00	0.00	
8,000.0	90.00	0.70	7,405.0	294.0	-288.7	294.0	0.00	0.00	
8,100.0	90.00	0.70	7,405.0	394.0	-287.5	394.0	0.00	0.00	
8,200.0	90.00	0.70	7,405.0	494.0	-286.3	494.0	0.00	0.00	
8,300.0	90.00	0.70	7,405.0	594.0	-285.1	594.0	0.00	0.00	
8,400.0	90.00	0.70	7,405.0	694.0	-283.8	694.0	0.00	0.00	
8,500.0	90.00	0.70	7,405.0	794.0	-282.6	794.0	0.00	0.00	
8,600.0	90.00	0.70	7,405.0	894.0	-281.4	894.0	0.00	0.00	
8,700.0	90.00	0.70	7,405.0	994.0	-280.2	994.0	0.00	0.00	
8,800.0	90.00	0.70	7,405.0	1,094.0	-279.0	1,094.0	0.00	0.00	
8,900.0	90.00	0.70	7,405.0	1,194.0	-277.7	1,194.0	0.00	0.00	
9,000.0	90.00	0.70	7,405.0	1,294.0	-276.5	1,294.0	0.00	0.00	
9,100.0	90.00	0.70	7,405.0	1,393.9	-275.3	1,393.9	0.00	0.00	
9,200.0	90.00	0.70	7,405.0	1,493.9	-274.1	1,493.9	0.00	0.00	
9,300.0	90.00	0.70	7,405.0	1,593.9	-272.8	1,593.9	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	well @ 4997.0ft
Project:	DJ Wattenberg	MD Reference:	well @ 4997.0ft
Site:	S26-T2N-R68W (Sullivan)	North Reference:	True
Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
9,400.0	90.00	0.70	7,405.0	1,693.9	-271.6	1,693.9	0.00	0.00	
9,500.0	90.00	0.70	7,405.0	1,793.9	-270.4	1,793.9	0.00	0.00	
9,600.0	90.00	0.70	7,405.0	1,893.9	-269.2	1,893.9	0.00	0.00	
9,700.0	90.00	0.70	7,405.0	1,993.9	-268.0	1,993.9	0.00	0.00	
9,800.0	90.00	0.70	7,405.0	2,093.9	-266.7	2,093.9	0.00	0.00	
9,900.0	90.00	0.70	7,405.0	2,193.9	-265.5	2,193.9	0.00	0.00	
10,000.0	90.00	0.70	7,405.0	2,293.9	-264.3	2,293.9	0.00	0.00	
10,100.0	90.00	0.70	7,405.0	2,393.9	-263.1	2,393.9	0.00	0.00	
10,200.0	90.00	0.70	7,405.0	2,493.9	-261.9	2,493.9	0.00	0.00	
10,300.0	90.00	0.70	7,405.0	2,593.9	-260.6	2,593.9	0.00	0.00	
10,400.0	90.00	0.70	7,405.0	2,693.9	-259.4	2,693.9	0.00	0.00	
10,500.0	90.00	0.70	7,405.0	2,793.8	-258.2	2,793.8	0.00	0.00	
10,600.0	90.00	0.70	7,405.0	2,893.8	-257.0	2,893.8	0.00	0.00	
10,700.0	90.00	0.70	7,405.0	2,993.8	-255.7	2,993.8	0.00	0.00	
10,800.0	90.00	0.70	7,405.0	3,093.8	-254.5	3,093.8	0.00	0.00	
10,900.0	90.00	0.70	7,405.0	3,193.8	-253.3	3,193.8	0.00	0.00	
11,000.0	90.00	0.70	7,405.0	3,293.8	-252.1	3,293.8	0.00	0.00	
11,100.0	90.00	0.70	7,405.0	3,393.8	-250.9	3,393.8	0.00	0.00	
11,200.0	90.00	0.70	7,405.0	3,493.8	-249.6	3,493.8	0.00	0.00	
11,300.0	90.00	0.70	7,405.0	3,593.8	-248.4	3,593.8	0.00	0.00	
11,400.0	90.00	0.70	7,405.0	3,693.8	-247.2	3,693.8	0.00	0.00	
11,500.0	90.00	0.70	7,405.0	3,793.8	-246.0	3,793.8	0.00	0.00	
11,600.0	90.00	0.70	7,405.0	3,893.8	-244.7	3,893.8	0.00	0.00	
11,700.0	90.00	0.70	7,405.0	3,993.8	-243.5	3,993.8	0.00	0.00	
11,800.0	90.00	0.70	7,405.0	4,093.7	-242.3	4,093.7	0.00	0.00	
11,900.0	90.00	0.70	7,405.0	4,193.7	-241.1	4,193.7	0.00	0.00	
12,000.0	90.00	0.70	7,405.0	4,293.7	-239.9	4,293.7	0.00	0.00	
12,100.0	90.00	0.70	7,405.0	4,393.7	-238.6	4,393.7	0.00	0.00	
12,200.0	90.00	0.70	7,405.0	4,493.7	-237.4	4,493.7	0.00	0.00	
12,300.0	90.00	0.70	7,405.0	4,593.7	-236.2	4,593.7	0.00	0.00	
12,400.0	90.00	0.70	7,405.0	4,693.7	-235.0	4,693.7	0.00	0.00	
12,500.0	90.00	0.70	7,405.0	4,793.7	-233.8	4,793.7	0.00	0.00	
12,600.0	90.00	0.70	7,405.0	4,893.7	-232.5	4,893.7	0.00	0.00	
12,700.0	90.00	0.70	7,405.0	4,993.7	-231.3	4,993.7	0.00	0.00	
12,800.0	90.00	0.70	7,405.0	5,093.7	-230.1	5,093.7	0.00	0.00	
12,900.0	90.00	0.70	7,405.0	5,193.7	-228.9	5,193.7	0.00	0.00	
13,000.0	90.00	0.70	7,405.0	5,293.7	-227.6	5,293.7	0.00	0.00	
13,100.0	90.00	0.70	7,405.0	5,393.7	-226.4	5,393.7	0.00	0.00	
13,200.0	90.00	0.70	7,405.0	5,493.6	-225.2	5,493.6	0.00	0.00	
13,300.0	90.00	0.70	7,405.0	5,593.6	-224.0	5,593.6	0.00	0.00	
13,400.0	90.00	0.70	7,405.0	5,693.6	-222.8	5,693.6	0.00	0.00	
13,500.0	90.00	0.70	7,405.0	5,793.6	-221.5	5,793.6	0.00	0.00	
13,600.0	90.00	0.70	7,405.0	5,893.6	-220.3	5,893.6	0.00	0.00	
13,700.0	90.00	0.70	7,405.0	5,993.6	-219.1	5,993.6	0.00	0.00	
13,800.0	90.00	0.70	7,405.0	6,093.6	-217.9	6,093.6	0.00	0.00	
13,900.0	90.00	0.70	7,405.0	6,193.6	-216.6	6,193.6	0.00	0.00	
14,000.0	90.00	0.70	7,405.0	6,293.6	-215.4	6,293.6	0.00	0.00	
14,100.0	90.00	0.70	7,405.0	6,393.6	-214.2	6,393.6	0.00	0.00	
14,200.0	90.00	0.70	7,405.0	6,493.6	-213.0	6,493.6	0.00	0.00	
14,300.0	90.00	0.70	7,405.0	6,593.6	-211.8	6,593.6	0.00	0.00	
14,337.4	90.00	0.70	7,405.0	6,630.9	-211.3	6,630.9	0.00	0.00	TD at 14337.4

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	well @ 4997.0ft
Project:	DJ Wattenberg	MD Reference:	well @ 4997.0ft
Site:	S26-T2N-R68W (Sullivan)	North Reference:	True
Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
Sullivan 4I-26H-P268 Dr	0.00	0.00	7,405.0	6,630.9	-211.3	1,287,760.24	3,150,046.20	40.122042	-104.963474
- plan hits target center									
- Point									
PBHL 4I-26H-P268	0.00	0.00	7,405.0	6,919.5	-207.8	1,288,048.85	3,150,047.97	40.122834	-104.963461
- plan misses target center by 288.6ft at 14337.4ft MD (7405.0 TVD, 6630.9 N, -211.3 E)									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
350.0	350.0	Fox Hills - BASE				
4,409.9	4,393.0	Sussex				
4,973.9	4,954.0	Shannon				
6,779.4	6,750.0	Teepee Buttes (*if present)				
7,313.3	7,238.0	Sharon Springs				
7,457.8	7,326.0	Niobrara				
7,649.9	7,394.0	B Chalk				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)		
1,000.0	1,000.0	0.0	0.0	KOP @ 1000'	
1,294.3	1,293.8	-13.4	-7.0	EOB: Inc=5.89°	
6,809.9	6,780.3	-514.5	-269.4	Start build/turn @ 6809' MD	
7,762.4	7,405.0	56.4	-291.6	LP @ 7405' TVD; 90°	
14,337.4	7,405.0	6,630.9	-211.3	TD at 14337.4	

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S26-T2N-R68W (Sullivan)

Sullivan 4I-26H-P268

HZ

Plan #1

Anticollision Report

26 August, 2014

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	Systematic Ellipse
Depth Range:	0.0 to 14,337.0ft	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	8/26/2014		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	14,628.6	Plan #1 (HZ)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S26-T2N-R68W (Sullivan)						
BERGER 32-23 (EXISTING) - SUNDANCE WELL - NO S						Out of range
BERGER 42-23C (EXISTING) - SUNDANCE WELL - NO						Out of range
GRANT 1 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
GRANT 3 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
GRANT 4 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
GRANT BROS 41-26 (EXISTING) - SUNDANCE WELL -						Out of range
GRANT BROS 43-23 (EXISTING) - SUNDANCE WELL -						Out of range
GRANT BROTHERS 2-26 (EXISTING) - ENCANA WELL	10,854.9	7,353.0	339.4	268.1	4.763	CC, ES
GRANT BROTHERS 2-26 (EXISTING) - ENCANA WELL	10,900.0	7,353.0	342.4	270.4	4.754	SF
GRANT BROTHERS 23-43 (EXISTING) - SUNDANCE W	14,300.0	7,626.7	178.9	32.5	1.222	Level 2, CC, ES, SF
GRANT BROTHERS 23-54 (EXISTING) - SUNDANCE W	13,776.3	7,210.0	672.7	553.2	5.631	CC, ES
GRANT BROTHERS 23-54 (EXISTING) - SUNDANCE W	13,800.0	7,210.0	673.1	553.2	5.617	SF
GRANT BROTHERS 31-26 (EXISTING) - ENCANA WEL						Out of range
GRANT BROTHERS 32-26 (EXISTING) - ENCANA WEL						Out of range
GRANT BROTHERS 3-23 (EXISTING) - ENCANA WELL	13,474.6	7,356.1	917.0	806.9	8.327	CC
GRANT BROTHERS 3-23 (EXISTING) - ENCANA WELL	13,500.0	7,355.7	917.3	806.8	8.297	ES
GRANT BROTHERS 3-23 (EXISTING) - ENCANA WELL	13,600.0	7,354.0	925.5	813.2	8.241	SF
GRANT BROTHERS 33-23C (EXISTING) - SUNDANCE						Out of range
GRANT BROTHERS 34-23C (EXISTING) - SUNDANCE						Out of range
GRANT BROTHERS 42-26 (EXISTING) - ENCANA WEL	10,387.9	7,421.1	223.6	157.6	3.390	CC, ES
GRANT BROTHERS 42-26 (EXISTING) - ENCANA WEL	10,400.0	7,421.2	223.9	157.7	3.385	SF
GRANT BROTHERS 44-23C (EXISTING) - SUNDANCE	13,025.6	7,365.0	152.7	43.9	1.404	Level 3, CC, ES, SF
JOHNSON 1 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
JOHNSON 2 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
MEREDITH 1 (EXISTING) - KPK WELL - NO SURVEYS	1,000.0	962.0	100.6	97.3	29.873	CC, ES
MEREDITH 1 (EXISTING) - KPK WELL - NO SURVEYS	1,700.0	1,659.3	144.0	138.1	24.594	SF
MEREDITH 2 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
PACE-CONNELLY 1 (EXISTING) - FOUNDATION WELL						Out of range
SULLIVAN 1 (EXISTING) - ENCANA WELL - NO SURVE	9,146.3	7,366.0	221.5	178.6	5.166	CC, ES, SF
SULLIVAN 33-26 (EXISTING) - ENCANA WELL - NO SU						Out of range
SULLIVAN 34-26 (EXISTING) - ENCANA WELL - SURVE						Out of range
SULLIVAN 44-26 (EXISTING) - ENCANA WELL - NO SU	1,394.2	1,357.2	17.0	12.2	3.546	CC
SULLIVAN 44-26 (EXISTING) - ENCANA WELL - NO SU	1,400.0	1,362.9	17.0	12.2	3.532	ES, SF
SULLIVAN 4-6-26 (EXISTING) - ENCANA WELL - SURV						Out of range
Sullivan 4A-26H-P268 - HZ - Plan #1	200.0	198.0	80.0	79.4	137.241	CC, ES
Sullivan 4A-26H-P268 - HZ - Plan #1	800.0	774.6	138.7	136.0	51.618	SF
Sullivan 4B-26H-P268 - HZ - Plan #1	300.0	299.0	69.9	69.0	74.895	CC, ES
Sullivan 4B-26H-P268 - HZ - Plan #1	700.0	687.6	95.9	93.6	41.369	SF
Sullivan 4C-26H-P268 - HZ - Plan #1	400.0	399.0	59.9	58.6	46.665	CC, ES
Sullivan 4C-26H-P268 - HZ - Plan #1	700.0	692.3	74.3	72.0	32.022	SF
Sullivan 4D-26H-P268 - HZ - Plan #1	500.0	499.0	50.1	48.4	30.684	CC, ES
Sullivan 4D-26H-P268 - HZ - Plan #1	800.0	793.3	64.3	61.7	24.095	SF
Sullivan 4E-26H-P268 - HZ - Plan #1	600.0	599.0	40.0	38.0	20.194	CC, ES
Sullivan 4E-26H-P268 - HZ - Plan #1	14,300.0	14,601.7	925.9	696.7	4.041	SF
Sullivan 4F-26H-P268 - HZ - Plan #1	700.0	699.0	29.9	27.6	12.846	CC, ES
Sullivan 4F-26H-P268 - HZ - Plan #1	14,300.0	14,349.4	670.0	434.0	2.839	SF
Sullivan 4G-26H-P268 - HZ - Plan #1	800.0	799.0	19.9	17.2	7.413	CC, ES
Sullivan 4G-26H-P268 - HZ - Plan #1	14,300.0	14,416.1	460.1	228.5	1.987	SF
Sullivan 4H-26H-P268 - HZ - Plan #1	900.0	900.0	10.1	7.0	3.324	CC, ES
Sullivan 4H-26H-P268 - HZ - Plan #1	14,300.0	14,532.5	316.9	147.3	1.869	SF
Sullivan 4J-26H-P268 - HZ - Plan #1	1,000.0	999.0	10.1	6.7	2.982	CC, ES
Sullivan 4J-26H-P268 - HZ - Plan #1	14,300.0	14,401.2	250.8	29.8	1.135	Level 2, SF
Sullivan 4K-26H-P268 - HZ - Plan #1	1,000.0	999.0	20.1	16.8	5.964	CC, ES

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S26-T2N-R68W (Sullivan)						
Sullivan 4K-26H-P268 - HZ - Plan #1	14,300.0	14,522.0	504.6	292.2	2.376	SF
Sullivan 4L-26H-P268 - HZ - Plan #1	1,000.0	999.0	29.9	26.6	8.863	CC, ES
Sullivan 4L-26H-P268 - HZ - Plan #1	14,300.0	14,326.8	682.4	446.0	2.886	SF
SULLIVAN 6-8-26 (EXISTING) - ENCANA WELL - SURV	7,238.6	7,263.9	692.4	663.1	23.626	CC, ES, SF
SULLIVAN 8-6-26 (EXISTING) - ENCANA WELL - SURV	8,495.5	7,476.1	734.3	696.4	19.374	CC
SULLIVAN 8-6-26 (EXISTING) - ENCANA WELL - SURV	8,500.0	7,476.1	734.3	696.3	19.345	ES
SULLIVAN 8-6-26 (EXISTING) - ENCANA WELL - SURV	8,700.0	7,474.6	762.2	721.5	18.710	SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - GRANT BROTHERS 2-26 (EXISTING) - ENCANA WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8110-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		
10,000.0	7,405.0	7,353.0	7,353.0	44.3	12.8	-90.00	3,152.9	-593.2	919.8	863.0	56.78	16.199		
10,100.0	7,405.0	7,353.0	7,353.0	45.9	12.8	-90.00	3,152.9	-593.2	827.7	769.2	58.46	14.159		
10,200.0	7,405.0	7,353.0	7,353.0	47.6	12.8	-90.00	3,152.9	-593.2	737.6	677.5	60.14	12.265		
10,300.0	7,405.0	7,353.0	7,353.0	49.3	12.8	-90.00	3,152.9	-593.2	650.5	588.7	61.83	10.521		
10,400.0	7,405.0	7,353.0	7,353.0	50.9	12.8	-90.00	3,152.9	-593.2	567.6	504.1	63.52	8.936		
10,500.0	7,405.0	7,353.0	7,353.0	52.6	12.8	-90.00	3,152.9	-593.2	491.1	425.9	65.21	7.531		
10,600.0	7,405.0	7,353.0	7,353.0	54.3	12.8	-90.00	3,152.9	-593.2	424.5	357.6	66.91	6.344		
10,700.0	7,405.0	7,353.0	7,353.0	56.0	12.8	-90.00	3,152.9	-593.2	373.1	304.5	68.61	5.438		
10,800.0	7,405.0	7,353.0	7,353.0	57.7	12.8	-90.00	3,152.9	-593.2	343.8	273.5	70.32	4.889		
10,854.9	7,405.0	7,353.0	7,353.0	58.6	12.8	-90.00	3,152.9	-593.2	339.4	268.1	71.26	4.763 CC, ES		
10,900.0	7,405.0	7,353.0	7,353.0	59.4	12.8	-90.00	3,152.9	-593.2	342.4	270.4	72.03	4.754 SF		
11,000.0	7,405.0	7,353.0	7,353.0	61.1	12.8	-90.00	3,152.9	-593.2	369.1	295.4	73.74	5.006		
11,100.0	7,405.0	7,353.0	7,353.0	62.8	12.8	-90.00	3,152.9	-593.2	418.6	343.2	75.45	5.549		
11,200.0	7,405.0	7,353.0	7,353.0	64.5	12.8	-90.00	3,152.9	-593.2	484.0	406.9	77.16	6.273		
11,300.0	7,405.0	7,353.0	7,353.0	66.2	12.8	-90.00	3,152.9	-593.2	559.7	480.8	78.88	7.096		
11,400.0	7,405.0	7,353.0	7,353.0	68.0	12.8	-90.00	3,152.9	-593.2	642.1	561.5	80.60	7.967		
11,500.0	7,405.0	7,353.0	7,353.0	69.7	12.8	-90.00	3,152.9	-593.2	728.9	646.6	82.32	8.855		
11,600.0	7,405.0	7,353.0	7,353.0	71.4	12.8	-90.00	3,152.9	-593.2	818.7	734.7	84.04	9.742		
11,700.0	7,405.0	7,353.0	7,353.0	73.1	12.8	-90.00	3,152.9	-593.2	910.7	824.9	85.77	10.618		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - GRANT BROTHERS 23-43 (EXISTING) - 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							
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
13,500.0	7,405.0	7,612.6	7,309.9	104.3	36.6	71.21	6,764.2	-159.3	972.8	846.7	126.11	7.714	
13,600.0	7,405.0	7,614.4	7,311.6	106.0	36.6	73.01	6,764.3	-159.3	873.0	744.0	128.97	6.769	
13,700.0	7,405.0	7,616.1	7,313.4	107.7	36.6	74.85	6,764.3	-159.3	773.2	641.4	131.76	5.868	
13,800.0	7,405.0	7,617.9	7,315.1	109.5	36.6	76.73	6,764.3	-159.3	673.4	538.9	134.47	5.008	
13,900.0	7,405.0	7,619.7	7,316.9	111.2	36.6	78.64	6,764.4	-159.3	573.8	436.7	137.09	4.185	
14,000.0	7,405.0	7,621.4	7,318.6	113.0	36.6	80.58	6,764.4	-159.3	474.2	334.6	139.60	3.397	
14,100.0	7,405.0	7,623.2	7,320.4	114.7	36.6	82.54	6,764.4	-159.3	375.0	233.0	141.98	2.641	
14,200.0	7,405.0	7,625.0	7,322.2	116.4	36.6	84.53	6,764.5	-159.3	276.2	132.0	144.23	1.915	
14,300.0	7,405.0	7,626.7	7,323.9	118.2	36.6	86.53	6,764.5	-159.3	178.9	32.5	146.32	1.222	Level 2, CC, ES, SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - GRANT BROTHERS 23-54 (EXISTING) - SUNDANCE WELL - NO SURVE													Offset Site Error: 0.0 ft
Survey Program: 118-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	
13,100.0	7,405.0	7,210.0	7,098.0	97.3	21.2	-70.00	6,077.6	-850.2	953.9	845.5	108.39	8.801	
13,200.0	7,405.0	7,210.0	7,098.0	99.1	21.2	-70.00	6,077.6	-850.2	885.8	775.8	110.02	8.051	
13,300.0	7,405.0	7,210.0	7,098.0	100.8	21.2	-70.00	6,077.6	-850.2	824.2	712.6	111.65	7.382	
13,400.0	7,405.0	7,210.0	7,098.0	102.5	21.2	-70.00	6,077.6	-850.2	770.8	657.5	113.29	6.804	
13,500.0	7,405.0	7,210.0	7,098.0	104.3	21.2	-70.00	6,077.6	-850.2	727.2	612.3	114.92	6.328	
13,600.0	7,405.0	7,210.0	7,098.0	106.0	21.2	-70.00	6,077.6	-850.2	695.4	578.8	116.56	5.966	
13,700.0	7,405.0	7,210.0	7,098.0	107.7	21.2	-70.00	6,077.6	-850.2	677.0	558.8	118.20	5.728	
13,776.3	7,405.0	7,210.0	7,098.0	109.1	21.2	-70.00	6,077.6	-850.2	672.7	553.2	119.45	5.631	CC, ES
13,800.0	7,405.0	7,210.0	7,098.0	109.5	21.2	-70.00	6,077.6	-850.2	673.1	553.2	119.83	5.617	SF
13,900.0	7,405.0	7,210.0	7,098.0	111.2	21.2	-70.00	6,077.6	-850.2	683.9	562.5	121.47	5.630	
14,000.0	7,405.0	7,210.0	7,098.0	113.0	21.2	-70.00	6,077.6	-850.2	708.9	585.8	123.11	5.758	
14,100.0	7,405.0	7,210.0	7,098.0	114.7	21.2	-70.00	6,077.6	-850.2	746.5	621.7	124.74	5.984	
14,200.0	7,405.0	7,210.0	7,098.0	116.4	21.2	-70.00	6,077.6	-850.2	795.0	668.6	126.38	6.290	
14,300.0	7,405.0	7,210.0	7,098.0	118.2	21.2	-70.00	6,077.6	-850.2	852.5	724.4	128.02	6.659	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - GRANT BROTHERS 3-23 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 100-Gyro													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							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		
13,100.0	7,405.0	7,362.4	7,360.0	97.3	6.4	-91.06	5,779.3	-1,138.6	990.5	886.9	103.60	9.561		
13,200.0	7,405.0	7,360.7	7,358.4	99.1	6.4	-90.96	5,779.3	-1,138.7	957.2	851.9	105.34	9.087		
13,300.0	7,405.0	7,359.0	7,356.7	100.8	6.4	-90.86	5,779.4	-1,138.7	933.5	826.4	107.08	8.717		
13,400.0	7,405.0	7,357.4	7,355.0	102.5	6.4	-90.75	5,779.4	-1,138.7	920.0	811.2	108.82	8.454		
13,474.6	7,405.0	7,356.1	7,353.8	103.8	6.4	-90.67	5,779.4	-1,138.7	917.0	806.9	110.12	8.327 CC		
13,500.0	7,405.0	7,355.7	7,353.3	104.3	6.4	-90.65	5,779.4	-1,138.7	917.3	806.8	110.56	8.297 ES		
13,600.0	7,405.0	7,354.0	7,351.6	106.0	6.4	-90.54	5,779.5	-1,138.7	925.5	813.2	112.30	8.241 SF		
13,700.0	7,405.0	7,352.2	7,349.9	107.7	6.4	-90.43	5,779.5	-1,138.8	944.3	830.2	114.04	8.280		
13,800.0	7,405.0	7,350.5	7,348.2	109.5	6.4	-90.32	5,779.5	-1,138.8	973.0	857.2	115.78	8.404		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - GRANT BROTHERS 42-26 (EXISTING) - 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						Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)			
9,500.0	7,405.0	7,416.8	7,351.7	36.1	18.6	88.89	2,678.9	-36.0	915.6	864.4	51.15	17.900	
9,600.0	7,405.0	7,417.3	7,352.2	37.7	18.6	89.02	2,678.9	-36.0	819.0	766.2	52.78	15.516	
9,700.0	7,405.0	7,417.8	7,352.7	39.3	18.6	89.14	2,678.9	-36.0	723.3	668.8	54.43	13.289	
9,800.0	7,405.0	7,418.3	7,353.1	40.9	18.6	89.27	2,678.9	-36.0	628.9	572.9	56.08	11.214	
9,900.0	7,405.0	7,418.8	7,353.6	42.6	18.6	89.39	2,679.0	-36.0	536.6	478.9	57.74	9.293	
10,000.0	7,405.0	7,419.2	7,354.1	44.3	18.6	89.52	2,679.0	-36.0	447.7	388.3	59.41	7.535	
10,100.0	7,405.0	7,419.7	7,354.6	45.9	18.6	89.64	2,679.0	-36.0	364.5	303.4	61.09	5.966	
10,200.0	7,405.0	7,420.2	7,355.1	47.6	18.6	89.77	2,679.0	-36.0	292.0	229.2	62.77	4.652	
10,300.0	7,405.0	7,420.7	7,355.6	49.3	18.6	89.89	2,679.0	-36.0	240.2	175.8	64.46	3.727	
10,387.9	7,405.0	7,421.1	7,356.0	50.7	18.6	90.00	2,679.0	-36.0	223.6	157.6	65.94	3.390 CC, ES	
10,400.0	7,405.0	7,421.2	7,356.1	50.9	18.6	90.01	2,679.0	-36.0	223.9	157.7	66.15	3.385 SF	
10,500.0	7,405.0	7,421.7	7,356.5	52.6	18.6	90.14	2,679.0	-36.0	250.1	182.3	67.84	3.687	
10,600.0	7,405.0	7,422.1	7,357.0	54.3	18.6	90.26	2,679.0	-36.0	308.2	238.7	69.54	4.432	
10,700.0	7,405.0	7,422.6	7,357.5	56.0	18.6	90.38	2,679.0	-36.0	383.9	312.7	71.24	5.389	
10,800.0	7,405.0	7,423.1	7,358.0	57.7	18.6	90.51	2,679.0	-36.0	468.9	395.9	72.94	6.428	
10,900.0	7,405.0	7,423.6	7,358.5	59.4	18.6	90.63	2,679.0	-36.0	558.8	484.2	74.65	7.486	
11,000.0	7,405.0	7,424.1	7,358.9	61.1	18.6	90.75	2,679.0	-36.0	651.7	575.3	76.36	8.534	
11,100.0	7,405.0	7,424.5	7,359.4	62.8	18.6	90.88	2,679.0	-36.0	746.4	668.3	78.07	9.561	
11,200.0	7,405.0	7,425.0	7,359.9	64.5	18.6	91.00	2,679.0	-36.0	842.3	762.6	79.78	10.558	
11,300.0	7,405.0	7,425.5	7,360.4	66.2	18.7	91.12	2,679.0	-36.0	939.1	857.6	81.49	11.524	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - GRANT BROTHERS 44-23C (EXISTING) - SUNDANCE WELL - NO SURV										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
12,100.0	7,405.0	7,365.0	7,365.0	80.0	12.9	90.00	5,317.4	-74.7	938.1	845.4	92.70	10.120	
12,200.0	7,405.0	7,365.0	7,365.0	81.7	12.9	90.00	5,317.4	-74.7	839.6	745.2	94.43	8.892	
12,300.0	7,405.0	7,365.0	7,365.0	83.5	12.9	90.00	5,317.4	-74.7	741.5	645.4	96.16	7.711	
12,400.0	7,405.0	7,365.0	7,365.0	85.2	12.9	90.00	5,317.4	-74.7	644.0	546.1	97.89	6.579	
12,500.0	7,405.0	7,365.0	7,365.0	86.9	12.9	90.00	5,317.4	-74.7	547.4	447.7	99.62	5.494	
12,600.0	7,405.0	7,365.0	7,365.0	88.7	12.9	90.00	5,317.4	-74.7	452.2	350.8	101.36	4.461	
12,700.0	7,405.0	7,365.0	7,365.0	90.4	12.9	90.00	5,317.4	-74.7	359.6	256.6	103.09	3.489	
12,800.0	7,405.0	7,365.0	7,365.0	92.1	12.9	90.00	5,317.4	-74.7	272.4	167.6	104.83	2.599	
12,900.0	7,405.0	7,365.0	7,365.0	93.9	12.9	90.00	5,317.4	-74.7	197.7	91.2	106.56	1.855	
13,000.0	7,405.0	7,365.0	7,365.0	95.6	12.9	90.00	5,317.4	-74.7	154.8	46.5	108.30	1.429	Level 3
13,025.6	7,405.0	7,365.0	7,365.0	96.0	12.9	90.00	5,317.4	-74.7	152.7	43.9	108.75	1.404	Level 3, CC, ES, SF
13,100.0	7,405.0	7,365.0	7,365.0	97.3	12.9	90.00	5,317.4	-74.7	169.8	59.8	110.04	1.543	
13,200.0	7,405.0	7,365.0	7,365.0	99.1	12.9	90.00	5,317.4	-74.7	231.8	120.0	111.78	2.073	
13,300.0	7,405.0	7,365.0	7,365.0	100.8	12.9	90.00	5,317.4	-74.7	314.0	200.5	113.52	2.766	
13,400.0	7,405.0	7,365.0	7,365.0	102.5	12.9	90.00	5,317.4	-74.7	404.3	289.0	115.25	3.508	
13,500.0	7,405.0	7,365.0	7,365.0	104.3	12.9	90.00	5,317.4	-74.7	498.3	381.3	116.99	4.259	
13,600.0	7,405.0	7,365.0	7,365.0	106.0	12.9	90.00	5,317.4	-74.7	594.3	475.6	118.73	5.005	
13,700.0	7,405.0	7,365.0	7,365.0	107.7	12.9	90.00	5,317.4	-74.7	691.4	571.0	120.47	5.739	
13,800.0	7,405.0	7,365.0	7,365.0	109.5	12.9	90.00	5,317.4	-74.7	789.3	667.1	122.22	6.458	
13,900.0	7,405.0	7,365.0	7,365.0	111.2	12.9	90.00	5,317.4	-74.7	887.6	763.6	123.96	7.161	
14,000.0	7,405.0	7,365.0	7,365.0	113.0	12.9	90.00	5,317.4	-74.7	986.3	860.6	125.70	7.846	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - MEREDITH 1 (EXISTING) - KPK WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 5120-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			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	-22.04	93.3	-37.8	107.6					
100.0	100.0	62.0	62.0	0.1	0.1	-22.04	93.3	-37.8	100.6	100.4	0.23	443.130		
200.0	200.0	162.0	162.0	0.3	0.3	-22.04	93.3	-37.8	100.6	100.1	0.58	174.660		
300.0	300.0	262.0	262.0	0.5	0.5	-22.04	93.3	-37.8	100.6	99.7	0.93	108.765		
400.0	400.0	362.0	362.0	0.6	0.6	-22.04	93.3	-37.8	100.6	99.4	1.27	78.971		
500.0	500.0	462.0	462.0	0.8	0.8	-22.04	93.3	-37.8	100.6	99.0	1.62	61.990		
600.0	600.0	562.0	562.0	1.0	1.0	-22.04	93.3	-37.8	100.6	98.7	1.97	51.019		
700.0	700.0	662.0	662.0	1.2	1.2	-22.04	93.3	-37.8	100.6	98.3	2.32	43.348		
800.0	800.0	762.0	762.0	1.3	1.3	-22.04	93.3	-37.8	100.6	98.0	2.67	37.682		
900.0	900.0	862.0	862.0	1.5	1.5	-22.04	93.3	-37.8	100.6	97.6	3.02	33.326		
1,000.0	1,000.0	962.0	962.0	1.7	1.7	-22.04	93.3	-37.8	100.6	97.3	3.37	29.873 CC, ES		
1,100.0	1,100.0	1,062.0	1,062.0	1.9	1.9	131.05	93.3	-37.8	101.8	98.1	3.72	27.375		
1,200.0	1,199.8	1,161.8	1,161.8	2.0	2.0	133.14	93.3	-37.8	105.3	101.2	4.07	25.881		
1,300.0	1,299.5	1,261.5	1,261.5	2.2	2.2	136.33	93.3	-37.8	111.4	107.0	4.42	25.200		
1,400.0	1,398.9	1,360.9	1,360.9	2.4	2.4	139.73	93.3	-37.8	119.1	114.3	4.78	24.909		
1,500.0	1,498.4	1,460.4	1,460.4	2.7	2.5	142.71	93.3	-37.8	127.1	121.9	5.14	24.729		
1,600.0	1,597.9	1,559.9	1,559.9	2.9	2.7	145.34	93.3	-37.8	135.4	129.9	5.50	24.632		
1,700.0	1,697.3	1,659.3	1,659.3	3.1	2.9	147.66	93.3	-37.8	144.0	138.1	5.85	24.594 SF		
1,800.0	1,796.8	1,758.8	1,758.8	3.3	3.1	149.71	93.3	-37.8	152.7	146.5	6.21	24.600		
1,900.0	1,896.3	1,858.3	1,858.3	3.6	3.2	151.54	93.3	-37.8	161.7	155.1	6.56	24.636		
2,000.0	1,995.8	1,957.8	1,957.8	3.8	3.4	153.18	93.3	-37.8	170.8	163.9	6.92	24.694		
2,100.0	2,095.2	2,057.2	2,057.2	4.0	3.6	154.65	93.3	-37.8	180.0	172.7	7.27	24.766		
2,200.0	2,194.7	2,156.7	2,156.7	4.3	3.8	155.98	93.3	-37.8	189.3	181.7	7.62	24.849		
2,300.0	2,294.2	2,256.2	2,256.2	4.5	3.9	157.18	93.3	-37.8	198.8	190.8	7.97	24.938		
2,400.0	2,393.7	2,355.7	2,355.7	4.7	4.1	158.28	93.3	-37.8	208.3	199.9	8.32	25.032		
2,500.0	2,493.1	2,455.1	2,455.1	5.0	4.3	159.27	93.3	-37.8	217.8	209.2	8.67	25.127		
2,600.0	2,592.6	2,554.6	2,554.6	5.2	4.5	160.19	93.3	-37.8	227.4	218.4	9.02	25.222		
2,700.0	2,692.1	2,654.1	2,654.1	5.5	4.6	161.03	93.3	-37.8	237.1	227.8	9.37	25.317		
2,800.0	2,791.5	2,753.5	2,753.5	5.7	4.8	161.80	93.3	-37.8	246.9	237.1	9.71	25.411		
2,900.0	2,891.0	2,853.0	2,853.0	6.0	5.0	162.52	93.3	-37.8	256.6	246.6	10.06	25.503		
3,000.0	2,990.5	2,952.5	2,952.5	6.2	5.2	163.18	93.3	-37.8	266.4	256.0	10.41	25.594		
3,100.0	3,090.0	3,052.0	3,052.0	6.4	5.3	163.79	93.3	-37.8	276.3	265.5	10.76	25.681		
3,200.0	3,189.4	3,151.4	3,151.4	6.7	5.5	164.37	93.3	-37.8	286.1	275.0	11.10	25.766		
3,300.0	3,288.9	3,250.9	3,250.9	6.9	5.7	164.90	93.3	-37.8	296.0	284.6	11.45	25.849		
3,400.0	3,388.4	3,350.4	3,350.4	7.2	5.8	165.40	93.3	-37.8	305.9	294.1	11.80	25.929		
3,500.0	3,487.9	3,449.9	3,449.9	7.4	6.0	165.87	93.3	-37.8	315.9	303.7	12.15	26.006		
3,600.0	3,587.3	3,549.3	3,549.3	7.7	6.2	166.31	93.3	-37.8	325.8	313.3	12.49	26.081		
3,700.0	3,686.8	3,648.8	3,648.8	7.9	6.4	166.72	93.3	-37.8	335.8	323.0	12.84	26.153		
3,800.0	3,786.3	3,748.3	3,748.3	8.2	6.5	167.11	93.3	-37.8	345.8	332.6	13.19	26.223		
3,900.0	3,885.7	3,847.7	3,847.7	8.4	6.7	167.48	93.3	-37.8	355.8	342.3	13.53	26.290		
4,000.0	3,985.2	3,947.2	3,947.2	8.7	6.9	167.83	93.3	-37.8	365.8	351.9	13.88	26.355		
4,100.0	4,084.7	4,046.7	4,046.7	8.9	7.1	168.16	93.3	-37.8	375.9	361.6	14.23	26.418		
4,200.0	4,184.2	4,146.2	4,146.2	9.2	7.2	168.47	93.3	-37.8	385.9	371.3	14.57	26.479		
4,300.0	4,283.6	4,245.6	4,245.6	9.4	7.4	168.77	93.3	-37.8	396.0	381.0	14.92	26.537		
4,400.0	4,383.1	4,345.1	4,345.1	9.7	7.6	169.05	93.3	-37.8	406.0	390.8	15.27	26.594		
4,500.0	4,482.6	4,444.6	4,444.6	9.9	7.8	169.32	93.3	-37.8	416.1	400.5	15.61	26.648		
4,600.0	4,582.1	4,544.1	4,544.1	10.1	7.9	169.57	93.3	-37.8	426.2	410.2	15.96	26.701		
4,700.0	4,681.5	4,643.5	4,643.5	10.4	8.1	169.82	93.3	-37.8	436.3	420.0	16.31	26.752		
4,800.0	4,781.0	4,743.0	4,743.0	10.6	8.3	170.05	93.3	-37.8	446.4	429.7	16.65	26.801		
4,900.0	4,880.5	4,842.5	4,842.5	10.9	8.5	170.27	93.3	-37.8	456.5	439.5	17.00	26.849		
5,000.0	4,979.9	4,941.9	4,941.9	11.1	8.6	170.49	93.3	-37.8	466.6	449.2	17.35	26.895		
5,100.0	5,079.4	5,041.4	5,041.4	11.4	8.8	170.69	93.3	-37.8	476.7	459.0	17.70	26.940		

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 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - MEREDITH 1 (EXISTING) - KPK WELL - NO SURVEYS												Offset Site Error: 0.0 ft	
Survey Program: 5120-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			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	5,178.9	5,120.0	5,120.0	11.6	8.9	170.84	93.3	-37.8	487.3	469.3	18.01	27.061	
5,300.0	5,278.4	5,120.0	5,120.0	11.9	8.9	170.84	93.3	-37.8	511.3	493.1	18.18	28.121	
5,400.0	5,377.8	5,120.0	5,120.0	12.1	8.9	170.84	93.3	-37.8	552.7	534.3	18.36	30.103	
5,500.0	5,477.3	5,120.0	5,120.0	12.4	8.9	170.84	93.3	-37.8	607.9	589.3	18.54	32.791	
5,600.0	5,576.8	5,120.0	5,120.0	12.6	8.9	170.84	93.3	-37.8	673.4	654.7	18.71	35.985	
5,700.0	5,676.3	5,120.0	5,120.0	12.9	8.9	170.84	93.3	-37.8	746.7	727.8	18.89	39.525	
5,800.0	5,775.7	5,120.0	5,120.0	13.1	8.9	170.84	93.3	-37.8	825.6	806.5	19.07	43.294	
5,900.0	5,875.2	5,120.0	5,120.0	13.4	8.9	170.84	93.3	-37.8	908.6	889.4	19.25	47.211	
6,000.0	5,974.7	5,120.0	5,120.0	13.6	8.9	170.84	93.3	-37.8	994.8	975.3	19.42	51.218	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - SULLIVAN 1 (EXISTING) - ENCANA WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8200-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,200.0	7,405.0	7,366.0	7,366.0	17.6	12.9	-90.00	1,442.9	-496.2	971.9	942.2	29.68	32.741		
8,300.0	7,405.0	7,366.0	7,366.0	18.7	12.9	-90.00	1,442.9	-496.2	874.8	844.0	30.81	28.391		
8,400.0	7,405.0	7,366.0	7,366.0	19.9	12.9	-90.00	1,442.9	-496.2	778.5	746.4	32.04	24.300		
8,500.0	7,405.0	7,366.0	7,366.0	21.1	12.9	-90.00	1,442.9	-496.2	683.2	649.9	33.34	20.494		
8,600.0	7,405.0	7,366.0	7,366.0	22.4	12.9	-90.00	1,442.9	-496.2	589.5	554.8	34.70	16.988		
8,700.0	7,405.0	7,366.0	7,366.0	23.8	12.9	-90.00	1,442.9	-496.2	498.2	462.1	36.12	13.795		
8,800.0	7,405.0	7,366.0	7,366.0	25.2	12.9	-90.00	1,442.9	-496.2	411.1	373.5	37.58	10.940		
8,900.0	7,405.0	7,366.0	7,366.0	26.7	12.9	-90.00	1,442.9	-496.2	331.3	292.2	39.07	8.478		
9,000.0	7,405.0	7,366.0	7,366.0	28.2	12.9	-90.00	1,442.9	-496.2	265.5	224.9	40.60	6.538		
9,100.0	7,405.0	7,366.0	7,366.0	29.7	12.9	-90.00	1,442.9	-496.2	226.3	184.1	42.15	5.369		
9,146.3	7,405.0	7,366.0	7,366.0	30.5	12.9	-90.00	1,442.9	-496.2	221.5	178.6	42.88	5.166 CC, ES, SF		
9,200.0	7,405.0	7,366.0	7,366.0	31.3	12.9	-90.00	1,442.9	-496.2	227.9	184.2	43.72	5.213		
9,300.0	7,405.0	7,366.0	7,366.0	32.9	12.9	-90.00	1,442.9	-496.2	269.6	224.3	45.32	5.949		
9,400.0	7,405.0	7,366.0	7,366.0	34.5	12.9	-90.00	1,442.9	-496.2	336.8	289.9	46.92	7.177		
9,500.0	7,405.0	7,366.0	7,366.0	36.1	12.9	-90.00	1,442.9	-496.2	417.3	368.8	48.55	8.597		
9,600.0	7,405.0	7,366.0	7,366.0	37.7	12.9	-90.00	1,442.9	-496.2	504.9	454.7	50.18	10.061		
9,700.0	7,405.0	7,366.0	7,366.0	39.3	12.9	-90.00	1,442.9	-496.2	596.4	544.5	51.82	11.507		
9,800.0	7,405.0	7,366.0	7,366.0	40.9	12.9	-90.00	1,442.9	-496.2	690.2	636.7	53.48	12.907		
9,900.0	7,405.0	7,366.0	7,366.0	42.6	12.9	-90.00	1,442.9	-496.2	785.6	730.4	55.14	14.247		
10,000.0	7,405.0	7,366.0	7,366.0	44.3	12.9	-90.00	1,442.9	-496.2	882.0	825.2	56.81	15.526		
10,100.0	7,405.0	7,366.0	7,366.0	45.9	12.9	-90.00	1,442.9	-496.2	979.1	920.6	58.48	16.742		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - SULLIVAN 44-26 (EXISTING) - ENCANA WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8192-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
0.0	0.0	0.0	0.0	0.0	0.0	-118.45	-14.6	-26.9	47.2					
100.0	100.0	64.0	64.0	0.1	0.1	-118.45	-14.6	-26.9	30.5	30.3	0.23	132.458		
200.0	200.0	164.0	164.0	0.3	0.3	-118.45	-14.6	-26.9	30.5	30.0	0.58	52.692		
300.0	300.0	264.0	264.0	0.5	0.5	-118.45	-14.6	-26.9	30.5	29.6	0.93	32.887		
400.0	400.0	364.0	364.0	0.6	0.6	-118.45	-14.6	-26.9	30.5	29.3	1.28	23.903		
500.0	500.0	464.0	464.0	0.8	0.8	-118.45	-14.6	-26.9	30.5	28.9	1.63	18.774		
600.0	600.0	564.0	564.0	1.0	1.0	-118.45	-14.6	-26.9	30.5	28.6	1.98	15.457		
700.0	700.0	664.0	664.0	1.2	1.2	-118.45	-14.6	-26.9	30.5	28.2	2.32	13.137		
800.0	800.0	764.0	764.0	1.3	1.3	-118.45	-14.6	-26.9	30.5	27.9	2.67	11.422		
900.0	900.0	864.0	864.0	1.5	1.5	-118.45	-14.6	-26.9	30.5	27.5	3.02	10.103		
1,000.0	1,000.0	964.0	964.0	1.7	1.7	-118.45	-14.6	-26.9	30.5	27.2	3.37	9.057		
1,100.0	1,100.0	1,064.0	1,064.0	1.9	1.9	35.84	-14.6	-26.9	29.1	25.4	3.72	7.824		
1,200.0	1,199.8	1,163.8	1,163.8	2.0	2.0	42.92	-14.6	-26.9	25.1	21.0	4.07	6.155		
1,300.0	1,299.5	1,263.5	1,263.5	2.2	2.2	60.58	-14.6	-26.9	19.6	15.1	4.44	4.414		
1,394.2	1,393.2	1,357.2	1,357.2	2.4	2.4	90.00	-14.6	-26.9	17.0	12.2	4.80	3.546 CC		
1,400.0	1,398.9	1,362.9	1,362.9	2.4	2.4	91.99	-14.6	-26.9	17.0	12.2	4.83	3.532 ES, SF		
1,500.0	1,498.4	1,462.4	1,462.4	2.7	2.6	122.35	-14.6	-26.9	20.2	15.0	5.18	3.898		
1,600.0	1,597.9	1,561.9	1,561.9	2.9	2.7	140.94	-14.6	-26.9	27.1	21.6	5.51	4.921		
1,700.0	1,697.3	1,661.3	1,661.3	3.1	2.9	151.36	-14.6	-26.9	35.7	29.8	5.85	6.106		
1,800.0	1,796.8	1,760.8	1,760.8	3.3	3.1	157.63	-14.6	-26.9	45.0	38.8	6.18	7.272		
1,900.0	1,896.3	1,860.3	1,860.3	3.6	3.2	161.73	-14.6	-26.9	54.6	48.1	6.52	8.368		
2,000.0	1,995.8	1,959.8	1,959.8	3.8	3.4	164.59	-14.6	-26.9	64.4	57.6	6.87	9.380		
2,100.0	2,095.2	2,059.2	2,059.2	4.0	3.6	166.69	-14.6	-26.9	74.4	67.1	7.21	10.310		
2,200.0	2,194.7	2,158.7	2,158.7	4.3	3.8	168.29	-14.6	-26.9	84.4	76.8	7.56	11.164		
2,300.0	2,294.2	2,258.2	2,258.2	4.5	3.9	169.55	-14.6	-26.9	94.4	86.5	7.90	11.949		
2,400.0	2,393.7	2,357.7	2,357.7	4.7	4.1	170.57	-14.6	-26.9	104.5	96.3	8.25	12.672		
2,500.0	2,493.1	2,457.1	2,457.1	5.0	4.3	171.41	-14.6	-26.9	114.7	106.1	8.60	13.340		
2,600.0	2,592.6	2,556.6	2,556.6	5.2	4.5	172.11	-14.6	-26.9	124.8	115.9	8.94	13.958		
2,700.0	2,692.1	2,656.1	2,656.1	5.5	4.6	172.71	-14.6	-26.9	135.0	125.7	9.29	14.531		
2,800.0	2,791.5	2,755.5	2,755.5	5.7	4.8	173.22	-14.6	-26.9	145.2	135.5	9.64	15.064		
2,900.0	2,891.0	2,855.0	2,855.0	6.0	5.0	173.67	-14.6	-26.9	155.4	145.4	9.98	15.561		
3,000.0	2,990.5	2,954.5	2,954.5	6.2	5.2	174.06	-14.6	-26.9	165.6	155.2	10.33	16.025		
3,100.0	3,090.0	3,054.0	3,054.0	6.4	5.3	174.41	-14.6	-26.9	175.8	165.1	10.68	16.460		
3,200.0	3,189.4	3,153.4	3,153.4	6.7	5.5	174.72	-14.6	-26.9	186.0	174.9	11.03	16.867		
3,300.0	3,288.9	3,252.9	3,252.9	6.9	5.7	174.99	-14.6	-26.9	196.2	184.8	11.37	17.250		
3,400.0	3,388.4	3,352.4	3,352.4	7.2	5.9	175.24	-14.6	-26.9	206.4	194.7	11.72	17.611		
3,500.0	3,487.9	3,451.9	3,451.9	7.4	6.0	175.46	-14.6	-26.9	216.6	204.6	12.07	17.951		
3,600.0	3,587.3	3,551.3	3,551.3	7.7	6.2	175.67	-14.6	-26.9	226.8	214.4	12.41	18.272		
3,700.0	3,686.8	3,650.8	3,650.8	7.9	6.4	175.86	-14.6	-26.9	237.1	224.3	12.76	18.576		
3,800.0	3,786.3	3,750.3	3,750.3	8.2	6.5	176.03	-14.6	-26.9	247.3	234.2	13.11	18.864		
3,900.0	3,885.7	3,849.7	3,849.7	8.4	6.7	176.19	-14.6	-26.9	257.5	244.1	13.46	19.137		
4,000.0	3,985.2	3,949.2	3,949.2	8.7	6.9	176.33	-14.6	-26.9	267.8	254.0	13.80	19.397		
4,100.0	4,084.7	4,048.7	4,048.7	8.9	7.1	176.47	-14.6	-26.9	278.0	263.9	14.15	19.644		
4,200.0	4,184.2	4,148.2	4,148.2	9.2	7.2	176.59	-14.6	-26.9	288.2	273.7	14.50	19.879		
4,300.0	4,283.6	4,247.6	4,247.6	9.4	7.4	176.71	-14.6	-26.9	298.5	283.6	14.85	20.103		
4,400.0	4,383.1	4,347.1	4,347.1	9.7	7.6	176.82	-14.6	-26.9	308.7	293.5	15.20	20.317		
4,500.0	4,482.6	4,446.6	4,446.6	9.9	7.8	176.92	-14.6	-26.9	319.0	303.4	15.54	20.521		
4,600.0	4,582.1	4,546.1	4,546.1	10.1	7.9	177.02	-14.6	-26.9	329.2	313.3	15.89	20.717		
4,700.0	4,681.5	4,645.5	4,645.5	10.4	8.1	177.11	-14.6	-26.9	339.4	323.2	16.24	20.904		
4,800.0	4,781.0	4,745.0	4,745.0	10.6	8.3	177.19	-14.6	-26.9	349.7	333.1	16.59	21.084		
4,900.0	4,880.5	4,844.5	4,844.5	10.9	8.5	177.27	-14.6	-26.9	359.9	343.0	16.93	21.256		
5,000.0	4,979.9	4,943.9	4,943.9	11.1	8.6	177.35	-14.6	-26.9	370.2	352.9	17.28	21.421		

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 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - SULLIVAN 44-26 (EXISTING) - ENCANA WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8192-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,079.4	5,043.4	5,043.4	11.4	8.8	177.42	-14.6	-26.9	380.4	362.8	17.63	21.580		
5,200.0	5,178.9	5,142.9	5,142.9	11.6	9.0	177.49	-14.6	-26.9	390.7	372.7	17.98	21.732		
5,300.0	5,278.4	5,242.4	5,242.4	11.9	9.1	177.55	-14.6	-26.9	400.9	382.6	18.32	21.879		
5,400.0	5,377.8	5,341.8	5,341.8	12.1	9.3	177.61	-14.6	-26.9	411.1	392.5	18.67	22.020		
5,500.0	5,477.3	5,441.3	5,441.3	12.4	9.5	177.67	-14.6	-26.9	421.4	402.4	19.02	22.157		
5,600.0	5,576.8	5,540.8	5,540.8	12.6	9.7	177.73	-14.6	-26.9	431.6	412.3	19.37	22.288		
5,700.0	5,676.3	5,640.3	5,640.3	12.9	9.8	177.78	-14.6	-26.9	441.9	422.2	19.71	22.415		
5,800.0	5,775.7	5,739.7	5,739.7	13.1	10.0	177.83	-14.6	-26.9	452.1	432.1	20.06	22.537		
5,900.0	5,875.2	5,839.2	5,839.2	13.4	10.2	177.88	-14.6	-26.9	462.4	442.0	20.41	22.655		
6,000.0	5,974.7	5,938.7	5,938.7	13.6	10.4	177.92	-14.6	-26.9	472.6	451.9	20.76	22.770		
6,100.0	6,074.1	6,038.1	6,038.1	13.9	10.5	177.97	-14.6	-26.9	482.9	461.8	21.10	22.880		
6,200.0	6,173.6	6,137.6	6,137.6	14.1	10.7	178.01	-14.6	-26.9	493.1	471.7	21.45	22.987		
6,300.0	6,273.1	6,237.1	6,237.1	14.4	10.9	178.05	-14.6	-26.9	503.4	481.6	21.80	23.091		
6,400.0	6,372.6	6,336.6	6,336.6	14.6	11.1	178.09	-14.6	-26.9	513.6	491.5	22.15	23.191		
6,500.0	6,472.0	6,436.0	6,436.0	14.9	11.2	178.13	-14.6	-26.9	523.9	501.4	22.50	23.288		
6,600.0	6,571.5	6,535.5	6,535.5	15.1	11.4	178.16	-14.6	-26.9	534.1	511.3	22.84	23.382		
6,700.0	6,671.0	6,635.0	6,635.0	15.4	11.6	178.20	-14.6	-26.9	544.4	521.2	23.19	23.474		
6,800.0	6,770.5	6,734.5	6,734.5	15.6	11.8	178.23	-14.6	-26.9	554.6	531.1	23.54	23.562		
6,900.0	6,870.2	6,834.2	6,834.2	15.8	11.9	60.97	-14.6	-26.9	558.5	534.6	23.86	23.405		
7,000.0	6,968.8	6,932.8	6,932.8	15.7	12.1	38.27	-14.6	-26.9	546.9	523.0	23.82	22.956		
7,100.0	7,063.3	7,027.3	7,027.3	15.5	12.3	37.16	-14.6	-26.9	520.5	496.9	23.52	22.133		
7,200.0	7,150.7	7,114.7	7,114.7	15.3	12.4	41.01	-14.6	-26.9	481.0	457.8	23.21	20.724		
7,300.0	7,228.5	7,192.5	7,192.5	14.9	12.6	48.74	-14.6	-26.9	431.3	408.0	23.33	18.486		
7,400.0	7,294.3	7,258.3	7,258.3	14.6	12.7	60.15	-14.6	-26.9	375.9	351.7	24.18	15.541		
7,500.0	7,346.0	7,310.0	7,310.0	14.3	12.8	73.47	-14.6	-26.9	321.8	296.4	25.34	12.700		
7,600.0	7,382.2	7,346.2	7,346.2	14.2	12.8	84.66	-14.6	-26.9	280.3	254.3	25.99	10.782		
7,693.0	7,400.8	7,364.8	7,364.8	14.3	12.9	90.00	-14.6	-26.9	265.4	239.2	26.23	10.119		
7,700.0	7,401.6	7,365.6	7,365.6	14.3	12.9	90.16	-14.6	-26.9	265.5	239.3	26.24	10.119		
7,800.0	7,405.0	7,369.0	7,369.0	14.6	12.9	90.00	-14.6	-26.9	285.7	259.2	26.56	10.759		
7,900.0	7,405.0	7,369.0	7,369.0	15.1	12.9	90.00	-14.6	-26.9	335.7	308.7	27.08	12.396		
8,000.0	7,405.0	7,369.0	7,369.0	15.8	12.9	90.00	-14.6	-26.9	404.7	376.9	27.80	14.559		
8,100.0	7,405.0	7,369.0	7,369.0	16.6	12.9	90.00	-14.6	-26.9	484.6	455.9	28.67	16.901		
8,200.0	7,405.0	7,369.0	7,369.0	17.6	12.9	90.00	-14.6	-26.9	570.9	541.2	29.69	19.229		
8,300.0	7,405.0	7,369.0	7,369.0	18.7	12.9	90.00	-14.6	-26.9	661.1	630.2	30.82	21.450		
8,400.0	7,405.0	7,369.0	7,369.0	19.9	12.9	90.00	-14.6	-26.9	753.7	721.7	32.04	23.523		
8,500.0	7,405.0	7,369.0	7,369.0	21.1	12.9	90.00	-14.6	-26.9	848.0	814.7	33.34	25.434		
8,600.0	7,405.0	7,369.0	7,369.0	22.4	12.9	90.00	-14.6	-26.9	943.5	908.8	34.71	27.186		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4A-26H-P268 - HZ - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.72	0.4	-80.0	80.0					
100.0	100.0	98.0	98.0	0.1	0.1	-89.72	0.4	-80.0	80.0	79.8	0.23	340.451		
200.0	200.0	198.0	198.0	0.3	0.3	-89.72	0.4	-80.0	80.0	79.4	0.58	137.241	CC, ES	
300.0	300.0	295.4	295.4	0.5	0.5	-90.04	-0.1	-81.5	81.6	80.6	0.93	87.928		
400.0	400.0	392.5	392.4	0.6	0.7	-90.95	-1.4	-86.2	86.4	85.1	1.27	67.885		
500.0	500.0	489.2	488.8	0.8	0.9	-92.26	-3.7	-94.0	94.5	92.9	1.62	58.379		
600.0	600.0	585.3	584.1	1.0	1.1	-93.76	-6.9	-104.8	106.0	104.0	1.97	53.823		
700.0	700.0	680.5	678.2	1.2	1.4	-95.26	-10.9	-118.6	120.7	118.4	2.32	51.940		
800.0	800.0	774.6	770.7	1.3	1.8	-96.65	-15.8	-135.1	138.7	136.0	2.69	51.618	SF	
900.0	900.0	867.5	861.4	1.5	2.2	-97.89	-21.4	-154.3	160.0	156.9	3.06	52.245		
1,000.0	1,000.0	958.9	950.1	1.7	2.6	-98.95	-27.7	-175.9	184.4	181.0	3.45	53.456		
1,100.0	1,100.0	1,051.4	1,039.0	1.9	3.1	52.43	-34.9	-200.3	210.7	207.1	3.66	57.515		
1,200.0	1,199.8	1,148.2	1,131.9	2.0	3.6	52.25	-42.6	-226.5	235.7	231.6	4.02	58.646		
1,300.0	1,299.5	1,245.5	1,225.2	2.2	4.1	52.72	-50.3	-252.8	258.5	254.1	4.39	58.902		
1,400.0	1,398.9	1,343.0	1,318.7	2.4	4.6	53.66	-58.0	-279.2	280.6	275.8	4.78	58.739		
1,500.0	1,498.4	1,440.4	1,412.2	2.7	5.1	54.47	-65.7	-305.5	302.6	297.5	5.17	58.498		
1,600.0	1,597.9	1,537.9	1,505.7	2.9	5.6	55.16	-73.4	-331.9	324.8	319.2	5.58	58.211		
1,700.0	1,697.3	1,635.3	1,599.2	3.1	6.1	55.77	-81.2	-358.2	347.0	341.0	5.99	57.898		
1,800.0	1,796.8	1,732.8	1,692.7	3.3	6.6	56.31	-88.9	-384.6	369.2	362.8	6.41	57.575		
1,900.0	1,896.3	1,830.2	1,786.2	3.6	7.2	56.78	-96.6	-411.0	391.4	384.6	6.84	57.251		
2,000.0	1,995.8	1,927.7	1,879.7	3.8	7.7	57.20	-104.3	-437.3	413.7	406.4	7.27	56.932		
2,100.0	2,095.2	2,025.1	1,973.2	4.0	8.2	57.58	-112.1	-463.7	435.9	428.2	7.70	56.621		
2,200.0	2,194.7	2,122.6	2,066.7	4.3	8.7	57.93	-119.8	-490.0	458.2	450.1	8.14	56.322		
2,300.0	2,294.2	2,220.0	2,160.2	4.5	9.3	58.24	-127.5	-516.4	480.5	472.0	8.58	56.036		
2,400.0	2,393.7	2,317.5	2,253.7	4.7	9.8	58.52	-135.2	-542.7	502.9	493.8	9.02	55.763		
2,500.0	2,493.1	2,414.9	2,347.2	5.0	10.3	58.78	-142.9	-569.1	525.2	515.7	9.46	55.502		
2,600.0	2,592.6	2,512.4	2,440.7	5.2	10.8	59.02	-150.7	-595.4	547.5	537.6	9.91	55.255		
2,700.0	2,692.1	2,609.8	2,534.2	5.5	11.3	59.24	-158.4	-621.8	569.9	559.5	10.36	55.020		
2,800.0	2,791.5	2,707.3	2,627.7	5.7	11.9	59.44	-166.1	-648.1	592.2	581.4	10.81	54.798		
2,900.0	2,891.0	2,804.7	2,721.2	6.0	12.4	59.63	-173.8	-674.5	614.6	603.3	11.26	54.586		
3,000.0	2,990.5	2,902.1	2,814.7	6.2	12.9	59.81	-181.6	-700.8	637.0	625.3	11.71	54.386		
3,100.0	3,090.0	2,999.6	2,908.2	6.4	13.4	59.97	-189.3	-727.2	659.3	647.2	12.17	54.195		
3,200.0	3,189.4	3,097.0	3,001.7	6.7	14.0	60.12	-197.0	-753.5	681.7	669.1	12.62	54.015		
3,300.0	3,288.9	3,194.5	3,095.2	6.9	14.5	60.27	-204.7	-779.9	704.1	691.0	13.08	53.843		
3,400.0	3,388.4	3,291.9	3,188.7	7.2	15.0	60.40	-212.5	-806.2	726.5	713.0	13.53	53.679		
3,500.0	3,487.9	3,389.4	3,282.2	7.4	15.5	60.53	-220.2	-832.6	748.9	734.9	13.99	53.524		
3,600.0	3,587.3	3,486.8	3,375.7	7.7	16.1	60.64	-227.9	-858.9	771.3	756.8	14.45	53.376		
3,700.0	3,686.8	3,584.3	3,469.2	7.9	16.6	60.76	-235.6	-885.3	793.7	778.8	14.91	53.235		
3,800.0	3,786.3	3,681.7	3,562.7	8.2	17.1	60.86	-243.3	-911.6	816.1	800.7	15.37	53.100		
3,900.0	3,885.7	3,779.2	3,656.2	8.4	17.6	60.96	-251.1	-938.0	838.5	822.7	15.83	52.972		
4,000.0	3,985.2	3,876.6	3,749.7	8.7	18.2	61.06	-258.8	-964.3	860.9	844.6	16.29	52.849		
4,100.0	4,084.7	3,974.1	3,843.2	8.9	18.7	61.15	-266.5	-990.7	883.3	866.5	16.75	52.732		
4,200.0	4,184.2	4,071.5	3,936.7	9.2	19.2	61.23	-274.2	-1,017.1	905.7	888.5	17.21	52.620		
4,300.0	4,283.6	4,169.0	4,030.2	9.4	19.7	61.32	-282.0	-1,043.4	928.1	910.4	17.67	52.512		
4,400.0	4,383.1	4,266.4	4,123.7	9.7	20.2	61.39	-289.7	-1,069.8	950.5	932.4	18.14	52.409		
4,500.0	4,482.6	4,363.9	4,217.2	9.9	20.8	61.47	-297.4	-1,096.1	972.9	954.3	18.60	52.310		
4,600.0	4,582.1	4,461.3	4,310.7	10.1	21.3	61.54	-305.1	-1,122.5	995.4	976.3	19.06	52.216		

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 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 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 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	-89.69	0.4	-69.9	69.9					
100.0	100.0	99.0	99.0	0.1	0.1	-89.69	0.4	-69.9	69.9	69.7	0.24	296.102		
200.0	200.0	199.0	199.0	0.3	0.3	-89.69	0.4	-69.9	69.9	69.3	0.58	119.608		
300.0	300.0	299.0	299.0	0.5	0.5	-89.69	0.4	-69.9	69.9	69.0	0.93	74.895 CC, ES		
400.0	400.0	396.7	396.7	0.6	0.6	-90.11	-0.1	-71.5	71.5	70.2	1.28	55.920		
500.0	500.0	494.2	494.1	0.8	0.8	-91.27	-1.7	-76.2	76.4	74.7	1.62	47.010		
600.0	600.0	591.2	590.7	1.0	1.0	-92.91	-4.3	-84.0	84.5	82.5	1.97	42.877		
700.0	700.0	687.6	686.4	1.2	1.3	-94.74	-7.9	-94.8	95.9	93.6	2.32	41.369 SF		
800.0	800.0	783.1	780.8	1.3	1.6	-96.52	-12.4	-108.5	110.7	108.0	2.67	41.425		
900.0	900.0	877.5	873.6	1.5	1.9	-98.14	-17.9	-125.0	128.8	125.8	3.03	42.448		
1,000.0	1,000.0	970.7	964.6	1.7	2.3	-99.54	-24.2	-144.1	150.1	146.7	3.41	44.074		
1,100.0	1,100.0	1,065.0	1,056.0	1.9	2.7	51.70	-31.5	-166.0	173.3	169.7	3.69	47.010		
1,200.0	1,199.8	1,162.6	1,150.5	2.0	3.1	51.57	-39.2	-189.2	195.0	190.9	4.04	48.221		
1,300.0	1,299.5	1,260.6	1,245.4	2.2	3.6	52.18	-46.9	-212.5	214.5	210.1	4.42	48.578		
1,400.0	1,398.9	1,358.8	1,340.4	2.4	4.1	53.25	-54.6	-235.8	233.2	228.4	4.81	48.534		
1,500.0	1,498.4	1,456.9	1,435.5	2.7	4.5	54.17	-62.4	-259.1	252.0	246.8	5.20	48.414		
1,600.0	1,597.9	1,555.1	1,530.5	2.9	5.0	54.95	-70.1	-282.5	270.8	265.2	5.61	48.245		
1,700.0	1,697.3	1,653.2	1,625.5	3.1	5.4	55.64	-77.8	-305.8	289.6	283.6	6.03	48.047		
1,800.0	1,796.8	1,751.4	1,720.6	3.3	5.9	56.24	-85.5	-329.1	308.5	302.0	6.45	47.832		
1,900.0	1,896.3	1,849.5	1,815.6	3.6	6.4	56.77	-93.3	-352.4	327.4	320.5	6.88	47.610		
2,000.0	1,995.8	1,947.7	1,910.6	3.8	6.8	57.24	-101.0	-375.7	346.3	339.0	7.31	47.387		
2,100.0	2,095.2	2,045.9	2,005.7	4.0	7.3	57.66	-108.7	-399.0	365.3	357.5	7.74	47.166		
2,200.0	2,194.7	2,144.0	2,100.7	4.3	7.8	58.05	-116.5	-422.3	384.3	376.1	8.18	46.951		
2,300.0	2,294.2	2,242.2	2,195.7	4.5	8.2	58.39	-124.2	-445.7	403.2	394.6	8.63	46.743		
2,400.0	2,393.7	2,340.3	2,290.8	4.7	8.7	58.71	-131.9	-469.0	422.2	413.2	9.07	46.543		
2,500.0	2,493.1	2,438.5	2,385.8	5.0	9.2	59.00	-139.7	-492.3	441.2	431.7	9.52	46.351		
2,600.0	2,592.6	2,536.6	2,480.8	5.2	9.7	59.26	-147.4	-515.6	460.3	450.3	9.97	46.168		
2,700.0	2,692.1	2,634.8	2,575.8	5.5	10.1	59.50	-155.1	-538.9	479.3	468.9	10.42	45.993		
2,800.0	2,791.5	2,732.9	2,670.9	5.7	10.6	59.73	-162.8	-562.2	498.3	487.5	10.87	45.827		
2,900.0	2,891.0	2,831.1	2,765.9	6.0	11.1	59.94	-170.6	-585.5	517.4	506.0	11.33	45.669		
3,000.0	2,990.5	2,929.2	2,860.9	6.2	11.5	60.13	-178.3	-608.9	536.4	524.6	11.78	45.518		
3,100.0	3,090.0	3,027.4	2,956.0	6.4	12.0	60.31	-186.0	-632.2	555.5	543.2	12.24	45.375		
3,200.0	3,189.4	3,125.5	3,051.0	6.7	12.5	60.48	-193.8	-655.5	574.5	561.8	12.70	45.238		
3,300.0	3,288.9	3,223.7	3,146.0	6.9	13.0	60.63	-201.5	-678.8	593.6	580.4	13.16	45.108		
3,400.0	3,388.4	3,321.8	3,241.1	7.2	13.4	60.78	-209.2	-702.1	612.7	599.0	13.62	44.985		
3,500.0	3,487.9	3,420.0	3,336.1	7.4	13.9	60.92	-217.0	-725.4	631.7	617.7	14.08	44.867		
3,600.0	3,587.3	3,518.2	3,431.1	7.7	14.4	61.05	-224.7	-748.7	650.8	636.3	14.54	44.754		
3,700.0	3,686.8	3,616.3	3,526.1	7.9	14.8	61.17	-232.4	-772.1	669.9	654.9	15.00	44.647		
3,800.0	3,786.3	3,714.5	3,621.2	8.2	15.3	61.29	-240.1	-795.4	689.0	673.5	15.47	44.544		
3,900.0	3,885.7	3,812.6	3,716.2	8.4	15.8	61.40	-247.9	-818.7	708.1	692.1	15.93	44.447		
4,000.0	3,985.2	3,910.8	3,811.2	8.7	16.3	61.51	-255.6	-842.0	727.1	710.7	16.39	44.353		
4,100.0	4,084.7	4,008.9	3,906.3	8.9	16.7	61.60	-263.3	-865.3	746.2	729.4	16.86	44.263		
4,200.0	4,184.2	4,107.1	4,001.3	9.2	17.2	61.70	-271.1	-888.6	765.3	748.0	17.32	44.177		
4,300.0	4,283.6	4,205.2	4,096.3	9.4	17.7	61.79	-278.8	-911.9	784.4	766.6	17.79	44.095		
4,400.0	4,383.1	4,303.4	4,191.4	9.7	18.1	61.87	-286.5	-935.3	803.5	785.3	18.25	44.016		
4,500.0	4,482.6	4,401.5	4,286.4	9.9	18.6	61.95	-294.3	-958.6	822.6	803.9	18.72	43.941		
4,600.0	4,582.1	4,499.7	4,381.4	10.1	19.1	62.03	-302.0	-981.9	841.7	822.5	19.19	43.868		
4,700.0	4,681.5	4,597.8	4,476.5	10.4	19.6	62.11	-309.7	-1,005.2	860.8	841.1	19.65	43.798		
4,800.0	4,781.0	4,696.0	4,571.5	10.6	20.0	62.18	-317.4	-1,028.5	879.9	859.8	20.12	43.731		
4,900.0	4,880.5	4,794.2	4,666.5	10.9	20.5	62.24	-325.2	-1,051.8	899.0	878.4	20.59	43.666		
5,000.0	4,979.9	4,892.3	4,761.5	11.1	21.0	62.31	-332.9	-1,075.1	918.1	897.0	21.06	43.604		
5,100.0	5,079.4	4,990.5	4,856.6	11.4	21.5	62.37	-340.6	-1,098.5	937.2	915.7	21.52	43.544		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													S26-T2N-R68W (Sullivan) - Sullivan 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									
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	5,178.9	5,088.6	4,951.6	11.6	21.9	62.43	-348.4	-1,121.8	956.3	934.3	21.99	43.486					
5,300.0	5,278.4	5,186.8	5,046.6	11.9	22.4	62.49	-356.1	-1,145.1	975.4	953.0	22.46	43.430					
5,400.0	5,377.8	5,284.9	5,141.7	12.1	22.9	62.54	-363.8	-1,168.4	994.5	971.6	22.93	43.377					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4C-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.64	0.4	-59.9	59.9					
100.0	100.0	99.0	99.0	0.1	0.1	-89.64	0.4	-59.9	59.9	59.6	0.24	253.465		
200.0	200.0	199.0	199.0	0.3	0.3	-89.64	0.4	-59.9	59.9	59.3	0.58	102.385		
300.0	300.0	299.0	299.0	0.5	0.5	-89.64	0.4	-59.9	59.9	58.9	0.93	64.110		
400.0	400.0	399.0	399.0	0.6	0.6	-89.64	0.4	-59.9	59.9	58.6	1.28	46.665 CC, ES		
500.0	500.0	497.1	497.1	0.8	0.8	-90.20	-0.2	-61.4	61.4	59.8	1.63	37.720		
600.0	600.0	594.9	594.7	1.0	1.0	-91.72	-2.0	-66.1	66.2	64.2	1.97	33.543		
700.0	700.0	692.3	691.8	1.2	1.2	-93.82	-4.9	-73.8	74.3	72.0	2.32	32.022 SF		
800.0	800.0	789.0	787.8	1.3	1.4	-96.08	-9.0	-84.5	85.7	83.1	2.67	32.126		
900.0	900.0	884.8	882.5	1.5	1.7	-98.23	-14.2	-98.1	100.5	97.5	3.02	33.268		
1,000.0	1,000.0	979.5	975.6	1.7	2.1	-100.11	-20.4	-114.5	118.6	115.2	3.38	35.082		
1,100.0	1,100.0	1,073.3	1,067.1	1.9	2.4	50.88	-27.6	-133.5	138.9	135.2	3.70	37.538		
1,200.0	1,199.8	1,171.2	1,162.3	2.0	2.8	50.65	-35.8	-154.8	158.7	154.7	4.06	39.119		
1,300.0	1,299.5	1,269.5	1,257.9	2.2	3.2	51.34	-43.9	-176.3	176.4	172.0	4.43	39.813		
1,400.0	1,398.9	1,368.0	1,353.7	2.4	3.7	52.49	-52.1	-197.8	193.2	188.4	4.82	40.077		
1,500.0	1,498.4	1,466.6	1,449.5	2.7	4.1	53.45	-60.3	-219.3	210.0	204.8	5.22	40.234		
1,600.0	1,597.9	1,565.1	1,545.3	2.9	4.5	54.27	-68.5	-240.9	226.9	221.3	5.63	40.315		
1,700.0	1,697.3	1,663.6	1,641.1	3.1	5.0	54.98	-76.7	-262.4	243.9	237.8	6.05	40.341		
1,800.0	1,796.8	1,762.1	1,736.9	3.3	5.4	55.60	-84.9	-283.9	260.9	254.4	6.47	40.329		
1,900.0	1,896.3	1,860.6	1,832.6	3.6	5.8	56.14	-93.1	-305.4	277.8	270.9	6.90	40.291		
2,000.0	1,995.8	1,959.1	1,928.4	3.8	6.3	56.62	-101.3	-326.9	294.9	287.5	7.33	40.234		
2,100.0	2,095.2	2,057.6	2,024.2	4.0	6.7	57.04	-109.4	-348.4	311.9	304.1	7.77	40.165		
2,200.0	2,194.7	2,156.2	2,120.0	4.3	7.1	57.42	-117.6	-369.9	328.9	320.7	8.21	40.088		
2,300.0	2,294.2	2,254.7	2,215.8	4.5	7.6	57.77	-125.8	-391.4	346.0	337.4	8.65	40.007		
2,400.0	2,393.7	2,353.2	2,311.6	4.7	8.0	58.08	-134.0	-412.9	363.1	354.0	9.09	39.924		
2,500.0	2,493.1	2,451.7	2,407.4	5.0	8.5	58.36	-142.2	-434.5	380.2	370.6	9.54	39.839		
2,600.0	2,592.6	2,550.2	2,503.2	5.2	8.9	58.62	-150.4	-456.0	397.3	387.3	9.99	39.755		
2,700.0	2,692.1	2,648.7	2,598.9	5.5	9.4	58.86	-158.6	-477.5	414.3	403.9	10.44	39.672		
2,800.0	2,791.5	2,747.2	2,694.7	5.7	9.8	59.08	-166.8	-499.0	431.5	420.6	10.90	39.591		
2,900.0	2,891.0	2,845.7	2,790.5	6.0	10.2	59.28	-174.9	-520.5	448.6	437.2	11.35	39.512		
3,000.0	2,990.5	2,944.3	2,886.3	6.2	10.7	59.47	-183.1	-542.0	465.7	453.9	11.81	39.435		
3,100.0	3,090.0	3,042.8	2,982.1	6.4	11.1	59.64	-191.3	-563.5	482.8	470.5	12.27	39.361		
3,200.0	3,189.4	3,141.3	3,077.9	6.7	11.6	59.81	-199.5	-585.0	499.9	487.2	12.72	39.289		
3,300.0	3,288.9	3,239.8	3,173.7	6.9	12.0	59.96	-207.7	-606.6	517.0	503.9	13.18	39.220		
3,400.0	3,388.4	3,338.3	3,269.4	7.2	12.5	60.10	-215.9	-628.1	534.2	520.5	13.64	39.153		
3,500.0	3,487.9	3,436.8	3,365.2	7.4	12.9	60.23	-224.1	-649.6	551.3	537.2	14.10	39.089		
3,600.0	3,587.3	3,535.3	3,461.0	7.7	13.3	60.36	-232.2	-671.1	568.4	553.9	14.57	39.027		
3,700.0	3,686.8	3,633.9	3,556.8	7.9	13.8	60.48	-240.4	-692.6	585.6	570.6	15.03	38.967		
3,800.0	3,786.3	3,732.4	3,652.6	8.2	14.2	60.59	-248.6	-714.1	602.7	587.2	15.49	38.909		
3,900.0	3,885.7	3,830.9	3,748.4	8.4	14.7	60.69	-256.8	-735.6	619.9	603.9	15.95	38.854		
4,000.0	3,985.2	3,929.4	3,844.2	8.7	15.1	60.79	-265.0	-757.1	637.0	620.6	16.42	38.801		
4,100.0	4,084.7	4,027.9	3,940.0	8.9	15.6	60.88	-273.2	-778.6	654.2	637.3	16.88	38.750		
4,200.0	4,184.2	4,126.4	4,035.7	9.2	16.0	60.97	-281.4	-800.2	671.3	654.0	17.35	38.701		
4,300.0	4,283.6	4,224.9	4,131.5	9.4	16.5	61.06	-289.6	-821.7	688.5	670.6	17.81	38.653		
4,400.0	4,383.1	4,323.5	4,227.3	9.7	16.9	61.14	-297.7	-843.2	705.6	687.3	18.28	38.607		
4,500.0	4,482.6	4,422.0	4,323.1	9.9	17.3	61.22	-305.9	-864.7	722.8	704.0	18.74	38.563		
4,600.0	4,582.1	4,520.5	4,418.9	10.1	17.8	61.29	-314.1	-886.2	739.9	720.7	19.21	38.521		
4,700.0	4,681.5	4,619.0	4,514.7	10.4	18.2	61.36	-322.3	-907.7	757.1	737.4	19.67	38.480		
4,800.0	4,781.0	4,717.5	4,610.5	10.6	18.7	61.43	-330.5	-929.2	774.2	754.1	20.14	38.440		
4,900.0	4,880.5	4,816.0	4,706.2	10.9	19.1	61.49	-338.7	-950.7	791.4	770.8	20.61	38.402		
5,000.0	4,979.9	4,914.5	4,802.0	11.1	19.6	61.55	-346.9	-972.3	808.5	787.5	21.07	38.365		
5,100.0	5,079.4	5,013.0	4,897.8	11.4	20.0	61.61	-355.0	-993.8	825.7	804.2	21.54	38.329		

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 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													S26-T2N-R68W (Sullivan) - Sullivan 4C-26H-P268 - HZ - Plan #1		Offset Site Error:		0.0 ft	
Survey Program:													0-Geolink MWD		Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							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	5,178.9	5,111.6	4,993.6	11.6	20.5	61.67	-363.2	-1,015.3	842.9	820.8	22.01	38.295						
5,300.0	5,278.4	5,210.1	5,089.4	11.9	20.9	61.72	-371.4	-1,036.8	860.0	837.5	22.48	38.261						
5,400.0	5,377.8	5,308.6	5,185.2	12.1	21.4	61.77	-379.6	-1,058.3	877.2	854.2	22.95	38.229						
5,500.0	5,477.3	5,407.1	5,281.0	12.4	21.8	61.82	-387.8	-1,079.8	894.3	870.9	23.41	38.198						
5,600.0	5,576.8	5,505.6	5,376.8	12.6	22.2	61.87	-396.0	-1,101.3	911.5	887.6	23.88	38.168						
5,700.0	5,676.3	5,604.1	5,472.5	12.9	22.7	61.92	-404.2	-1,122.8	928.7	904.3	24.35	38.138						
5,800.0	5,775.7	5,702.6	5,568.3	13.1	23.1	61.96	-412.4	-1,144.3	945.8	921.0	24.82	38.110						
5,900.0	5,875.2	5,801.2	5,664.1	13.4	23.6	62.00	-420.5	-1,165.9	963.0	937.7	25.29	38.082						
6,000.0	5,974.7	5,899.7	5,759.9	13.6	24.0	62.05	-428.7	-1,187.4	980.2	954.4	25.76	38.056						
6,100.0	6,074.1	5,998.2	5,855.7	13.9	24.5	62.09	-436.9	-1,208.9	997.3	971.1	26.22	38.030						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4D-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total 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	-89.58	0.4	-50.1	50.1					
100.0	100.0	99.0	99.0	0.1	0.1	-89.58	0.4	-50.1	50.1	49.8	0.24	212.012		
200.0	200.0	199.0	199.0	0.3	0.3	-89.58	0.4	-50.1	50.1	49.5	0.58	85.640		
300.0	300.0	299.0	299.0	0.5	0.5	-89.58	0.4	-50.1	50.1	49.1	0.93	53.625		
400.0	400.0	399.0	399.0	0.6	0.6	-89.58	0.4	-50.1	50.1	48.8	1.28	39.033		
500.0	500.0	499.0	499.0	0.8	0.8	-89.58	0.4	-50.1	50.1	48.4	1.63	30.684 CC, ES		
600.0	600.0	597.4	597.4	1.0	1.0	-90.34	-0.3	-51.6	51.6	49.6	1.98	26.090		
700.0	700.0	695.6	695.4	1.2	1.2	-92.38	-2.3	-56.2	56.3	54.0	2.32	24.238		
800.0	800.0	793.3	792.8	1.3	1.4	-95.11	-5.7	-63.8	64.3	61.7	2.67	24.095 SF		
900.0	900.0	890.3	889.1	1.5	1.6	-97.95	-10.4	-74.3	75.7	72.7	3.02	25.088		
1,000.0	1,000.0	986.4	984.1	1.7	1.9	-100.54	-16.3	-87.7	90.5	87.1	3.37	26.852		
1,100.0	1,100.0	1,081.7	1,077.7	1.9	2.2	50.06	-23.5	-103.9	107.5	103.8	3.71	28.951		
1,200.0	1,199.8	1,179.9	1,173.8	2.0	2.5	49.74	-31.6	-122.3	124.3	120.3	4.07	30.540		
1,300.0	1,299.5	1,278.8	1,270.6	2.2	2.9	50.58	-39.9	-140.9	139.0	134.5	4.44	31.266		
1,400.0	1,398.9	1,377.8	1,367.5	2.4	3.3	51.89	-48.1	-159.5	152.7	147.9	4.84	31.580		
1,500.0	1,498.4	1,476.8	1,464.3	2.7	3.7	52.99	-56.4	-178.1	166.5	161.2	5.24	31.795		
1,600.0	1,597.9	1,575.8	1,561.2	2.9	4.0	53.92	-64.6	-196.8	180.3	174.7	5.65	31.938		
1,700.0	1,697.3	1,674.8	1,658.1	3.1	4.4	54.72	-72.8	-215.4	194.2	188.1	6.06	32.028		
1,800.0	1,796.8	1,773.8	1,755.0	3.3	4.8	55.41	-81.1	-234.0	208.1	201.6	6.49	32.079		
1,900.0	1,896.3	1,872.8	1,851.9	3.6	5.2	56.01	-89.3	-252.6	222.1	215.1	6.92	32.101		
2,000.0	1,995.8	1,971.8	1,948.7	3.8	5.6	56.54	-97.6	-271.2	236.0	228.7	7.35	32.103		
2,100.0	2,095.2	2,070.7	2,045.6	4.0	6.0	57.02	-105.8	-289.8	250.0	242.2	7.79	32.090		
2,200.0	2,194.7	2,169.7	2,142.5	4.3	6.4	57.44	-114.1	-308.4	264.0	255.8	8.23	32.066		
2,300.0	2,294.2	2,268.7	2,239.4	4.5	6.8	57.82	-122.3	-327.0	278.0	269.3	8.68	32.035		
2,400.0	2,393.7	2,367.7	2,336.3	4.7	7.2	58.16	-130.5	-345.7	292.0	282.9	9.13	31.999		
2,500.0	2,493.1	2,466.7	2,433.2	5.0	7.6	58.48	-138.8	-364.3	306.1	296.5	9.58	31.959		
2,600.0	2,592.6	2,565.7	2,530.0	5.2	8.0	58.76	-147.0	-382.9	320.1	310.1	10.03	31.917		
2,700.0	2,692.1	2,664.7	2,626.9	5.5	8.4	59.02	-155.3	-401.5	334.1	323.6	10.48	31.874		
2,800.0	2,791.5	2,763.7	2,723.8	5.7	8.8	59.26	-163.5	-420.1	348.2	337.2	10.94	31.831		
2,900.0	2,891.0	2,862.7	2,820.7	6.0	9.2	59.48	-171.8	-438.7	362.2	350.8	11.40	31.787		
3,000.0	2,990.5	2,961.7	2,917.6	6.2	9.6	59.69	-180.0	-457.3	376.3	364.4	11.85	31.744		
3,100.0	3,090.0	3,060.7	3,014.5	6.4	10.0	59.88	-188.2	-475.9	390.4	378.0	12.31	31.701		
3,200.0	3,189.4	3,159.7	3,111.3	6.7	10.4	60.06	-196.5	-494.6	404.4	391.7	12.77	31.660		
3,300.0	3,288.9	3,258.7	3,208.2	6.9	10.8	60.22	-204.7	-513.2	418.5	405.3	13.24	31.619		
3,400.0	3,388.4	3,357.7	3,305.1	7.2	11.2	60.38	-213.0	-531.8	432.6	418.9	13.70	31.579		
3,500.0	3,487.9	3,456.7	3,402.0	7.4	11.6	60.52	-221.2	-550.4	446.6	432.5	14.16	31.540		
3,600.0	3,587.3	3,555.7	3,498.9	7.7	12.0	60.66	-229.5	-569.0	460.7	446.1	14.63	31.503		
3,700.0	3,686.8	3,654.7	3,595.8	7.9	12.4	60.78	-237.7	-587.6	474.8	459.7	15.09	31.466		
3,800.0	3,786.3	3,753.7	3,692.6	8.2	12.7	60.90	-245.9	-606.2	488.9	473.3	15.55	31.431		
3,900.0	3,885.7	3,852.7	3,789.5	8.4	13.1	61.02	-254.2	-624.8	503.0	487.0	16.02	31.397		
4,000.0	3,985.2	3,951.7	3,886.4	8.7	13.5	61.13	-262.4	-643.5	517.1	500.6	16.49	31.364		
4,100.0	4,084.7	4,050.7	3,983.3	8.9	13.9	61.23	-270.7	-662.1	531.2	514.2	16.95	31.332		
4,200.0	4,184.2	4,149.7	4,080.2	9.2	14.3	61.32	-278.9	-680.7	545.3	527.8	17.42	31.301		
4,300.0	4,283.6	4,248.7	4,177.0	9.4	14.7	61.41	-287.2	-699.3	559.3	541.5	17.89	31.271		
4,400.0	4,383.1	4,347.7	4,273.9	9.7	15.1	61.50	-295.4	-717.9	573.4	555.1	18.36	31.242		
4,500.0	4,482.6	4,446.7	4,370.8	9.9	15.5	61.58	-303.6	-736.5	587.5	568.7	18.82	31.214		
4,600.0	4,582.1	4,545.7	4,467.7	10.1	15.9	61.66	-311.9	-755.1	601.6	582.3	19.29	31.187		
4,700.0	4,681.5	4,644.7	4,564.6	10.4	16.3	61.74	-320.1	-773.8	615.7	596.0	19.76	31.160		
4,800.0	4,781.0	4,743.7	4,661.5	10.6	16.7	61.81	-328.4	-792.4	629.8	609.6	20.23	31.135		
4,900.0	4,880.5	4,842.7	4,758.3	10.9	17.1	61.88	-336.6	-811.0	643.9	623.2	20.70	31.110		
5,000.0	4,979.9	4,941.7	4,855.2	11.1	17.5	61.95	-344.9	-829.6	658.0	636.9	21.17	31.087		
5,100.0	5,079.4	5,040.7	4,952.1	11.4	17.9	62.01	-353.1	-848.2	672.1	650.5	21.64	31.064		

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 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4D-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
5,200.0	5,178.9	5,139.7	5,049.0	11.6	18.3	62.07	-361.3	-866.8	686.2	664.1	22.11	31.041		
5,300.0	5,278.4	5,238.7	5,145.9	11.9	18.7	62.13	-369.6	-885.4	700.3	677.8	22.58	31.020		
5,400.0	5,377.8	5,337.7	5,242.8	12.1	19.1	62.18	-377.8	-904.0	714.4	691.4	23.05	30.999		
5,500.0	5,477.3	5,436.7	5,339.6	12.4	19.5	62.24	-386.1	-922.7	728.5	705.0	23.52	30.978		
5,600.0	5,576.8	5,535.7	5,436.5	12.6	19.9	62.29	-394.3	-941.3	742.7	718.7	23.99	30.959		
5,700.0	5,676.3	5,634.7	5,533.4	12.9	20.3	62.34	-402.6	-959.9	756.8	732.3	24.46	30.940		
5,800.0	5,775.7	5,733.7	5,630.3	13.1	20.7	62.39	-410.8	-978.5	770.9	745.9	24.93	30.921		
5,900.0	5,875.2	5,832.7	5,727.2	13.4	21.1	62.43	-419.0	-997.1	785.0	759.6	25.40	30.903		
6,000.0	5,974.7	5,931.7	5,824.0	13.6	21.5	62.48	-427.3	-1,015.7	799.1	773.2	25.87	30.886		
6,100.0	6,074.1	6,030.7	5,920.9	13.9	21.9	62.52	-435.5	-1,034.3	813.2	786.8	26.34	30.869		
6,200.0	6,173.6	6,129.7	6,017.8	14.1	22.3	62.56	-443.8	-1,052.9	827.3	800.5	26.81	30.852		
6,300.0	6,273.1	6,228.7	6,114.7	14.4	22.7	62.60	-452.0	-1,071.6	841.4	814.1	27.29	30.836		
6,400.0	6,372.6	6,327.7	6,211.6	14.6	23.1	62.64	-460.3	-1,090.2	855.5	827.8	27.76	30.820		
6,500.0	6,472.0	6,426.7	6,308.5	14.9	23.5	62.68	-468.5	-1,108.8	869.6	841.4	28.23	30.805		
6,600.0	6,571.5	6,525.7	6,405.3	15.1	23.9	62.71	-476.7	-1,127.4	883.7	855.0	28.70	30.790		
6,700.0	6,671.0	6,624.7	6,502.2	15.4	24.3	62.75	-485.0	-1,146.0	897.8	868.7	29.17	30.776		
6,800.0	6,770.5	6,723.7	6,599.1	15.6	24.7	62.78	-493.2	-1,164.6	912.0	882.3	29.65	30.762		
6,900.0	6,870.2	6,822.3	6,695.7	15.8	25.1	-53.82	-501.4	-1,183.2	926.1	895.8	30.23	30.635		
7,000.0	6,968.8	6,918.4	6,789.7	15.7	25.5	-78.14	-509.4	-1,201.2	940.2	909.9	30.39	30.936		
7,100.0	7,063.3	7,008.9	6,878.3	15.5	25.9	-83.31	-517.0	-1,218.3	955.3	925.1	30.21	31.623		
7,200.0	7,150.7	7,107.0	6,974.5	15.3	26.2	-86.30	-518.0	-1,236.7	972.1	942.4	29.72	32.705		
7,300.0	7,228.5	7,217.2	7,080.9	14.9	26.5	-88.54	-499.2	-1,257.2	990.0	960.9	29.04	34.094		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4E-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total 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	-89.49	0.4	-40.0	40.0					
100.0	100.0	99.0	99.0	0.1	0.1	-89.49	0.4	-40.0	40.0	39.8	0.24	169.375		
200.0	200.0	199.0	199.0	0.3	0.3	-89.49	0.4	-40.0	40.0	39.4	0.58	68.417		
300.0	300.0	299.0	299.0	0.5	0.5	-89.49	0.4	-40.0	40.0	39.1	0.93	42.841		
400.0	400.0	399.0	399.0	0.6	0.6	-89.49	0.4	-40.0	40.0	38.7	1.28	31.183		
500.0	500.0	499.0	499.0	0.8	0.8	-89.49	0.4	-40.0	40.0	38.4	1.63	24.513		
600.0	600.0	599.0	599.0	1.0	1.0	-89.49	0.4	-40.0	40.0	38.0	1.98	20.194 CC, ES		
700.0	700.0	697.8	697.7	1.2	1.2	-90.59	-0.4	-41.5	41.5	39.2	2.33	17.825		
800.0	800.0	796.3	796.1	1.3	1.3	-93.49	-2.8	-45.9	46.1	43.4	2.67	17.240		
900.0	900.0	894.3	893.8	1.5	1.5	-97.21	-6.7	-53.3	54.0	51.0	3.02	17.879		
1,000.0	1,000.0	991.7	990.5	1.7	1.8	-100.87	-12.2	-63.6	65.3	62.0	3.37	19.393		
1,100.0	1,100.0	1,088.4	1,086.0	1.9	2.0	49.04	-19.2	-76.7	78.9	75.2	3.72	21.203		
1,200.0	1,199.8	1,187.0	1,183.1	2.0	2.3	48.51	-27.3	-91.9	92.5	88.4	4.08	22.675		
1,300.0	1,299.5	1,286.3	1,280.8	2.2	2.7	49.54	-35.5	-107.4	103.9	99.4	4.45	23.327		
1,400.0	1,398.9	1,385.7	1,378.7	2.4	3.0	51.10	-43.8	-122.8	114.3	109.5	4.84	23.599		
1,500.0	1,498.4	1,485.1	1,476.5	2.7	3.3	52.40	-52.0	-138.2	124.8	119.6	5.25	23.795		
1,600.0	1,597.9	1,584.5	1,574.4	2.9	3.6	53.50	-60.2	-153.7	135.4	129.7	5.66	23.933		
1,700.0	1,697.3	1,683.9	1,672.3	3.1	4.0	54.43	-68.4	-169.1	146.0	139.9	6.08	24.028		
1,800.0	1,796.8	1,783.3	1,770.1	3.3	4.3	55.24	-76.7	-184.6	156.6	150.1	6.50	24.090		
1,900.0	1,896.3	1,882.7	1,868.0	3.6	4.7	55.95	-84.9	-200.0	167.3	160.4	6.93	24.128		
2,000.0	1,995.8	1,982.1	1,965.8	3.8	5.0	56.57	-93.1	-215.5	178.0	170.6	7.37	24.149		
2,100.0	2,095.2	2,081.6	2,063.7	4.0	5.3	57.13	-101.4	-230.9	188.7	180.9	7.81	24.156		
2,200.0	2,194.7	2,181.0	2,161.5	4.3	5.7	57.62	-109.6	-246.4	199.4	191.1	8.26	24.153		
2,300.0	2,294.2	2,280.4	2,259.4	4.5	6.0	58.06	-117.8	-261.8	210.1	201.4	8.70	24.144		
2,400.0	2,393.7	2,379.8	2,357.3	4.7	6.4	58.46	-126.1	-277.3	220.9	211.7	9.15	24.129		
2,500.0	2,493.1	2,479.2	2,455.1	5.0	6.7	58.82	-134.3	-292.7	231.6	222.0	9.61	24.111		
2,600.0	2,592.6	2,578.6	2,553.0	5.2	7.1	59.15	-142.5	-308.2	242.4	232.3	10.06	24.090		
2,700.0	2,692.1	2,678.0	2,650.8	5.5	7.4	59.46	-150.8	-323.6	253.1	242.6	10.52	24.067		
2,800.0	2,791.5	2,777.4	2,748.7	5.7	7.8	59.73	-159.0	-339.1	263.9	252.9	10.98	24.043		
2,900.0	2,891.0	2,876.8	2,846.5	6.0	8.1	59.99	-167.2	-354.5	274.7	263.3	11.44	24.018		
3,000.0	2,990.5	2,976.3	2,944.4	6.2	8.5	60.23	-175.4	-370.0	285.5	273.6	11.90	23.993		
3,100.0	3,090.0	3,075.7	3,042.3	6.4	8.8	60.44	-183.7	-385.4	296.3	283.9	12.36	23.968		
3,200.0	3,189.4	3,175.1	3,140.1	6.7	9.2	60.65	-191.9	-400.9	307.1	294.2	12.82	23.943		
3,300.0	3,288.9	3,274.5	3,238.0	6.9	9.5	60.84	-200.1	-416.3	317.9	304.6	13.29	23.919		
3,400.0	3,388.4	3,373.9	3,335.8	7.2	9.9	61.02	-208.4	-431.8	328.7	314.9	13.75	23.894		
3,500.0	3,487.9	3,473.3	3,433.7	7.4	10.2	61.18	-216.6	-447.2	339.5	325.2	14.22	23.871		
3,600.0	3,587.3	3,572.7	3,531.5	7.7	10.6	61.34	-224.8	-462.7	350.3	335.6	14.69	23.847		
3,700.0	3,686.8	3,672.1	3,629.4	7.9	11.0	61.48	-233.1	-478.1	361.1	345.9	15.16	23.825		
3,800.0	3,786.3	3,771.5	3,727.3	8.2	11.3	61.62	-241.3	-493.6	371.9	356.3	15.62	23.803		
3,900.0	3,885.7	3,870.9	3,825.1	8.4	11.7	61.75	-249.5	-509.0	382.7	366.6	16.09	23.781		
4,000.0	3,985.2	3,970.4	3,923.0	8.7	12.0	61.88	-257.7	-524.5	393.5	377.0	16.56	23.760		
4,100.0	4,084.7	4,069.8	4,020.8	8.9	12.4	61.99	-266.0	-539.9	404.3	387.3	17.03	23.740		
4,200.0	4,184.2	4,169.2	4,118.7	9.2	12.7	62.10	-274.2	-555.3	415.1	397.6	17.50	23.720		
4,300.0	4,283.6	4,268.6	4,216.5	9.4	13.1	62.21	-282.4	-570.8	426.0	408.0	17.97	23.701		
4,400.0	4,383.1	4,368.0	4,314.4	9.7	13.4	62.31	-290.7	-586.2	436.8	418.3	18.44	23.683		
4,500.0	4,482.6	4,467.4	4,412.3	9.9	13.8	62.40	-298.9	-601.7	447.6	428.7	18.91	23.665		
4,600.0	4,582.1	4,566.8	4,510.1	10.1	14.1	62.49	-307.1	-617.1	458.4	439.0	19.39	23.647		
4,700.0	4,681.5	4,666.2	4,608.0	10.4	14.5	62.58	-315.4	-632.6	469.3	449.4	19.86	23.630		
4,800.0	4,781.0	4,765.6	4,705.8	10.6	14.8	62.66	-323.6	-648.0	480.1	459.7	20.33	23.614		
4,900.0	4,880.5	4,865.0	4,803.7	10.9	15.2	62.74	-331.8	-663.5	490.9	470.1	20.80	23.598		
5,000.0	4,979.9	4,964.5	4,901.5	11.1	15.5	62.82	-340.1	-678.9	501.7	480.5	21.28	23.583		
5,100.0	5,079.4	5,063.9	4,999.4	11.4	15.9	62.89	-348.3	-694.4	512.6	490.8	21.75	23.568		

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 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4E-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,200.0	5,178.9	5,163.3	5,097.3	11.6	16.2	62.96	-356.5	-709.8	523.4	501.2	22.22	23.553		
5,300.0	5,278.4	5,262.7	5,195.1	11.9	16.6	63.02	-364.7	-725.3	534.2	511.5	22.69	23.539		
5,400.0	5,377.8	5,362.1	5,293.0	12.1	17.0	63.09	-373.0	-740.7	545.0	521.9	23.17	23.526		
5,500.0	5,477.3	5,461.5	5,390.8	12.4	17.3	63.15	-381.2	-756.2	555.9	532.2	23.64	23.512		
5,600.0	5,576.8	5,560.9	5,488.7	12.6	17.7	63.21	-389.4	-771.6	566.7	542.6	24.12	23.499		
5,700.0	5,676.3	5,660.3	5,586.5	12.9	18.0	63.26	-397.7	-787.1	577.5	552.9	24.59	23.487		
5,800.0	5,775.7	5,759.7	5,684.4	13.1	18.4	63.32	-405.9	-802.5	588.4	563.3	25.06	23.475		
5,900.0	5,875.2	5,859.1	5,782.3	13.4	18.7	63.37	-414.1	-818.0	599.2	573.7	25.54	23.463		
6,000.0	5,974.7	5,958.6	5,880.1	13.6	19.1	63.42	-422.4	-833.4	610.0	584.0	26.01	23.452		
6,100.0	6,074.1	6,058.0	5,978.0	13.9	19.4	63.47	-430.6	-848.9	620.9	594.4	26.49	23.440		
6,200.0	6,173.6	6,157.4	6,075.8	14.1	19.8	63.52	-438.8	-864.3	631.7	604.7	26.96	23.430		
6,300.0	6,273.1	6,256.8	6,173.7	14.4	20.1	63.56	-447.0	-879.8	642.5	615.1	27.44	23.419		
6,400.0	6,372.6	6,356.2	6,271.5	14.6	20.5	63.61	-455.3	-895.2	653.4	625.4	27.91	23.409		
6,500.0	6,472.0	6,455.6	6,369.4	14.9	20.8	63.65	-463.5	-910.7	664.2	635.8	28.39	23.399		
6,600.0	6,571.5	6,555.0	6,467.3	15.1	21.2	63.69	-471.7	-926.1	675.0	646.2	28.86	23.389		
6,700.0	6,671.0	6,654.4	6,565.1	15.4	21.6	63.73	-480.0	-941.6	685.9	656.5	29.34	23.380		
6,800.0	6,770.5	6,753.8	6,663.0	15.6	21.9	63.77	-488.2	-957.0	696.7	666.9	29.81	23.370		
6,900.0	6,870.2	6,852.9	6,760.5	15.8	22.3	-53.27	-496.4	-972.4	707.4	677.2	30.26	23.377		
7,000.0	6,968.8	6,949.4	6,855.5	15.7	22.6	-78.37	-504.4	-987.4	718.2	687.9	30.25	23.741		
7,100.0	7,063.3	7,040.4	6,945.0	15.5	22.9	-84.53	-511.9	-1,001.5	730.3	700.4	29.89	24.428		
7,200.0	7,150.7	7,125.0	7,028.3	15.3	23.2	-88.40	-518.8	-1,014.7	745.7	716.3	29.38	25.380		
7,300.0	7,228.5	7,227.0	7,128.9	14.9	23.5	-92.04	-516.2	-1,030.6	765.3	736.6	28.69	26.674		
7,400.0	7,294.3	7,346.9	7,244.3	14.6	23.6	-95.49	-490.1	-1,048.8	787.7	759.7	27.93	28.198		
7,500.0	7,346.0	7,493.9	7,374.5	14.3	23.6	-99.03	-426.1	-1,069.3	811.0	783.8	27.13	29.896		
7,600.0	7,382.2	7,679.8	7,509.2	14.2	23.5	-102.55	-300.8	-1,090.6	831.9	805.5	26.39	31.530		
7,700.0	7,401.6	7,910.7	7,610.6	14.3	23.4	-105.07	-95.7	-1,106.6	845.8	819.6	26.16	32.336		
7,800.0	7,405.0	8,102.2	7,630.0	14.6	23.7	-105.44	94.0	-1,109.7	849.1	822.3	26.85	31.630		
7,900.0	7,405.0	8,202.2	7,630.0	15.1	24.0	-105.42	194.0	-1,109.7	850.3	822.4	27.85	30.528		
8,000.0	7,405.0	8,302.2	7,630.0	15.8	24.4	-105.39	294.0	-1,109.7	851.5	822.3	29.22	29.141		
8,100.0	7,405.0	8,402.2	7,630.0	16.6	25.0	-105.37	394.0	-1,109.7	852.6	821.8	30.90	27.595		
8,200.0	7,405.0	8,502.2	7,630.0	17.6	25.6	-105.35	494.0	-1,109.7	853.8	821.0	32.84	25.998		
8,300.0	7,405.0	8,602.2	7,630.0	18.7	26.4	-105.33	594.0	-1,109.7	855.0	820.0	35.01	24.424		
8,400.0	7,405.0	8,702.2	7,630.0	19.9	27.2	-105.31	694.0	-1,109.7	856.2	818.8	37.35	22.921		
8,500.0	7,405.0	8,802.1	7,630.0	21.1	28.1	-105.28	794.0	-1,109.7	857.4	817.5	39.85	21.515		
8,600.0	7,405.0	8,902.1	7,630.0	22.4	29.2	-105.26	894.0	-1,109.7	858.5	816.1	42.47	20.215		
8,700.0	7,405.0	9,002.1	7,630.0	23.8	30.2	-105.24	994.0	-1,109.7	859.7	814.5	45.20	19.022		
8,800.0	7,405.0	9,102.1	7,630.0	25.2	31.4	-105.22	1,094.0	-1,109.7	860.9	812.9	48.00	17.934		
8,900.0	7,405.0	9,202.1	7,630.0	26.7	32.6	-105.20	1,193.9	-1,109.7	862.1	811.2	50.89	16.942		
9,000.0	7,405.0	9,302.1	7,630.0	28.2	33.8	-105.18	1,293.9	-1,109.7	863.3	809.4	53.83	16.038		
9,100.0	7,405.0	9,402.1	7,630.0	29.7	35.1	-105.16	1,393.9	-1,109.7	864.4	807.6	56.82	15.214		
9,200.0	7,405.0	9,502.1	7,630.0	31.3	36.4	-105.14	1,493.9	-1,109.7	865.6	805.8	59.85	14.463		
9,300.0	7,405.0	9,602.1	7,630.0	32.9	37.8	-105.11	1,593.9	-1,109.7	866.8	803.9	62.92	13.775		
9,400.0	7,405.0	9,702.1	7,630.0	34.5	39.2	-105.09	1,693.9	-1,109.7	868.0	801.9	66.03	13.146		
9,500.0	7,405.0	9,802.1	7,630.0	36.1	40.6	-105.07	1,793.9	-1,109.7	869.2	800.0	69.16	12.567		
9,600.0	7,405.0	9,902.1	7,630.0	37.7	42.0	-105.05	1,893.9	-1,109.7	870.3	798.0	72.31	12.035		
9,700.0	7,405.0	10,002.1	7,630.0	39.3	43.5	-105.03	1,993.9	-1,109.7	871.5	796.0	75.49	11.544		
9,800.0	7,405.0	10,102.0	7,630.0	40.9	45.0	-105.01	2,093.9	-1,109.7	872.7	794.0	78.69	11.091		
9,900.0	7,405.0	10,202.0	7,630.0	42.6	46.5	-104.99	2,193.9	-1,109.7	873.9	792.0	81.90	10.670		
10,000.0	7,405.0	10,302.0	7,630.0	44.3	48.0	-104.97	2,293.9	-1,109.7	875.0	789.9	85.13	10.279		
10,100.0	7,405.0	10,402.0	7,630.0	45.9	49.6	-104.95	2,393.9	-1,109.7	876.2	787.9	88.37	9.916		
10,200.0	7,405.0	10,502.0	7,630.0	47.6	51.1	-104.93	2,493.8	-1,109.7	877.4	785.8	91.62	9.576		
10,300.0	7,405.0	10,602.0	7,630.0	49.3	52.7	-104.91	2,593.8	-1,109.7	878.6	783.7	94.89	9.259		

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 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4E-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total 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	10,702.0	7,630.0	50.9	54.3	-104.89	2,693.8	-1,109.7	879.8	781.6	98.16	8.963		
10,500.0	7,405.0	10,802.0	7,630.0	52.6	55.9	-104.87	2,793.8	-1,109.7	881.0	779.5	101.44	8.684		
10,600.0	7,405.0	10,902.0	7,630.0	54.3	57.5	-104.85	2,893.8	-1,109.7	882.1	777.4	104.73	8.423		
10,700.0	7,405.0	11,002.0	7,630.0	56.0	59.1	-104.83	2,993.8	-1,109.7	883.3	775.3	108.03	8.177		
10,800.0	7,405.0	11,102.0	7,630.0	57.7	60.7	-104.81	3,093.8	-1,109.7	884.5	773.2	111.33	7.945		
10,900.0	7,405.0	11,202.0	7,630.0	59.4	62.3	-104.78	3,193.8	-1,109.7	885.7	771.0	114.64	7.725		
11,000.0	7,405.0	11,302.0	7,630.0	61.1	63.9	-104.76	3,293.8	-1,109.7	886.9	768.9	117.96	7.518		
11,100.0	7,405.0	11,402.0	7,630.0	62.8	65.6	-104.74	3,393.8	-1,109.7	888.0	766.8	121.28	7.322		
11,200.0	7,405.0	11,501.9	7,630.0	64.5	67.2	-104.72	3,493.8	-1,109.7	889.2	764.6	124.61	7.136		
11,300.0	7,405.0	11,601.9	7,630.0	66.2	68.9	-104.70	3,593.8	-1,109.7	890.4	762.5	127.94	6.959		
11,400.0	7,405.0	11,701.9	7,630.0	68.0	70.5	-104.68	3,693.8	-1,109.7	891.6	760.3	131.28	6.792		
11,500.0	7,405.0	11,801.9	7,630.0	69.7	72.2	-104.66	3,793.7	-1,109.7	892.8	758.1	134.62	6.632		
11,600.0	7,405.0	11,901.9	7,630.0	71.4	73.8	-104.65	3,893.7	-1,109.7	893.9	756.0	137.96	6.480		
11,700.0	7,405.0	12,001.9	7,630.0	73.1	75.5	-104.63	3,993.7	-1,109.7	895.1	753.8	141.31	6.335		
11,800.0	7,405.0	12,101.9	7,630.0	74.8	77.2	-104.61	4,093.7	-1,109.7	896.3	751.6	144.66	6.196		
11,900.0	7,405.0	12,201.9	7,630.0	76.6	78.8	-104.59	4,193.7	-1,109.7	897.5	749.5	148.01	6.064		
12,000.0	7,405.0	12,301.9	7,630.0	78.3	80.5	-104.57	4,293.7	-1,109.7	898.7	747.3	151.37	5.937		
12,100.0	7,405.0	12,401.9	7,630.0	80.0	82.2	-104.55	4,393.7	-1,109.7	899.9	745.1	154.73	5.816		
12,200.0	7,405.0	12,501.9	7,630.0	81.7	83.9	-104.53	4,493.7	-1,109.7	901.0	742.9	158.09	5.699		
12,300.0	7,405.0	12,601.9	7,630.0	83.5	85.6	-104.51	4,593.7	-1,109.7	902.2	740.8	161.46	5.588		
12,400.0	7,405.0	12,701.9	7,630.0	85.2	87.3	-104.49	4,693.7	-1,109.7	903.4	738.6	164.83	5.481		
12,500.0	7,405.0	12,801.8	7,630.0	86.9	89.0	-104.47	4,793.7	-1,109.7	904.6	736.4	168.19	5.378		
12,600.0	7,405.0	12,901.8	7,630.0	88.7	90.6	-104.45	4,893.7	-1,109.7	905.8	734.2	171.57	5.279		
12,700.0	7,405.0	13,001.8	7,630.0	90.4	92.3	-104.43	4,993.7	-1,109.7	907.0	732.0	174.94	5.184		
12,800.0	7,405.0	13,101.8	7,630.0	92.1	94.0	-104.41	5,093.7	-1,109.7	908.1	729.8	178.32	5.093		
12,900.0	7,405.0	13,201.8	7,630.0	93.9	95.7	-104.39	5,193.6	-1,109.7	909.3	727.6	181.69	5.005		
13,000.0	7,405.0	13,301.8	7,630.0	95.6	97.4	-104.37	5,293.6	-1,109.7	910.5	725.4	185.07	4.920		
13,100.0	7,405.0	13,401.8	7,630.0	97.3	99.1	-104.35	5,393.6	-1,109.7	911.7	723.2	188.45	4.838		
13,200.0	7,405.0	13,501.8	7,630.0	99.1	100.9	-104.33	5,493.6	-1,109.7	912.9	721.0	191.84	4.759		
13,300.0	7,405.0	13,601.8	7,630.0	100.8	102.6	-104.32	5,593.6	-1,109.7	914.1	718.8	195.22	4.682		
13,400.0	7,405.0	13,701.8	7,630.0	102.5	104.3	-104.30	5,693.6	-1,109.7	915.2	716.6	198.61	4.608		
13,500.0	7,405.0	13,801.8	7,630.0	104.3	106.0	-104.28	5,793.6	-1,109.7	916.4	714.4	202.00	4.537		
13,600.0	7,405.0	13,901.8	7,630.0	106.0	107.7	-104.26	5,893.6	-1,109.7	917.6	712.2	205.39	4.468		
13,700.0	7,405.0	14,001.8	7,630.0	107.7	109.4	-104.24	5,993.6	-1,109.7	918.8	710.0	208.78	4.401		
13,800.0	7,405.0	14,101.8	7,630.0	109.5	111.1	-104.22	6,093.6	-1,109.7	920.0	707.8	212.17	4.336		
13,900.0	7,405.0	14,201.7	7,630.0	111.2	112.8	-104.20	6,193.6	-1,109.7	921.2	705.6	215.56	4.273		
14,000.0	7,405.0	14,301.7	7,630.0	113.0	114.5	-104.18	6,293.6	-1,109.7	922.3	703.4	218.96	4.212		
14,100.0	7,405.0	14,401.7	7,630.0	114.7	116.3	-104.17	6,393.6	-1,109.7	923.5	701.2	222.35	4.153		
14,200.0	7,405.0	14,501.7	7,630.0	116.4	118.0	-104.15	6,493.5	-1,109.7	924.7	699.0	225.75	4.096		
14,300.0	7,405.0	14,601.7	7,630.0	118.2	119.7	-104.13	6,593.5	-1,109.6	925.9	696.7	229.15	4.041 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4F-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
0.0	0.0	0.0	0.0	0.0	0.0	-89.95	0.0	-29.9	29.9					
100.0	100.0	99.0	99.0	0.1	0.1	-89.95	0.0	-29.9	29.9	29.7	0.24	126.730		
200.0	200.0	199.0	199.0	0.3	0.3	-89.95	0.0	-29.9	29.9	29.3	0.58	51.191		
300.0	300.0	299.0	299.0	0.5	0.5	-89.95	0.0	-29.9	29.9	29.0	0.93	32.054		
400.0	400.0	399.0	399.0	0.6	0.6	-89.95	0.0	-29.9	29.9	28.6	1.28	23.332		
500.0	500.0	499.0	499.0	0.8	0.8	-89.95	0.0	-29.9	29.9	28.3	1.63	18.341		
600.0	600.0	599.0	599.0	1.0	1.0	-89.95	0.0	-29.9	29.9	27.9	1.98	15.109		
700.0	700.0	699.0	699.0	1.2	1.2	-89.95	0.0	-29.9	29.9	27.6	2.33	12.846 CC, ES		
800.0	800.0	798.1	798.1	1.3	1.3	-91.67	-0.9	-31.3	31.4	28.7	2.68	11.709		
900.0	900.0	897.0	896.8	1.5	1.5	-96.02	-3.7	-35.6	35.8	32.8	3.02	11.841		
1,000.0	1,000.0	995.4	994.9	1.7	1.7	-101.23	-8.5	-42.6	43.6	40.2	3.37	12.930		
1,100.0	1,100.0	1,093.3	1,092.0	1.9	1.9	47.55	-15.0	-52.3	53.7	50.0	3.73	14.402		
1,200.0	1,199.8	1,191.6	1,189.3	2.0	2.2	46.45	-23.3	-64.6	64.4	60.3	4.08	15.779		
1,300.0	1,299.5	1,291.2	1,287.6	2.2	2.5	47.47	-31.9	-77.6	73.4	68.9	4.46	16.464		
1,400.0	1,398.9	1,390.9	1,386.1	2.4	2.8	49.18	-40.6	-90.5	81.3	76.4	4.84	16.778		
1,500.0	1,498.4	1,490.5	1,484.5	2.7	3.1	50.59	-49.3	-103.4	89.3	84.0	5.24	17.021		
1,600.0	1,597.9	1,590.2	1,582.9	2.9	3.4	51.77	-58.0	-116.4	97.3	91.7	5.65	17.209		
1,700.0	1,697.3	1,689.8	1,681.4	3.1	3.7	52.76	-66.7	-129.3	105.4	99.3	6.07	17.354		
1,800.0	1,796.8	1,789.5	1,779.8	3.3	4.0	53.62	-75.4	-142.3	113.5	107.0	6.50	17.467		
1,900.0	1,896.3	1,889.2	1,878.2	3.6	4.3	54.36	-84.0	-155.2	121.6	114.7	6.93	17.554		
2,000.0	1,995.8	1,988.8	1,976.7	3.8	4.6	55.01	-92.7	-168.1	129.7	122.4	7.36	17.621		
2,100.0	2,095.2	2,088.5	2,075.1	4.0	4.9	55.58	-101.4	-181.1	137.9	130.1	7.80	17.674		
2,200.0	2,194.7	2,188.1	2,173.5	4.3	5.2	56.09	-110.1	-194.0	146.0	137.8	8.24	17.714		
2,300.0	2,294.2	2,287.8	2,271.9	4.5	5.5	56.54	-118.8	-207.0	154.2	145.5	8.69	17.745		
2,400.0	2,393.7	2,387.5	2,370.4	4.7	5.8	56.95	-127.5	-219.9	162.4	153.3	9.14	17.768		
2,500.0	2,493.1	2,487.1	2,468.8	5.0	6.2	57.32	-136.1	-232.8	170.6	161.0	9.59	17.786		
2,600.0	2,592.6	2,586.8	2,567.2	5.2	6.5	57.66	-144.8	-245.8	178.8	168.7	10.04	17.799		
2,700.0	2,692.1	2,686.4	2,665.7	5.5	6.8	57.96	-153.5	-258.7	187.0	176.5	10.50	17.808		
2,800.0	2,791.5	2,786.1	2,764.1	5.7	7.1	58.24	-162.2	-271.7	195.2	184.2	10.96	17.814		
2,900.0	2,891.0	2,885.7	2,862.5	6.0	7.4	58.50	-170.9	-284.6	203.4	192.0	11.41	17.818		
3,000.0	2,990.5	2,985.4	2,961.0	6.2	7.8	58.74	-179.6	-297.5	211.6	199.7	11.87	17.820		
3,100.0	3,090.0	3,085.1	3,059.4	6.4	8.1	58.96	-188.2	-310.5	219.8	207.5	12.34	17.821		
3,200.0	3,189.4	3,184.7	3,157.8	6.7	8.4	59.16	-196.9	-323.4	228.0	215.2	12.80	17.820		
3,300.0	3,288.9	3,284.4	3,256.3	6.9	8.7	59.35	-205.6	-336.4	236.3	223.0	13.26	17.818		
3,400.0	3,388.4	3,384.0	3,354.7	7.2	9.0	59.53	-214.3	-349.3	244.5	230.8	13.72	17.815		
3,500.0	3,487.9	3,483.7	3,453.1	7.4	9.4	59.69	-223.0	-362.2	252.7	238.5	14.19	17.812		
3,600.0	3,587.3	3,583.4	3,551.6	7.7	9.7	59.85	-231.7	-375.2	260.9	246.3	14.65	17.808		
3,700.0	3,686.8	3,683.0	3,650.0	7.9	10.0	59.99	-240.4	-388.1	269.2	254.1	15.12	17.804		
3,800.0	3,786.3	3,782.7	3,748.4	8.2	10.3	60.13	-249.0	-401.1	277.4	261.8	15.58	17.800		
3,900.0	3,885.7	3,882.3	3,846.9	8.4	10.7	60.26	-257.7	-414.0	285.6	269.6	16.05	17.795		
4,000.0	3,985.2	3,982.0	3,945.3	8.7	11.0	60.38	-266.4	-426.9	293.9	277.4	16.52	17.790		
4,100.0	4,084.7	4,081.6	4,043.7	8.9	11.3	60.50	-275.1	-439.9	302.1	285.1	16.99	17.785		
4,200.0	4,184.2	4,181.3	4,142.2	9.2	11.6	60.61	-283.8	-452.8	310.3	292.9	17.45	17.780		
4,300.0	4,283.6	4,281.0	4,240.6	9.4	11.9	60.71	-292.5	-465.8	318.6	300.7	17.92	17.775		
4,400.0	4,383.1	4,380.6	4,339.0	9.7	12.3	60.81	-301.1	-478.7	326.8	308.4	18.39	17.770		
4,500.0	4,482.6	4,480.3	4,437.5	9.9	12.6	60.90	-309.8	-491.6	335.1	316.2	18.86	17.765		
4,600.0	4,582.1	4,579.9	4,535.9	10.1	12.9	60.99	-318.5	-504.6	343.3	324.0	19.33	17.759		
4,700.0	4,681.5	4,679.6	4,634.3	10.4	13.2	61.08	-327.2	-517.5	351.5	331.7	19.80	17.754		
4,800.0	4,781.0	4,779.3	4,732.8	10.6	13.6	61.16	-335.9	-530.5	359.8	339.5	20.27	17.749		
4,900.0	4,880.5	4,878.9	4,831.2	10.9	13.9	61.23	-344.6	-543.4	368.0	347.3	20.74	17.744		
5,000.0	4,979.9	4,978.6	4,929.6	11.1	14.2	61.31	-353.2	-556.3	376.3	355.1	21.21	17.739		
5,100.0	5,079.4	5,078.2	5,028.1	11.4	14.5	61.38	-361.9	-569.3	384.5	362.8	21.68	17.734		

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 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4F-26H-P268 - HZ - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						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	5,178.9	5,177.9	5,126.5	11.6	14.9	61.45	-370.6	-582.2	392.8	370.6	22.15	17.729		
5,300.0	5,278.4	5,277.5	5,224.9	11.9	15.2	61.51	-379.3	-595.2	401.0	378.4	22.62	17.725		
5,400.0	5,377.8	5,377.2	5,323.4	12.1	15.5	61.57	-388.0	-608.1	409.3	386.2	23.10	17.720		
5,500.0	5,477.3	5,476.9	5,421.8	12.4	15.8	61.63	-396.7	-621.0	417.5	393.9	23.57	17.715		
5,600.0	5,576.8	5,576.5	5,520.2	12.6	16.1	61.69	-405.4	-634.0	425.8	401.7	24.04	17.711		
5,700.0	5,676.3	5,676.2	5,618.7	12.9	16.5	61.75	-414.0	-646.9	434.0	409.5	24.51	17.706		
5,800.0	5,775.7	5,775.8	5,717.1	13.1	16.8	61.80	-422.7	-659.9	442.2	417.3	24.98	17.702		
5,900.0	5,875.2	5,875.5	5,815.5	13.4	17.1	61.85	-431.4	-672.8	450.5	425.0	25.46	17.698		
6,000.0	5,974.7	5,975.2	5,913.9	13.6	17.4	61.90	-440.1	-685.7	458.7	432.8	25.93	17.693		
6,100.0	6,074.1	6,074.8	6,012.4	13.9	17.8	61.95	-448.8	-698.7	467.0	440.6	26.40	17.689		
6,200.0	6,173.6	6,174.5	6,110.8	14.1	18.1	61.99	-457.5	-711.6	475.2	448.4	26.87	17.685		
6,300.0	6,273.1	6,274.1	6,209.2	14.4	18.4	62.04	-466.1	-724.6	483.5	456.1	27.34	17.681		
6,400.0	6,372.6	6,373.8	6,307.7	14.6	18.7	62.08	-474.8	-737.5	491.7	463.9	27.82	17.677		
6,500.0	6,472.0	6,473.4	6,406.1	14.9	19.1	62.12	-483.5	-750.4	500.0	471.7	28.29	17.674		
6,600.0	6,571.5	6,573.1	6,504.5	15.1	19.4	62.16	-492.2	-763.4	508.2	479.5	28.76	17.670		
6,700.0	6,671.0	6,672.8	6,603.0	15.4	19.7	62.20	-500.9	-776.3	516.5	487.3	29.24	17.666		
6,800.0	6,770.5	6,772.4	6,701.4	15.6	20.0	62.24	-509.6	-789.2	524.7	495.0	29.71	17.663		
6,900.0	6,870.2	6,871.8	6,799.6	15.8	20.4	-55.19	-518.1	-802.2	533.1	503.0	30.06	17.733		
7,000.0	6,968.8	6,972.2	6,898.9	15.7	20.6	-80.07	-515.9	-815.2	541.8	511.8	29.97	18.075		
7,100.0	7,063.3	7,074.9	6,998.7	15.5	20.6	-85.05	-495.6	-828.3	550.6	521.0	29.58	18.613		
7,200.0	7,150.7	7,180.3	7,095.5	15.3	20.6	-87.28	-456.5	-841.1	559.3	530.4	28.96	19.312		
7,300.0	7,228.5	7,288.2	7,185.6	14.9	20.5	-88.57	-398.7	-852.9	567.5	539.3	28.22	20.114		
7,400.0	7,294.3	7,398.5	7,265.0	14.6	20.3	-89.38	-323.0	-863.3	574.9	547.4	27.47	20.924		
7,500.0	7,346.0	7,511.0	7,329.6	14.3	20.2	-89.87	-231.5	-871.8	581.1	554.2	26.90	21.602		
7,600.0	7,382.2	7,625.2	7,375.9	14.2	20.1	-90.13	-127.5	-877.9	585.9	559.3	26.64	21.991		
7,700.0	7,401.6	7,740.5	7,400.9	14.3	20.2	-90.17	-15.2	-881.2	589.0	562.2	26.81	21.968		
7,800.0	7,405.0	7,849.9	7,405.0	14.6	20.4	-90.10	94.0	-881.7	590.6	563.1	27.46	21.505		
7,900.0	7,405.0	7,949.9	7,405.0	15.1	20.7	-90.10	194.0	-881.7	591.8	563.3	28.50	20.765		
8,000.0	7,405.0	8,049.9	7,405.0	15.8	21.2	-90.10	294.0	-881.7	593.0	563.1	29.91	19.827		
8,100.0	7,405.0	8,149.9	7,405.0	16.6	21.9	-90.10	394.0	-881.7	594.2	562.6	31.65	18.777		
8,200.0	7,405.0	8,249.9	7,405.0	17.6	22.6	-90.10	494.0	-881.7	595.5	561.8	33.66	17.689		
8,300.0	7,405.0	8,349.9	7,405.0	18.7	23.5	-90.10	594.0	-881.7	596.7	560.8	35.91	16.617		
8,400.0	7,405.0	8,449.9	7,405.0	19.9	24.4	-90.10	694.0	-881.7	597.9	559.6	38.34	15.593		
8,500.0	7,405.0	8,549.8	7,405.0	21.1	25.5	-90.10	794.0	-881.7	599.1	558.2	40.93	14.636		
8,600.0	7,405.0	8,649.8	7,405.0	22.4	26.6	-90.10	894.0	-881.7	600.3	556.7	43.65	13.752		
8,700.0	7,405.0	8,749.8	7,405.0	23.8	27.7	-90.10	994.0	-881.7	601.6	555.1	46.48	12.942		
8,800.0	7,405.0	8,849.8	7,405.0	25.2	29.0	-90.10	1,094.0	-881.7	602.8	553.4	49.39	12.204		
8,900.0	7,405.0	8,949.8	7,405.0	26.7	30.3	-90.09	1,193.9	-881.7	604.0	551.6	52.38	11.531		
9,000.0	7,405.0	9,049.8	7,405.0	28.2	31.6	-90.09	1,293.9	-881.7	605.2	549.8	55.43	10.919		
9,100.0	7,405.0	9,149.8	7,405.0	29.7	33.0	-90.09	1,393.9	-881.7	606.5	547.9	58.53	10.362		
9,200.0	7,405.0	9,249.8	7,405.0	31.3	34.4	-90.09	1,493.9	-881.7	607.7	546.0	61.67	9.854		
9,300.0	7,405.0	9,349.8	7,405.0	32.9	35.8	-90.09	1,593.9	-881.7	608.9	544.0	64.85	9.389		
9,400.0	7,405.0	9,449.8	7,405.0	34.5	37.3	-90.09	1,693.9	-881.7	610.1	542.1	68.06	8.964		
9,500.0	7,405.0	9,549.8	7,405.0	36.1	38.8	-90.09	1,793.9	-881.7	611.3	540.0	71.30	8.574		
9,600.0	7,405.0	9,649.8	7,405.0	37.7	40.3	-90.09	1,893.9	-881.7	612.6	538.0	74.57	8.215		
9,700.0	7,405.0	9,749.8	7,405.0	39.3	41.8	-90.09	1,993.9	-881.7	613.8	535.9	77.86	7.884		
9,800.0	7,405.0	9,849.8	7,405.0	40.9	43.4	-90.09	2,093.9	-881.7	615.0	533.8	81.16	7.578		
9,900.0	7,405.0	9,949.7	7,405.0	42.6	44.9	-90.09	2,193.9	-881.7	616.2	531.7	84.48	7.294		
10,000.0	7,405.0	10,049.7	7,405.0	44.3	46.5	-90.09	2,293.9	-881.7	617.4	529.6	87.82	7.031		
10,100.0	7,405.0	10,149.7	7,405.0	45.9	48.1	-90.09	2,393.9	-881.7	618.7	527.5	91.16	6.786		
10,200.0	7,405.0	10,249.7	7,405.0	47.6	49.7	-90.09	2,493.8	-881.7	619.9	525.4	94.52	6.558		
10,300.0	7,405.0	10,349.7	7,405.0	49.3	51.3	-90.09	2,593.8	-881.7	621.1	523.2	97.90	6.345		

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 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4F-26H-P268 - HZ - Plan #1												Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,400.0	7,405.0	10,449.7	7,405.0	50.9	52.9	-90.09	2,693.8	-881.7	622.3	521.1	101.28	6.145	
10,500.0	7,405.0	10,549.7	7,405.0	52.6	54.6	-90.09	2,793.8	-881.7	623.6	518.9	104.66	5.958	
10,600.0	7,405.0	10,649.7	7,405.0	54.3	56.2	-90.09	2,893.8	-881.7	624.8	516.7	108.06	5.782	
10,700.0	7,405.0	10,749.7	7,405.0	56.0	57.8	-90.09	2,993.8	-881.7	626.0	514.5	111.46	5.616	
10,800.0	7,405.0	10,849.7	7,405.0	57.7	59.5	-90.09	3,093.8	-881.7	627.2	512.3	114.87	5.460	
10,900.0	7,405.0	10,949.7	7,405.0	59.4	61.1	-90.09	3,193.8	-881.7	628.4	510.2	118.29	5.313	
11,000.0	7,405.0	11,049.7	7,405.0	61.1	62.8	-90.09	3,293.8	-881.7	629.7	508.0	121.71	5.174	
11,100.0	7,405.0	11,149.7	7,405.0	62.8	64.5	-90.09	3,393.8	-881.7	630.9	505.8	125.13	5.042	
11,200.0	7,405.0	11,249.6	7,405.0	64.5	66.1	-90.09	3,493.8	-881.7	632.1	503.5	128.56	4.917	
11,300.0	7,405.0	11,349.6	7,405.0	66.2	67.8	-90.09	3,593.8	-881.7	633.3	501.3	131.99	4.798	
11,400.0	7,405.0	11,449.6	7,405.0	68.0	69.5	-90.09	3,693.8	-881.7	634.5	499.1	135.43	4.685	
11,500.0	7,405.0	11,549.6	7,405.0	69.7	71.2	-90.09	3,793.7	-881.7	635.8	496.9	138.87	4.578	
11,600.0	7,405.0	11,649.6	7,405.0	71.4	72.8	-90.09	3,893.7	-881.7	637.0	494.7	142.32	4.476	
11,700.0	7,405.0	11,749.6	7,405.0	73.1	74.5	-90.09	3,993.7	-881.7	638.2	492.4	145.76	4.378	
11,800.0	7,405.0	11,849.6	7,405.0	74.8	76.2	-90.09	4,093.7	-881.7	639.4	490.2	149.21	4.285	
11,900.0	7,405.0	11,949.6	7,405.0	76.6	77.9	-90.09	4,193.7	-881.7	640.7	488.0	152.67	4.196	
12,000.0	7,405.0	12,049.6	7,405.0	78.3	79.6	-90.09	4,293.7	-881.7	641.9	485.8	156.12	4.111	
12,100.0	7,405.0	12,149.6	7,405.0	80.0	81.3	-90.09	4,393.7	-881.7	643.1	483.5	159.58	4.030	
12,200.0	7,405.0	12,249.6	7,405.0	81.7	83.0	-90.09	4,493.7	-881.7	644.3	481.3	163.04	3.952	
12,300.0	7,405.0	12,349.6	7,405.0	83.5	84.7	-90.09	4,593.7	-881.7	645.5	479.0	166.50	3.877	
12,400.0	7,405.0	12,449.6	7,405.0	85.2	86.4	-90.09	4,693.7	-881.7	646.8	476.8	169.97	3.805	
12,500.0	7,405.0	12,549.6	7,405.0	86.9	88.1	-90.09	4,793.7	-881.7	648.0	474.6	173.43	3.736	
12,600.0	7,405.0	12,649.5	7,405.0	88.7	89.8	-90.09	4,893.7	-881.7	649.2	472.3	176.90	3.670	
12,700.0	7,405.0	12,749.5	7,405.0	90.4	91.5	-90.09	4,993.7	-881.7	650.4	470.1	180.37	3.606	
12,800.0	7,405.0	12,849.5	7,405.0	92.1	93.3	-90.09	5,093.7	-881.7	651.7	467.8	183.84	3.545	
12,900.0	7,405.0	12,949.5	7,405.0	93.9	95.0	-90.09	5,193.6	-881.7	652.9	465.6	187.31	3.486	
13,000.0	7,405.0	13,049.5	7,405.0	95.6	96.7	-90.09	5,293.6	-881.7	654.1	463.3	190.78	3.429	
13,100.0	7,405.0	13,149.5	7,405.0	97.3	98.4	-90.09	5,393.6	-881.7	655.3	461.1	194.26	3.373	
13,200.0	7,405.0	13,249.5	7,405.0	99.1	100.1	-90.09	5,493.6	-881.7	656.5	458.8	197.73	3.320	
13,300.0	7,405.0	13,349.5	7,405.0	100.8	101.8	-90.09	5,593.6	-881.7	657.8	456.6	201.21	3.269	
13,400.0	7,405.0	13,449.5	7,405.0	102.5	103.6	-90.09	5,693.6	-881.7	659.0	454.3	204.68	3.219	
13,500.0	7,405.0	13,549.5	7,405.0	104.3	105.3	-90.09	5,793.6	-881.7	660.2	452.0	208.16	3.172	
13,600.0	7,405.0	13,649.5	7,405.0	106.0	107.0	-90.09	5,893.6	-881.7	661.4	449.8	211.64	3.125	
13,700.0	7,405.0	13,749.5	7,405.0	107.7	108.7	-90.09	5,993.6	-881.7	662.6	447.5	215.12	3.080	
13,800.0	7,405.0	13,849.5	7,405.0	109.5	110.4	-90.09	6,093.6	-881.7	663.9	445.3	218.60	3.037	
13,900.0	7,405.0	13,949.4	7,405.0	111.2	112.2	-90.09	6,193.6	-881.7	665.1	443.0	222.09	2.995	
14,000.0	7,405.0	14,049.4	7,405.0	113.0	113.9	-90.09	6,293.6	-881.7	666.3	440.7	225.57	2.954	
14,100.0	7,405.0	14,149.4	7,405.0	114.7	115.6	-90.09	6,393.6	-881.7	667.5	438.5	229.05	2.914	
14,200.0	7,405.0	14,249.4	7,405.0	116.4	117.4	-90.09	6,493.5	-881.7	668.8	436.2	232.54	2.876	
14,300.0	7,405.0	14,349.4	7,405.0	118.2	119.1	-90.09	6,593.5	-881.7	670.0	434.0	236.02	2.839 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4G-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.95	0.0	-19.9	19.9					
100.0	100.0	99.0	99.0	0.1	0.1	-89.95	0.0	-19.9	19.9	19.6	0.24	84.092		
200.0	200.0	199.0	199.0	0.3	0.3	-89.95	0.0	-19.9	19.9	19.3	0.58	33.968		
300.0	300.0	299.0	299.0	0.5	0.5	-89.95	0.0	-19.9	19.9	18.9	0.93	21.270		
400.0	400.0	399.0	399.0	0.6	0.6	-89.95	0.0	-19.9	19.9	18.6	1.28	15.482		
500.0	500.0	499.0	499.0	0.8	0.8	-89.95	0.0	-19.9	19.9	18.2	1.63	12.170		
600.0	600.0	599.0	599.0	1.0	1.0	-89.95	0.0	-19.9	19.9	17.9	1.98	10.026		
700.0	700.0	699.0	699.0	1.2	1.2	-89.95	0.0	-19.9	19.9	17.5	2.33	8.524		
800.0	800.0	799.0	799.0	1.3	1.3	-89.95	0.0	-19.9	19.9	17.2	2.68	7.413 CC, ES		
900.0	900.0	898.5	898.4	1.5	1.5	-93.00	-1.1	-21.1	21.2	18.1	3.03	6.990		
1,000.0	1,000.0	997.7	997.5	1.7	1.7	-100.25	-4.5	-25.0	25.4	22.0	3.37	7.527		
1,100.0	1,100.0	1,096.5	1,096.0	1.9	1.9	46.44	-10.2	-31.3	31.8	28.1	3.73	8.540		
1,200.0	1,199.8	1,195.4	1,194.1	2.0	2.1	44.27	-18.1	-40.2	39.1	35.0	4.08	9.566		
1,300.0	1,299.5	1,295.2	1,293.1	2.2	2.4	45.24	-26.8	-49.9	44.9	40.4	4.45	10.076		
1,400.0	1,398.9	1,395.1	1,392.1	2.4	2.6	47.34	-35.5	-59.7	49.6	44.8	4.84	10.251		
1,500.0	1,498.4	1,495.0	1,491.1	2.7	2.9	49.07	-44.2	-69.5	54.5	49.2	5.24	10.388		
1,600.0	1,597.9	1,594.8	1,590.1	2.9	3.1	50.52	-52.9	-79.3	59.3	53.7	5.65	10.495		
1,700.0	1,697.3	1,694.7	1,689.1	3.1	3.4	51.75	-61.6	-89.1	64.2	58.1	6.07	10.578		
1,800.0	1,796.8	1,794.6	1,788.2	3.3	3.6	52.80	-70.3	-98.9	69.1	62.6	6.49	10.643		
1,900.0	1,896.3	1,894.4	1,887.2	3.6	3.9	53.71	-79.0	-108.6	74.0	67.1	6.92	10.692		
2,000.0	1,995.8	1,994.3	1,986.2	3.8	4.2	54.51	-87.7	-118.4	79.0	71.6	7.36	10.731		
2,100.0	2,095.2	2,094.2	2,085.2	4.0	4.5	55.22	-96.4	-128.2	83.9	76.1	7.80	10.760		
2,200.0	2,194.7	2,194.1	2,184.2	4.3	4.7	55.85	-105.1	-138.0	88.9	80.7	8.25	10.783		
2,300.0	2,294.2	2,293.9	2,283.2	4.5	5.0	56.41	-113.8	-147.8	93.9	85.2	8.69	10.800		
2,400.0	2,393.7	2,393.8	2,382.2	4.7	5.3	56.91	-122.5	-157.6	98.9	89.7	9.14	10.813		
2,500.0	2,493.1	2,493.7	2,481.2	5.0	5.6	57.36	-131.2	-167.3	103.9	94.3	9.60	10.823		
2,600.0	2,592.6	2,593.5	2,580.2	5.2	5.9	57.78	-139.9	-177.1	108.9	98.8	10.05	10.830		
2,700.0	2,692.1	2,693.4	2,679.2	5.5	6.1	58.15	-148.6	-186.9	113.9	103.4	10.51	10.835		
2,800.0	2,791.5	2,793.3	2,778.2	5.7	6.4	58.50	-157.3	-196.7	118.9	107.9	10.97	10.838		
2,900.0	2,891.0	2,893.2	2,877.3	6.0	6.7	58.82	-166.0	-206.5	123.9	112.5	11.43	10.840		
3,000.0	2,990.5	2,993.0	2,976.3	6.2	7.0	59.11	-174.7	-216.3	128.9	117.0	11.90	10.840		
3,100.0	3,090.0	3,092.9	3,075.3	6.4	7.3	59.38	-183.4	-226.0	134.0	121.6	12.36	10.840		
3,200.0	3,189.4	3,192.8	3,174.3	6.7	7.6	59.63	-192.1	-235.8	139.0	126.2	12.82	10.839		
3,300.0	3,288.9	3,292.7	3,273.3	6.9	7.9	59.87	-200.8	-245.6	144.0	130.7	13.29	10.838		
3,400.0	3,388.4	3,392.5	3,372.3	7.2	8.1	60.08	-209.6	-255.4	149.1	135.3	13.76	10.836		
3,500.0	3,487.9	3,492.4	3,471.3	7.4	8.4	60.29	-218.3	-265.2	154.1	139.9	14.22	10.833		
3,600.0	3,587.3	3,592.3	3,570.3	7.7	8.7	60.48	-227.0	-275.0	159.1	144.4	14.69	10.831		
3,700.0	3,686.8	3,692.1	3,669.3	7.9	9.0	60.66	-235.7	-284.7	164.2	149.0	15.16	10.828		
3,800.0	3,786.3	3,792.0	3,768.3	8.2	9.3	60.82	-244.4	-294.5	169.2	153.6	15.63	10.825		
3,900.0	3,885.7	3,891.9	3,867.4	8.4	9.6	60.98	-253.1	-304.3	174.2	158.1	16.10	10.822		
4,000.0	3,985.2	3,991.8	3,966.4	8.7	9.8	61.13	-261.8	-314.1	179.3	162.7	16.57	10.819		
4,100.0	4,084.7	4,091.6	4,065.4	8.9	10.1	61.27	-270.5	-323.9	184.3	167.3	17.04	10.816		
4,200.0	4,184.2	4,191.5	4,164.4	9.2	10.4	61.41	-279.2	-333.7	189.4	171.8	17.51	10.813		
4,300.0	4,283.6	4,291.4	4,263.4	9.4	10.7	61.54	-287.9	-343.5	194.4	176.4	17.98	10.810		
4,400.0	4,383.1	4,391.2	4,362.4	9.7	11.0	61.66	-296.6	-353.2	199.4	181.0	18.46	10.806		
4,500.0	4,482.6	4,491.1	4,461.4	9.9	11.3	61.77	-305.3	-363.0	204.5	185.6	18.93	10.803		
4,600.0	4,582.1	4,591.0	4,560.4	10.1	11.6	61.88	-314.0	-372.8	209.5	190.1	19.40	10.800		
4,700.0	4,681.5	4,690.9	4,659.4	10.4	11.9	61.98	-322.7	-382.6	214.6	194.7	19.87	10.797		
4,800.0	4,781.0	4,790.7	4,758.4	10.6	12.1	62.08	-331.4	-392.4	219.6	199.3	20.35	10.794		
4,900.0	4,880.5	4,890.6	4,857.5	10.9	12.4	62.18	-340.1	-402.2	224.7	203.9	20.82	10.791		
5,000.0	4,979.9	4,990.5	4,956.5	11.1	12.7	62.27	-348.8	-411.9	229.7	208.4	21.30	10.788		
5,100.0	5,079.4	5,090.3	5,055.5	11.4	13.0	62.36	-357.5	-421.7	234.8	213.0	21.77	10.785		

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 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4G-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,200.0	5,178.9	5,190.2	5,154.5	11.6	13.3	62.44	-366.2	-431.5	239.8	217.6	22.24	10.782		
5,300.0	5,278.4	5,290.1	5,253.5	11.9	13.6	62.52	-374.9	-441.3	244.9	222.2	22.72	10.779		
5,400.0	5,377.8	5,390.0	5,352.5	12.1	13.9	62.59	-383.7	-451.1	249.9	226.7	23.19	10.776		
5,500.0	5,477.3	5,489.8	5,451.5	12.4	14.1	62.67	-392.4	-460.9	255.0	231.3	23.67	10.773		
5,600.0	5,576.8	5,589.7	5,550.5	12.6	14.4	62.74	-401.1	-470.6	260.0	235.9	24.14	10.770		
5,700.0	5,676.3	5,689.6	5,649.5	12.9	14.7	62.81	-409.8	-480.4	265.1	240.5	24.62	10.768		
5,800.0	5,775.7	5,789.4	5,748.5	13.1	15.0	62.87	-418.5	-490.2	270.1	245.0	25.09	10.765		
5,900.0	5,875.2	5,889.3	5,847.5	13.4	15.3	62.93	-427.2	-500.0	275.2	249.6	25.57	10.762		
6,000.0	5,974.7	5,989.2	5,946.6	13.6	15.6	63.00	-435.9	-509.8	280.2	254.2	26.04	10.760		
6,100.0	6,074.1	6,089.1	6,045.6	13.9	15.9	63.05	-444.6	-519.6	285.3	258.8	26.52	10.757		
6,200.0	6,173.6	6,188.9	6,144.6	14.1	16.2	63.11	-453.3	-529.3	290.3	263.3	27.00	10.755		
6,300.0	6,273.1	6,288.8	6,243.6	14.4	16.4	63.16	-462.0	-539.1	295.4	267.9	27.47	10.753		
6,400.0	6,372.6	6,388.7	6,342.6	14.6	16.7	63.22	-470.7	-548.9	300.5	272.5	27.95	10.750		
6,500.0	6,472.0	6,488.5	6,441.6	14.9	17.0	63.27	-479.4	-558.7	305.5	277.1	28.42	10.748		
6,600.0	6,571.5	6,588.4	6,540.6	15.1	17.3	63.32	-488.1	-568.5	310.6	281.7	28.90	10.746		
6,700.0	6,671.0	6,688.3	6,639.6	15.4	17.6	63.37	-496.8	-578.3	315.6	286.2	29.38	10.744		
6,800.0	6,770.5	6,788.2	6,738.6	15.6	17.9	63.41	-505.5	-588.0	320.7	290.8	29.85	10.741		
6,900.0	6,870.2	6,887.7	6,837.3	15.8	18.2	-54.80	-514.2	-597.8	325.7	295.6	30.09	10.824		
7,000.0	6,968.8	6,986.7	6,935.6	15.7	18.4	-82.12	-519.6	-607.5	331.6	301.8	29.74	11.148		
7,100.0	7,063.3	7,089.6	7,037.3	15.5	18.5	-89.66	-508.4	-617.5	338.8	309.7	29.10	11.644		
7,200.0	7,150.7	7,196.9	7,139.4	15.3	18.4	-94.25	-477.6	-627.6	347.0	318.7	28.30	12.261		
7,300.0	7,228.5	7,309.0	7,238.0	14.9	18.2	-97.65	-425.5	-637.4	355.7	328.2	27.47	12.947		
7,400.0	7,294.3	7,425.9	7,328.0	14.6	18.0	-100.23	-351.9	-646.3	364.1	337.3	26.73	13.622		
7,500.0	7,346.0	7,547.2	7,403.8	14.3	17.7	-102.11	-257.7	-653.8	371.5	345.3	26.19	14.184		
7,600.0	7,382.2	7,672.3	7,459.4	14.2	17.6	-103.31	-146.1	-659.3	377.4	351.4	26.00	14.516		
7,700.0	7,401.6	7,799.8	7,490.0	14.3	17.7	-103.81	-22.6	-662.3	381.1	354.8	26.20	14.543		
7,800.0	7,405.0	7,916.6	7,495.0	14.6	17.9	-103.76	94.0	-662.8	382.6	355.7	26.86	14.246		
7,900.0	7,405.0	8,016.6	7,495.0	15.1	18.3	-103.72	194.0	-662.8	383.8	355.9	27.88	13.764		
8,000.0	7,405.0	8,116.6	7,495.0	15.8	18.9	-103.67	294.0	-662.8	385.0	355.7	29.27	13.151		
8,100.0	7,405.0	8,216.6	7,495.0	16.6	19.6	-103.63	394.0	-662.8	386.1	355.2	30.98	12.466		
8,200.0	7,405.0	8,316.6	7,495.0	17.6	20.4	-103.59	494.0	-662.8	387.3	354.4	32.95	11.756		
8,300.0	7,405.0	8,416.6	7,495.0	18.7	21.4	-103.55	594.0	-662.8	388.5	353.4	35.14	11.056		
8,400.0	7,405.0	8,516.6	7,495.0	19.9	22.4	-103.50	694.0	-662.8	389.7	352.2	37.52	10.387		
8,500.0	7,405.0	8,616.6	7,495.0	21.1	23.6	-103.46	794.0	-662.8	390.9	350.8	40.05	9.760		
8,600.0	7,405.0	8,716.6	7,495.0	22.4	24.8	-103.42	894.0	-662.8	392.1	349.4	42.70	9.182		
8,700.0	7,405.0	8,816.5	7,495.0	23.8	26.0	-103.38	994.0	-662.8	393.3	347.8	45.46	8.651		
8,800.0	7,405.0	8,916.5	7,495.0	25.2	27.3	-103.34	1,093.9	-662.8	394.5	346.2	48.30	8.166		
8,900.0	7,405.0	9,016.5	7,495.0	26.7	28.7	-103.30	1,193.9	-662.8	395.6	344.4	51.22	7.725		
9,000.0	7,405.0	9,116.5	7,495.0	28.2	30.1	-103.26	1,293.9	-662.8	396.8	342.6	54.19	7.323		
9,100.0	7,405.0	9,216.5	7,495.0	29.7	31.5	-103.22	1,393.9	-662.8	398.0	340.8	57.22	6.957		
9,200.0	7,405.0	9,316.5	7,495.0	31.3	33.0	-103.18	1,493.9	-662.8	399.2	338.9	60.29	6.622		
9,300.0	7,405.0	9,416.5	7,495.0	32.9	34.5	-103.14	1,593.9	-662.8	400.4	337.0	63.39	6.316		
9,400.0	7,405.0	9,516.5	7,495.0	34.5	36.0	-103.10	1,693.9	-662.8	401.6	335.1	66.53	6.036		
9,500.0	7,405.0	9,616.5	7,495.0	36.1	37.6	-103.06	1,793.9	-662.8	402.8	333.1	69.70	5.779		
9,600.0	7,405.0	9,716.5	7,495.0	37.7	39.1	-103.02	1,893.9	-662.8	404.0	331.1	72.89	5.542		
9,700.0	7,405.0	9,816.5	7,495.0	39.3	40.7	-102.98	1,993.9	-662.8	405.2	329.1	76.10	5.324		
9,800.0	7,405.0	9,916.5	7,495.0	40.9	42.3	-102.94	2,093.9	-662.8	406.4	327.0	79.33	5.122		
9,900.0	7,405.0	10,016.5	7,495.0	42.6	43.9	-102.90	2,193.9	-662.8	407.5	325.0	82.58	4.935		
10,000.0	7,405.0	10,116.4	7,495.0	44.3	45.5	-102.86	2,293.9	-662.8	408.7	322.9	85.84	4.761		
10,100.0	7,405.0	10,216.4	7,495.0	45.9	47.1	-102.83	2,393.9	-662.8	409.9	320.8	89.12	4.600		
10,200.0	7,405.0	10,316.4	7,495.0	47.6	48.8	-102.79	2,493.8	-662.8	411.1	318.7	92.41	4.449		
10,300.0	7,405.0	10,416.4	7,495.0	49.3	50.4	-102.75	2,593.8	-662.8	412.3	316.6	95.71	4.308		

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 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4G-26H-P268 - HZ - Plan #1												Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
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
10,400.0	7,405.0	10,516.4	7,495.0	50.9	52.0	-102.71	2,693.8	-662.8	413.5	314.5	99.02	4.176	
10,500.0	7,405.0	10,616.4	7,495.0	52.6	53.7	-102.68	2,793.8	-662.8	414.7	312.4	102.34	4.052	
10,600.0	7,405.0	10,716.4	7,495.0	54.3	55.4	-102.64	2,893.8	-662.8	415.9	310.2	105.67	3.936	
10,700.0	7,405.0	10,816.4	7,495.0	56.0	57.0	-102.60	2,993.8	-662.8	417.1	308.1	109.00	3.826	
10,800.0	7,405.0	10,916.4	7,495.0	57.7	58.7	-102.57	3,093.8	-662.8	418.3	305.9	112.35	3.723	
10,900.0	7,405.0	11,016.4	7,495.0	59.4	60.4	-102.53	3,193.8	-662.8	419.5	303.8	115.69	3.626	
11,000.0	7,405.0	11,116.4	7,495.0	61.1	62.1	-102.49	3,293.8	-662.8	420.7	301.6	119.05	3.533	
11,100.0	7,405.0	11,216.4	7,495.0	62.8	63.7	-102.46	3,393.8	-662.8	421.8	299.4	122.41	3.446	
11,200.0	7,405.0	11,316.4	7,495.0	64.5	65.4	-102.42	3,493.8	-662.8	423.0	297.3	125.78	3.363	
11,300.0	7,405.0	11,416.4	7,495.0	66.2	67.1	-102.39	3,593.8	-662.8	424.2	295.1	129.15	3.285	
11,400.0	7,405.0	11,516.3	7,495.0	68.0	68.8	-102.35	3,693.8	-662.8	425.4	292.9	132.52	3.210	
11,500.0	7,405.0	11,616.3	7,495.0	69.7	70.5	-102.32	3,793.7	-662.8	426.6	290.7	135.90	3.139	
11,600.0	7,405.0	11,716.3	7,495.0	71.4	72.2	-102.28	3,893.7	-662.8	427.8	288.5	139.28	3.072	
11,700.0	7,405.0	11,816.3	7,495.0	73.1	73.9	-102.25	3,993.7	-662.8	429.0	286.3	142.67	3.007	
11,800.0	7,405.0	11,916.3	7,495.0	74.8	75.6	-102.21	4,093.7	-662.8	430.2	284.1	146.06	2.945	
11,900.0	7,405.0	12,016.3	7,495.0	76.6	77.3	-102.18	4,193.7	-662.8	431.4	281.9	149.45	2.886	
12,000.0	7,405.0	12,116.3	7,495.0	78.3	79.0	-102.14	4,293.7	-662.8	432.6	279.7	152.85	2.830	
12,100.0	7,405.0	12,216.3	7,495.0	80.0	80.7	-102.11	4,393.7	-662.8	433.8	277.5	156.25	2.776	
12,200.0	7,405.0	12,316.3	7,495.0	81.7	82.5	-102.08	4,493.7	-662.8	435.0	275.3	159.65	2.725	
12,300.0	7,405.0	12,416.3	7,495.0	83.5	84.2	-102.04	4,593.7	-662.8	436.2	273.1	163.06	2.675	
12,400.0	7,405.0	12,516.3	7,495.0	85.2	85.9	-102.01	4,693.7	-662.8	437.4	270.9	166.47	2.627	
12,500.0	7,405.0	12,616.3	7,495.0	86.9	87.6	-101.98	4,793.7	-662.8	438.6	268.7	169.88	2.582	
12,600.0	7,405.0	12,716.3	7,495.0	88.7	89.3	-101.94	4,893.7	-662.8	439.8	266.5	173.29	2.538	
12,700.0	7,405.0	12,816.2	7,495.0	90.4	91.0	-101.91	4,993.7	-662.8	441.0	264.3	176.70	2.495	
12,800.0	7,405.0	12,916.2	7,495.0	92.1	92.8	-101.88	5,093.7	-662.8	442.1	262.0	180.12	2.455	
12,900.0	7,405.0	13,016.2	7,495.0	93.9	94.5	-101.85	5,193.6	-662.8	443.3	259.8	183.54	2.416	
13,000.0	7,405.0	13,116.2	7,495.0	95.6	96.2	-101.81	5,293.6	-662.8	444.5	257.6	186.96	2.378	
13,100.0	7,405.0	13,216.2	7,495.0	97.3	97.9	-101.78	5,393.6	-662.8	445.7	255.4	190.38	2.341	
13,200.0	7,405.0	13,316.2	7,495.0	99.1	99.7	-101.75	5,493.6	-662.8	446.9	253.1	193.81	2.306	
13,300.0	7,405.0	13,416.2	7,495.0	100.8	101.4	-101.72	5,593.6	-662.8	448.1	250.9	197.23	2.272	
13,400.0	7,405.0	13,516.2	7,495.0	102.5	103.1	-101.69	5,693.6	-662.8	449.3	248.7	200.66	2.239	
13,500.0	7,405.0	13,616.2	7,495.0	104.3	104.8	-101.65	5,793.6	-662.8	450.5	246.4	204.09	2.207	
13,600.0	7,405.0	13,716.2	7,495.0	106.0	106.6	-101.62	5,893.6	-662.8	451.7	244.2	207.52	2.177	
13,700.0	7,405.0	13,816.2	7,495.0	107.7	108.3	-101.59	5,993.6	-662.8	452.9	242.0	210.95	2.147	
13,800.0	7,405.0	13,916.2	7,495.0	109.5	110.0	-101.56	6,093.6	-662.8	454.1	239.7	214.39	2.118	
13,900.0	7,405.0	14,016.2	7,495.0	111.2	111.8	-101.53	6,193.6	-662.8	455.3	237.5	217.82	2.090	
14,000.0	7,405.0	14,116.2	7,495.0	113.0	113.5	-101.50	6,293.6	-662.8	456.5	235.2	221.26	2.063	
14,100.0	7,405.0	14,216.1	7,495.0	114.7	115.2	-101.47	6,393.6	-662.8	457.7	233.0	224.70	2.037	
14,200.0	7,405.0	14,316.1	7,495.0	116.4	117.0	-101.44	6,493.5	-662.8	458.9	230.8	228.14	2.012	
14,300.0	7,405.0	14,416.1	7,495.0	118.2	118.7	-101.41	6,593.5	-662.8	460.1	228.5	231.58	1.987 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4H-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.95	0.0	-10.1	10.1					
100.0	100.0	100.0	100.0	0.1	0.1	-89.95	0.0	-10.1	10.1	9.8	0.24	42.425		
200.0	200.0	200.0	200.0	0.3	0.3	-89.95	0.0	-10.1	10.1	9.5	0.59	17.172		
300.0	300.0	300.0	300.0	0.5	0.5	-89.95	0.0	-10.1	10.1	9.1	0.94	10.765		
400.0	400.0	400.0	400.0	0.6	0.6	-89.95	0.0	-10.1	10.1	8.8	1.28	7.839		
500.0	500.0	500.0	500.0	0.8	0.8	-89.95	0.0	-10.1	10.1	8.4	1.63	6.164		
600.0	600.0	600.0	600.0	1.0	1.0	-89.95	0.0	-10.1	10.1	8.1	1.98	5.079		
700.0	700.0	700.0	700.0	1.2	1.2	-89.95	0.0	-10.1	10.1	7.7	2.33	4.319		
800.0	800.0	800.0	800.0	1.3	1.3	-89.95	0.0	-10.1	10.1	7.4	2.68	3.756		
900.0	900.0	900.0	900.0	1.5	1.5	-89.95	0.0	-10.1	10.1	7.0	3.03	3.324 CC, ES		
1,000.0	1,000.0	999.8	999.7	1.7	1.7	-97.11	-1.4	-11.1	11.2	7.8	3.38	3.314		
1,100.0	1,100.0	1,099.4	1,099.2	1.9	1.9	45.64	-5.6	-14.2	14.0	10.3	3.73	3.756		
1,200.0	1,199.8	1,198.8	1,198.3	2.0	2.1	40.85	-12.5	-19.4	17.4	13.3	4.09	4.255		
1,300.0	1,299.5	1,298.8	1,297.6	2.2	2.3	40.89	-21.1	-25.8	19.9	15.5	4.45	4.479		
1,400.0	1,398.9	1,398.7	1,397.0	2.4	2.5	43.65	-29.7	-32.2	21.3	16.5	4.83	4.414		
1,500.0	1,498.4	1,498.7	1,496.4	2.7	2.7	46.07	-38.4	-38.6	22.8	17.6	5.23	4.358		
1,600.0	1,597.9	1,598.7	1,595.8	2.9	3.0	48.19	-47.0	-45.0	24.3	18.6	5.64	4.306		
1,700.0	1,697.3	1,698.7	1,695.3	3.1	3.2	50.07	-55.6	-51.5	25.8	19.7	6.06	4.260		
1,800.0	1,796.8	1,798.7	1,794.7	3.3	3.4	51.73	-64.2	-57.9	27.3	20.9	6.48	4.217		
1,900.0	1,896.3	1,898.7	1,894.1	3.6	3.7	53.22	-72.9	-64.3	28.9	22.0	6.92	4.178		
2,000.0	1,995.8	1,998.6	1,993.5	3.8	3.9	54.55	-81.5	-70.7	30.5	23.1	7.36	4.143		
2,100.0	2,095.2	2,098.6	2,092.9	4.0	4.2	55.75	-90.1	-77.1	32.1	24.3	7.81	4.110		
2,200.0	2,194.7	2,198.6	2,192.3	4.3	4.4	56.84	-98.8	-83.6	33.7	25.4	8.26	4.079		
2,300.0	2,294.2	2,298.6	2,291.7	4.5	4.6	57.82	-107.4	-90.0	35.3	26.6	8.72	4.051		
2,400.0	2,393.7	2,398.6	2,391.1	4.7	4.9	58.72	-116.0	-96.4	37.0	27.8	9.18	4.026		
2,500.0	2,493.1	2,498.6	2,490.5	5.0	5.1	59.55	-124.7	-102.8	38.6	28.9	9.64	4.002		
2,600.0	2,592.6	2,598.6	2,589.9	5.2	5.4	60.30	-133.3	-109.3	40.2	30.1	10.11	3.980		
2,700.0	2,692.1	2,698.5	2,689.3	5.5	5.6	61.00	-141.9	-115.7	41.9	31.3	10.58	3.959		
2,800.0	2,791.5	2,798.5	2,788.7	5.7	5.9	61.64	-150.5	-122.1	43.5	32.5	11.05	3.940		
2,900.0	2,891.0	2,898.5	2,888.1	6.0	6.1	62.24	-159.2	-128.5	45.2	33.7	11.53	3.922		
3,000.0	2,990.5	2,998.5	2,987.5	6.2	6.4	62.80	-167.8	-134.9	46.9	34.9	12.00	3.906		
3,100.0	3,090.0	3,098.5	3,086.9	6.4	6.6	63.31	-176.4	-141.4	48.6	36.1	12.48	3.891		
3,200.0	3,189.4	3,198.5	3,186.3	6.7	6.9	63.79	-185.1	-147.8	50.2	37.3	12.96	3.876		
3,300.0	3,288.9	3,298.5	3,285.7	6.9	7.2	64.24	-193.7	-154.2	51.9	38.5	13.44	3.863		
3,400.0	3,388.4	3,398.4	3,385.1	7.2	7.4	64.67	-202.3	-160.6	53.6	39.7	13.92	3.850		
3,500.0	3,487.9	3,498.4	3,484.5	7.4	7.7	65.06	-211.0	-167.1	55.3	40.9	14.40	3.839		
3,600.0	3,587.3	3,598.4	3,583.9	7.7	7.9	65.44	-219.6	-173.5	57.0	42.1	14.88	3.827		
3,700.0	3,686.8	3,698.4	3,683.3	7.9	8.2	65.79	-228.2	-179.9	58.7	43.3	15.37	3.817		
3,800.0	3,786.3	3,798.4	3,782.8	8.2	8.4	66.12	-236.8	-186.3	60.3	44.5	15.85	3.807		
3,900.0	3,885.7	3,898.4	3,882.2	8.4	8.7	66.43	-245.5	-192.7	62.0	45.7	16.33	3.798		
4,000.0	3,985.2	3,998.4	3,981.6	8.7	8.9	66.73	-254.1	-199.2	63.7	46.9	16.82	3.789		
4,100.0	4,084.7	4,098.3	4,081.0	8.9	9.2	67.01	-262.7	-205.6	65.4	48.1	17.31	3.781		
4,200.0	4,184.2	4,198.3	4,180.4	9.2	9.4	67.28	-271.4	-212.0	67.1	49.3	17.79	3.773		
4,300.0	4,283.6	4,298.3	4,279.8	9.4	9.7	67.53	-280.0	-218.4	68.8	50.5	18.28	3.765		
4,400.0	4,383.1	4,398.3	4,379.2	9.7	9.9	67.78	-288.6	-224.8	70.5	51.8	18.77	3.758		
4,500.0	4,482.6	4,498.3	4,478.6	9.9	10.2	68.01	-297.3	-231.3	72.2	53.0	19.25	3.751		
4,600.0	4,582.1	4,598.3	4,578.0	10.1	10.5	68.23	-305.9	-237.7	73.9	54.2	19.74	3.745		
4,700.0	4,681.5	4,698.2	4,677.4	10.4	10.7	68.44	-314.5	-244.1	75.6	55.4	20.23	3.739		
4,800.0	4,781.0	4,798.2	4,776.8	10.6	11.0	68.64	-323.1	-250.5	77.3	56.6	20.72	3.733		
4,900.0	4,880.5	4,898.2	4,876.2	10.9	11.2	68.83	-331.8	-257.0	79.0	57.8	21.21	3.727		
5,000.0	4,979.9	4,998.2	4,975.6	11.1	11.5	69.01	-340.4	-263.4	80.8	59.1	21.70	3.722		
5,100.0	5,079.4	5,098.2	5,075.0	11.4	11.7	69.19	-349.0	-269.8	82.5	60.3	22.19	3.717		

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 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4H-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,200.0	5,178.9	5,198.2	5,174.4	11.6	12.0	69.36	-357.7	-276.2	84.2	61.5	22.68	3.712		
5,300.0	5,278.4	5,298.2	5,273.8	11.9	12.2	69.52	-366.3	-282.6	85.9	62.7	23.17	3.707		
5,400.0	5,377.8	5,398.1	5,373.2	12.1	12.5	69.68	-374.9	-289.1	87.6	63.9	23.66	3.703		
5,500.0	5,477.3	5,498.1	5,472.6	12.4	12.7	69.83	-383.6	-295.5	89.3	65.2	24.15	3.698		
5,600.0	5,576.8	5,598.1	5,572.0	12.6	13.0	69.97	-392.2	-301.9	91.0	66.4	24.64	3.694		
5,700.0	5,676.3	5,698.1	5,671.4	12.9	13.3	70.11	-400.8	-308.3	92.7	67.6	25.13	3.690		
5,800.0	5,775.7	5,798.1	5,770.8	13.1	13.5	70.25	-409.4	-314.8	94.4	68.8	25.62	3.686		
5,900.0	5,875.2	5,898.1	5,870.3	13.4	13.8	70.38	-418.1	-321.2	96.2	70.0	26.11	3.683		
6,000.0	5,974.7	5,998.1	5,969.7	13.6	14.0	70.50	-426.7	-327.6	97.9	71.3	26.60	3.679		
6,100.0	6,074.1	6,098.0	6,069.1	13.9	14.3	70.62	-435.3	-334.0	99.6	72.5	27.09	3.676		
6,200.0	6,173.6	6,198.0	6,168.5	14.1	14.5	70.74	-444.0	-340.4	101.3	73.7	27.58	3.672		
6,300.0	6,273.1	6,298.0	6,267.9	14.4	14.8	70.85	-452.6	-346.9	103.0	74.9	28.07	3.669		
6,400.0	6,372.6	6,398.0	6,367.3	14.6	15.1	70.96	-461.2	-353.3	104.7	76.2	28.57	3.666		
6,500.0	6,472.0	6,498.0	6,466.7	14.9	15.3	71.06	-469.9	-359.7	106.4	77.4	29.06	3.663		
6,600.0	6,571.5	6,598.0	6,566.1	15.1	15.6	71.17	-478.5	-366.1	108.2	78.6	29.55	3.660		
6,700.0	6,671.0	6,697.9	6,665.5	15.4	15.8	71.27	-487.1	-372.5	109.9	79.8	30.04	3.657		
6,800.0	6,770.5	6,797.9	6,764.9	15.6	16.1	71.36	-495.7	-379.0	111.6	81.1	30.53	3.655		
6,900.0	6,870.2	6,897.6	6,864.0	15.8	16.3	-49.49	-504.4	-385.4	112.5	81.9	30.56	3.680		
7,000.0	6,968.8	6,994.6	6,960.4	15.7	16.6	-85.25	-512.7	-391.6	114.5	85.1	29.40	3.895		
7,100.0	7,063.3	7,090.2	7,055.6	15.5	16.8	-105.56	-519.1	-397.7	126.6	99.4	27.26	4.645		
7,200.0	7,150.7	7,194.6	7,159.2	15.3	16.8	-120.76	-510.1	-404.4	149.4	124.2	25.16	5.936		
7,300.0	7,228.5	7,308.9	7,268.7	14.9	16.7	-131.34	-478.8	-411.5	177.5	154.1	23.41	7.582		
7,400.0	7,294.3	7,435.0	7,379.8	14.6	16.4	-138.57	-419.9	-418.7	206.5	184.6	21.91	9.426		
7,500.0	7,346.0	7,574.7	7,484.4	14.3	16.0	-143.37	-328.1	-425.5	232.7	212.1	20.69	11.249		
7,600.0	7,382.2	7,728.0	7,570.0	14.2	15.7	-146.28	-201.7	-431.0	253.0	233.1	19.92	12.700		
7,700.0	7,401.6	7,892.0	7,621.2	14.3	15.6	-147.53	-46.4	-434.3	264.6	244.8	19.81	13.359		
7,800.0	7,405.0	8,033.0	7,630.0	14.6	16.0	-147.44	94.0	-434.9	267.0	246.6	20.38	13.097		
7,900.0	7,405.0	8,133.0	7,630.0	15.1	16.4	-147.22	194.0	-434.9	267.6	246.5	21.17	12.643		
8,000.0	7,405.0	8,233.0	7,630.0	15.8	17.1	-147.00	294.0	-434.9	268.3	246.2	22.10	12.140		
8,100.0	7,405.0	8,333.0	7,630.0	16.6	17.8	-146.78	394.0	-434.9	269.0	245.8	23.17	11.608		
8,200.0	7,405.0	8,433.0	7,630.0	17.6	18.8	-146.56	494.0	-434.9	269.6	245.3	24.36	11.068		
8,300.0	7,405.0	8,533.0	7,630.0	18.7	19.8	-146.35	594.0	-434.9	270.3	244.6	25.67	10.532		
8,400.0	7,405.0	8,633.0	7,630.0	19.9	20.9	-146.13	694.0	-434.9	271.0	243.9	27.07	10.010		
8,500.0	7,405.0	8,732.9	7,630.0	21.1	22.1	-145.92	794.0	-434.9	271.7	243.1	28.56	9.511		
8,600.0	7,405.0	8,832.9	7,630.0	22.4	23.4	-145.71	894.0	-434.9	272.3	242.2	30.14	9.037		
8,700.0	7,405.0	8,932.9	7,630.0	23.8	24.7	-145.49	994.0	-434.9	273.0	241.3	31.78	8.591		
8,800.0	7,405.0	9,032.9	7,630.0	25.2	26.1	-145.28	1,093.9	-434.9	273.7	240.2	33.49	8.173		
8,900.0	7,405.0	9,132.9	7,630.0	26.7	27.5	-145.07	1,193.9	-434.9	274.4	239.2	35.26	7.782		
9,000.0	7,405.0	9,232.9	7,630.0	28.2	29.0	-144.87	1,293.9	-434.9	275.1	238.0	37.09	7.418		
9,100.0	7,405.0	9,332.9	7,630.0	29.7	30.5	-144.66	1,393.9	-434.9	275.8	236.9	38.96	7.080		
9,200.0	7,405.0	9,432.9	7,630.0	31.3	32.0	-144.45	1,493.9	-434.9	276.5	235.7	40.88	6.765		
9,300.0	7,405.0	9,532.9	7,630.0	32.9	33.6	-144.25	1,593.9	-434.9	277.3	234.4	42.84	6.471		
9,400.0	7,405.0	9,632.9	7,630.0	34.5	35.1	-144.04	1,693.9	-434.9	278.0	233.1	44.84	6.199		
9,500.0	7,405.0	9,732.9	7,630.0	36.1	36.7	-143.84	1,793.9	-434.9	278.7	231.8	46.88	5.944		
9,600.0	7,405.0	9,832.9	7,630.0	37.7	38.3	-143.64	1,893.9	-434.9	279.4	230.5	48.96	5.708		
9,700.0	7,405.0	9,932.9	7,630.0	39.3	39.9	-143.44	1,993.9	-434.9	280.1	229.1	51.06	5.486		
9,800.0	7,405.0	10,032.8	7,630.0	40.9	41.5	-143.24	2,093.9	-434.9	280.9	227.7	53.20	5.280		
9,900.0	7,405.0	10,132.8	7,630.0	42.6	43.2	-143.04	2,193.9	-434.9	281.6	226.2	55.36	5.087		
10,000.0	7,405.0	10,232.8	7,630.0	44.3	44.8	-142.84	2,293.9	-434.9	282.3	224.8	57.56	4.906		
10,100.0	7,405.0	10,332.8	7,630.0	45.9	46.4	-142.64	2,393.9	-434.9	283.1	223.3	59.78	4.736		
10,200.0	7,405.0	10,432.8	7,630.0	47.6	48.1	-142.45	2,493.8	-434.9	283.8	221.8	62.02	4.576		
10,300.0	7,405.0	10,532.8	7,630.0	49.3	49.8	-142.25	2,593.8	-434.9	284.6	220.3	64.29	4.426		

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 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4H-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
10,400.0	7,405.0	10,632.8	7,630.0	50.9	51.4	-142.06	2,693.8	-434.9	285.3	218.7	66.59	4.285		
10,500.0	7,405.0	10,732.8	7,630.0	52.6	53.1	-141.86	2,793.8	-434.9	286.1	217.2	68.90	4.152		
10,600.0	7,405.0	10,832.8	7,630.0	54.3	54.8	-141.67	2,893.8	-434.9	286.8	215.6	71.24	4.026		
10,700.0	7,405.0	10,932.8	7,630.0	56.0	56.5	-141.48	2,993.8	-434.9	287.6	214.0	73.61	3.907		
10,800.0	7,405.0	11,032.8	7,630.0	57.7	58.2	-141.29	3,093.8	-434.9	288.3	212.4	75.99	3.795		
10,900.0	7,405.0	11,132.8	7,630.0	59.4	59.8	-141.10	3,193.8	-434.9	289.1	210.7	78.39	3.688		
11,000.0	7,405.0	11,232.8	7,630.0	61.1	61.5	-140.91	3,293.8	-434.9	289.9	209.1	80.81	3.587		
11,100.0	7,405.0	11,332.8	7,630.0	62.8	63.2	-140.73	3,393.8	-434.9	290.7	207.4	83.26	3.491		
11,200.0	7,405.0	11,432.7	7,630.0	64.5	64.9	-140.54	3,493.8	-434.9	291.4	205.7	85.72	3.400		
11,300.0	7,405.0	11,532.7	7,630.0	66.2	66.6	-140.36	3,593.8	-434.9	292.2	204.0	88.19	3.313		
11,400.0	7,405.0	11,632.7	7,630.0	68.0	68.3	-140.17	3,693.8	-434.9	293.0	202.3	90.69	3.231		
11,500.0	7,405.0	11,732.7	7,630.0	69.7	70.1	-139.99	3,793.7	-434.9	293.8	200.6	93.21	3.152		
11,600.0	7,405.0	11,832.7	7,630.0	71.4	71.8	-139.81	3,893.7	-434.9	294.6	198.8	95.74	3.077		
11,700.0	7,405.0	11,932.7	7,630.0	73.1	73.5	-139.63	3,993.7	-434.9	295.4	197.1	98.29	3.005		
11,800.0	7,405.0	12,032.7	7,630.0	74.8	75.2	-139.45	4,093.7	-434.9	296.1	195.3	100.85	2.936		
11,900.0	7,405.0	12,132.7	7,630.0	76.6	76.9	-139.27	4,193.7	-434.9	296.9	193.5	103.43	2.871		
12,000.0	7,405.0	12,232.7	7,630.0	78.3	78.6	-139.09	4,293.7	-434.9	297.7	191.7	106.03	2.808		
12,100.0	7,405.0	12,332.7	7,630.0	80.0	80.4	-138.91	4,393.7	-434.9	298.5	189.9	108.64	2.748		
12,200.0	7,405.0	12,432.7	7,630.0	81.7	82.1	-138.74	4,493.7	-434.9	299.3	188.1	111.27	2.690		
12,300.0	7,405.0	12,532.7	7,630.0	83.5	83.8	-138.56	4,593.7	-434.9	300.2	186.2	113.91	2.635		
12,400.0	7,405.0	12,632.7	7,630.0	85.2	85.5	-138.39	4,693.7	-434.9	301.0	184.4	116.57	2.582		
12,500.0	7,405.0	12,732.6	7,630.0	86.9	87.2	-138.21	4,793.7	-434.9	301.8	182.5	119.24	2.531		
12,600.0	7,405.0	12,832.6	7,630.0	88.7	89.0	-138.04	4,893.7	-434.9	302.6	180.7	121.92	2.482		
12,700.0	7,405.0	12,932.6	7,630.0	90.4	90.7	-137.87	4,993.7	-434.9	303.4	178.8	124.62	2.435		
12,800.0	7,405.0	13,032.6	7,630.0	92.1	92.4	-137.70	5,093.7	-434.9	304.2	176.9	127.33	2.389		
12,900.0	7,405.0	13,132.6	7,630.0	93.9	94.2	-137.53	5,193.6	-434.9	305.1	175.0	130.06	2.345		
13,000.0	7,405.0	13,232.6	7,630.0	95.6	95.9	-137.36	5,293.6	-434.9	305.9	173.1	132.80	2.303		
13,100.0	7,405.0	13,332.6	7,630.0	97.3	97.6	-137.19	5,393.6	-434.9	306.7	171.2	135.55	2.263		
13,200.0	7,405.0	13,432.6	7,630.0	99.1	99.3	-137.02	5,493.6	-434.9	307.5	169.2	138.32	2.223		
13,300.0	7,405.0	13,532.6	7,630.0	100.8	101.1	-136.86	5,593.6	-434.9	308.4	167.3	141.09	2.186		
13,400.0	7,405.0	13,632.6	7,630.0	102.5	102.8	-136.69	5,693.6	-434.9	309.2	165.3	143.88	2.149		
13,500.0	7,405.0	13,732.6	7,630.0	104.3	104.5	-136.53	5,793.6	-434.9	310.0	163.4	146.68	2.114		
13,600.0	7,405.0	13,832.6	7,630.0	106.0	106.3	-136.37	5,893.6	-434.9	310.9	161.4	149.50	2.080		
13,700.0	7,405.0	13,932.6	7,630.0	107.7	108.0	-136.20	5,993.6	-434.9	311.7	159.4	152.32	2.047		
13,800.0	7,405.0	14,032.6	7,630.0	109.5	109.8	-136.04	6,093.6	-434.9	312.6	157.4	155.16	2.015		
13,900.0	7,405.0	14,132.5	7,630.0	111.2	111.5	-135.88	6,193.6	-434.9	313.4	155.4	158.01	1.984		
14,000.0	7,405.0	14,232.5	7,630.0	113.0	113.2	-135.72	6,293.6	-434.9	314.3	153.4	160.87	1.954		
14,100.0	7,405.0	14,332.5	7,630.0	114.7	115.0	-135.56	6,393.6	-434.9	315.1	151.4	163.74	1.925		
14,200.0	7,405.0	14,432.5	7,630.0	116.4	116.7	-135.40	6,493.5	-434.9	316.0	149.4	166.62	1.896		
14,300.0	7,405.0	14,532.5	7,630.0	118.2	118.4	-135.25	6,593.5	-434.9	316.9	147.3	169.51	1.869 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4J-26H-P268 - HZ - Plan #1														Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	90.05	0.0	10.1	10.1						
100.0	100.0	99.0	99.0	0.1	0.1	90.05	0.0	10.1	10.1	9.8	0.24	42.638			
200.0	200.0	199.0	199.0	0.3	0.3	90.05	0.0	10.1	10.1	9.5	0.58	17.223			
300.0	300.0	299.0	299.0	0.5	0.5	90.05	0.0	10.1	10.1	9.1	0.93	10.785			
400.0	400.0	399.0	399.0	0.6	0.6	90.05	0.0	10.1	10.1	8.8	1.28	7.850			
500.0	500.0	499.0	499.0	0.8	0.8	90.05	0.0	10.1	10.1	8.4	1.63	6.171			
600.0	600.0	599.0	599.0	1.0	1.0	90.05	0.0	10.1	10.1	8.1	1.98	5.084			
700.0	700.0	699.0	699.0	1.2	1.2	90.05	0.0	10.1	10.1	7.7	2.33	4.322			
800.0	800.0	799.0	799.0	1.3	1.3	90.05	0.0	10.1	10.1	7.4	2.68	3.759			
900.0	900.0	899.0	899.0	1.5	1.5	90.05	0.0	10.1	10.1	7.0	3.03	3.326			
1,000.0	1,000.0	999.0	999.0	1.7	1.7	90.05	0.0	10.1	10.1	6.7	3.38	2.982 CC, ES			
1,100.0	1,100.0	1,099.0	1,099.0	1.9	1.9	-125.67	0.0	10.1	11.0	7.3	3.73	2.949			
1,200.0	1,199.8	1,198.9	1,198.9	2.0	2.0	-135.86	-1.7	10.4	14.3	10.2	4.08	3.514			
1,300.0	1,299.5	1,298.9	1,298.7	2.2	2.2	-138.48	-6.8	11.3	19.9	15.4	4.44	4.475			
1,400.0	1,398.9	1,398.8	1,398.2	2.4	2.4	-135.10	-15.1	12.7	26.0	21.2	4.82	5.389			
1,500.0	1,498.4	1,498.6	1,497.6	2.7	2.6	-131.65	-24.2	14.3	32.1	26.9	5.22	6.148			
1,600.0	1,597.9	1,598.4	1,597.0	2.9	2.8	-129.31	-33.3	15.9	38.3	32.7	5.63	6.799			
1,700.0	1,697.3	1,698.2	1,696.4	3.1	3.0	-127.62	-42.4	17.5	44.5	38.5	6.05	7.358			
1,800.0	1,796.8	1,798.0	1,795.7	3.3	3.2	-126.35	-51.5	19.1	50.8	44.3	6.48	7.840			
1,900.0	1,896.3	1,897.8	1,895.1	3.6	3.5	-125.35	-60.6	20.7	57.1	50.2	6.91	8.259			
2,000.0	1,995.8	1,997.6	1,994.5	3.8	3.7	-124.56	-69.7	22.3	63.4	56.0	7.35	8.624			
2,100.0	2,095.2	2,097.4	2,093.8	4.0	3.9	-123.91	-78.8	23.9	69.7	61.9	7.79	8.945			
2,200.0	2,194.7	2,197.1	2,193.2	4.3	4.1	-123.36	-87.9	25.5	76.0	67.8	8.24	9.229			
2,300.0	2,294.2	2,296.9	2,292.6	4.5	4.3	-122.90	-96.9	27.1	82.3	73.6	8.68	9.481			
2,400.0	2,393.7	2,396.7	2,391.9	4.7	4.6	-122.51	-106.0	28.7	88.7	79.5	9.13	9.707			
2,500.0	2,493.1	2,496.5	2,491.3	5.0	4.8	-122.17	-115.1	30.3	95.0	85.4	9.59	9.910			
2,600.0	2,592.6	2,596.3	2,590.7	5.2	5.0	-121.87	-124.2	31.9	101.3	91.3	10.04	10.092			
2,700.0	2,692.1	2,696.1	2,690.1	5.5	5.2	-121.61	-133.3	33.5	107.7	97.2	10.50	10.258			
2,800.0	2,791.5	2,795.9	2,789.4	5.7	5.5	-121.37	-142.4	35.1	114.0	103.1	10.95	10.409			
2,900.0	2,891.0	2,895.7	2,888.8	6.0	5.7	-121.16	-151.5	36.7	120.3	108.9	11.41	10.547			
3,000.0	2,990.5	2,995.5	2,988.2	6.2	5.9	-120.97	-160.6	38.3	126.7	114.8	11.87	10.673			
3,100.0	3,090.0	3,095.3	3,087.5	6.4	6.2	-120.80	-169.6	39.9	133.0	120.7	12.33	10.790			
3,200.0	3,189.4	3,195.1	3,186.9	6.7	6.4	-120.65	-178.7	41.5	139.4	126.6	12.79	10.897			
3,300.0	3,288.9	3,294.9	3,286.3	6.9	6.6	-120.51	-187.8	43.1	145.7	132.5	13.25	10.996			
3,400.0	3,388.4	3,394.7	3,385.7	7.2	6.9	-120.38	-196.9	44.7	152.1	138.4	13.71	11.088			
3,500.0	3,487.9	3,494.5	3,485.0	7.4	7.1	-120.26	-206.0	46.3	158.4	144.2	14.18	11.174			
3,600.0	3,587.3	3,594.3	3,584.4	7.7	7.3	-120.15	-215.1	47.9	164.8	150.1	14.64	11.254			
3,700.0	3,686.8	3,694.1	3,683.8	7.9	7.6	-120.05	-224.2	49.5	171.1	156.0	15.10	11.328			
3,800.0	3,786.3	3,793.9	3,783.1	8.2	7.8	-119.95	-233.3	51.1	177.5	161.9	15.57	11.398			
3,900.0	3,885.7	3,893.7	3,882.5	8.4	8.0	-119.86	-242.4	52.7	183.8	167.8	16.03	11.464			
4,000.0	3,985.2	3,993.5	3,981.9	8.7	8.3	-119.78	-251.4	54.3	190.2	173.7	16.50	11.526			
4,100.0	4,084.7	4,093.3	4,081.2	8.9	8.5	-119.70	-260.5	55.8	196.5	179.5	16.96	11.584			
4,200.0	4,184.2	4,193.1	4,180.6	9.2	8.7	-119.63	-269.6	57.4	202.9	185.4	17.43	11.638			
4,300.0	4,283.6	4,292.9	4,280.0	9.4	9.0	-119.56	-278.7	59.0	209.2	191.3	17.90	11.690			
4,400.0	4,383.1	4,392.7	4,379.4	9.7	9.2	-119.50	-287.8	60.6	215.6	197.2	18.36	11.739			
4,500.0	4,482.6	4,492.5	4,478.7	9.9	9.4	-119.44	-296.9	62.2	221.9	203.1	18.83	11.786			
4,600.0	4,582.1	4,592.3	4,578.1	10.1	9.7	-119.38	-306.0	63.8	228.3	209.0	19.30	11.830			
4,700.0	4,681.5	4,692.1	4,677.5	10.4	9.9	-119.33	-315.1	65.4	234.6	214.9	19.76	11.871			
4,800.0	4,781.0	4,791.9	4,776.8	10.6	10.1	-119.28	-324.1	67.0	241.0	220.7	20.23	11.911			
4,900.0	4,880.5	4,891.7	4,876.2	10.9	10.4	-119.23	-333.2	68.6	247.3	226.6	20.70	11.949			
5,000.0	4,979.9	4,991.5	4,975.6	11.1	10.6	-119.18	-342.3	70.2	253.7	232.5	21.17	11.985			
5,100.0	5,079.4	5,091.3	5,074.9	11.4	10.8	-119.14	-351.4	71.8	260.0	238.4	21.63	12.020			

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 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4J-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,178.9	5,191.1	5,174.3	11.6	11.1	-119.10	-360.5	73.4	266.4	244.3	22.10	12.053		
5,300.0	5,278.4	5,290.9	5,273.7	11.9	11.3	-119.06	-369.6	75.0	272.7	250.2	22.57	12.084		
5,400.0	5,377.8	5,390.7	5,373.1	12.1	11.6	-119.02	-378.7	76.6	279.1	256.0	23.04	12.114		
5,500.0	5,477.3	5,490.5	5,472.4	12.4	11.8	-118.99	-387.8	78.2	285.4	261.9	23.51	12.143		
5,600.0	5,576.8	5,590.3	5,571.8	12.6	12.0	-118.95	-396.9	79.8	291.8	267.8	23.97	12.171		
5,700.0	5,676.3	5,690.1	5,671.2	12.9	12.3	-118.92	-405.9	81.4	298.1	273.7	24.44	12.198		
5,800.0	5,775.7	5,789.9	5,770.5	13.1	12.5	-118.89	-415.0	83.0	304.5	279.6	24.91	12.223		
5,900.0	5,875.2	5,889.7	5,869.9	13.4	12.7	-118.86	-424.1	84.6	310.9	285.5	25.38	12.248		
6,000.0	5,974.7	5,989.5	5,969.3	13.6	13.0	-118.83	-433.2	86.2	317.2	291.4	25.85	12.271		
6,100.0	6,074.1	6,089.3	6,068.6	13.9	13.2	-118.80	-442.3	87.8	323.6	297.2	26.32	12.294		
6,200.0	6,173.6	6,189.1	6,168.0	14.1	13.4	-118.77	-451.4	89.4	329.9	303.1	26.79	12.316		
6,300.0	6,273.1	6,288.9	6,267.4	14.4	13.7	-118.75	-460.5	91.0	336.3	309.0	27.26	12.337		
6,400.0	6,372.6	6,388.7	6,366.8	14.6	13.9	-118.72	-469.6	92.6	342.6	314.9	27.73	12.357		
6,500.0	6,472.0	6,488.5	6,466.1	14.9	14.1	-118.70	-478.7	94.2	349.0	320.8	28.20	12.377		
6,600.0	6,571.5	6,588.3	6,565.5	15.1	14.4	-118.67	-487.7	95.8	355.3	326.7	28.66	12.396		
6,700.0	6,671.0	6,688.1	6,664.9	15.4	14.6	-118.65	-496.8	97.4	361.7	332.5	29.13	12.414		
6,800.0	6,770.5	6,787.8	6,764.2	15.6	14.9	-118.63	-505.9	99.0	368.0	338.4	29.60	12.432		
6,900.0	6,870.2	6,887.3	6,863.2	15.8	15.1	124.43	-515.0	100.6	374.2	344.3	29.98	12.482		
7,000.0	6,968.8	6,987.3	6,963.1	15.7	15.2	102.00	-516.5	102.1	380.6	350.5	30.08	12.650		
7,100.0	7,063.3	7,090.4	7,064.7	15.5	15.1	99.36	-499.9	103.7	387.1	357.2	29.82	12.979		
7,200.0	7,150.7	7,196.9	7,164.8	15.3	14.9	99.30	-464.0	105.1	393.5	364.2	29.25	13.453		
7,300.0	7,228.5	7,306.8	7,259.3	14.9	14.6	99.96	-408.2	106.4	399.4	370.9	28.45	14.039		
7,400.0	7,294.3	7,420.0	7,343.6	14.6	14.1	100.80	-333.0	107.5	404.4	376.9	27.58	14.664		
7,500.0	7,346.0	7,536.1	7,413.1	14.3	13.8	101.61	-240.2	108.3	408.3	381.4	26.84	15.211		
7,600.0	7,382.2	7,654.5	7,463.2	14.2	13.6	102.26	-133.1	108.7	410.6	384.1	26.44	15.530		
7,700.0	7,401.6	7,774.5	7,490.5	14.3	13.6	102.68	-16.6	108.7	411.0	384.5	26.55	15.482		
7,800.0	7,405.0	7,886.7	7,495.0	14.6	14.0	102.83	95.4	108.4	409.8	382.6	27.20	15.068		
7,900.0	7,405.0	7,986.6	7,495.0	15.1	14.5	102.88	195.4	108.0	408.3	380.0	28.24	14.458		
8,000.0	7,405.0	8,086.6	7,495.0	15.8	15.2	102.93	295.4	107.7	406.7	377.1	29.63	13.726		
8,100.0	7,405.0	8,186.6	7,495.0	16.6	16.1	102.98	395.4	107.3	405.2	373.9	31.34	12.929		
8,200.0	7,405.0	8,286.6	7,495.0	17.6	17.1	103.03	495.4	107.0	403.7	370.4	33.31	12.119		
8,300.0	7,405.0	8,386.6	7,495.0	18.7	18.2	103.08	595.4	106.6	402.1	366.6	35.50	11.328		
8,400.0	7,405.0	8,486.6	7,495.0	19.9	19.4	103.13	695.3	106.3	400.6	362.7	37.87	10.579		
8,500.0	7,405.0	8,586.6	7,495.0	21.1	20.7	103.18	795.3	105.9	399.1	358.7	40.39	9.881		
8,600.0	7,405.0	8,686.6	7,495.0	22.4	22.1	103.23	895.3	105.6	397.5	354.5	43.03	9.239		
8,700.0	7,405.0	8,786.5	7,495.0	23.8	23.5	103.29	995.3	105.2	396.0	350.2	45.77	8.652		
8,800.0	7,405.0	8,886.5	7,495.0	25.2	24.9	103.34	1,095.3	104.9	394.5	345.9	48.59	8.118		
8,900.0	7,405.0	8,986.5	7,495.0	26.7	26.4	103.39	1,195.3	104.5	393.0	341.5	51.49	7.632		
9,000.0	7,405.0	9,086.5	7,495.0	28.2	28.0	103.44	1,295.3	104.2	391.4	337.0	54.44	7.190		
9,100.0	7,405.0	9,186.5	7,495.0	29.7	29.5	103.50	1,395.3	103.8	389.9	332.5	57.44	6.788		
9,200.0	7,405.0	9,286.5	7,495.0	31.3	31.1	103.55	1,495.2	103.5	388.4	327.9	60.48	6.421		
9,300.0	7,405.0	9,386.5	7,495.0	32.9	32.7	103.61	1,595.2	103.1	386.8	323.3	63.56	6.086		
9,400.0	7,405.0	9,486.5	7,495.0	34.5	34.3	103.66	1,695.2	102.8	385.3	318.7	66.67	5.780		
9,500.0	7,405.0	9,586.4	7,495.0	36.1	35.9	103.72	1,795.2	102.4	383.8	314.0	69.80	5.499		
9,600.0	7,405.0	9,686.4	7,495.0	37.7	37.5	103.77	1,895.2	102.1	382.3	309.3	72.95	5.240		
9,700.0	7,405.0	9,786.4	7,495.0	39.3	39.1	103.83	1,995.2	101.7	380.7	304.6	76.13	5.001		
9,800.0	7,405.0	9,886.4	7,495.0	40.9	40.8	103.89	2,095.2	101.4	379.2	299.9	79.32	4.781		
9,900.0	7,405.0	9,986.4	7,495.0	42.6	42.5	103.94	2,195.1	101.0	377.7	295.2	82.52	4.577		
10,000.0	7,405.0	10,086.4	7,495.0	44.3	44.1	104.00	2,295.1	100.7	376.2	290.4	85.74	4.388		
10,100.0	7,405.0	10,186.4	7,495.0	45.9	45.8	104.06	2,395.1	100.3	374.6	285.7	88.96	4.211		
10,200.0	7,405.0	10,286.4	7,495.0	47.6	47.5	104.12	2,495.1	100.0	373.1	280.9	92.20	4.047		
10,300.0	7,405.0	10,386.3	7,495.0	49.3	49.2	104.18	2,595.1	99.7	371.6	276.2	95.44	3.893		

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 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4J-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				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	10,486.3	7,495.0	50.9	50.8	104.24	2,695.1	99.3	370.1	271.4	98.70	3.750		
10,500.0	7,405.0	10,586.3	7,495.0	52.6	52.5	104.30	2,795.1	99.0	368.6	266.6	101.95	3.615		
10,600.0	7,405.0	10,686.3	7,495.0	54.3	54.2	104.36	2,895.1	98.6	367.0	261.8	105.22	3.488		
10,700.0	7,405.0	10,786.3	7,495.0	56.0	55.9	104.42	2,995.0	98.3	365.5	257.0	108.49	3.369		
10,800.0	7,405.0	10,886.3	7,495.0	57.7	57.6	104.48	3,095.0	97.9	364.0	252.2	111.76	3.257		
10,900.0	7,405.0	10,986.3	7,495.0	59.4	59.3	104.54	3,195.0	97.6	362.5	247.4	115.03	3.151		
11,000.0	7,405.0	11,086.3	7,495.0	61.1	61.1	104.60	3,295.0	97.2	360.9	242.6	118.31	3.051		
11,100.0	7,405.0	11,186.2	7,495.0	62.8	62.8	104.67	3,395.0	96.9	359.4	237.8	121.59	2.956		
11,200.0	7,405.0	11,286.2	7,495.0	64.5	64.5	104.73	3,495.0	96.5	357.9	233.0	124.88	2.866		
11,300.0	7,405.0	11,386.2	7,495.0	66.2	66.2	104.80	3,595.0	96.2	356.4	228.2	128.16	2.781		
11,400.0	7,405.0	11,486.2	7,495.0	68.0	67.9	104.86	3,695.0	95.8	354.9	223.4	131.45	2.700		
11,500.0	7,405.0	11,586.2	7,495.0	69.7	69.6	104.93	3,794.9	95.5	353.4	218.6	134.74	2.623		
11,600.0	7,405.0	11,686.2	7,495.0	71.4	71.3	104.99	3,894.9	95.1	351.8	213.8	138.02	2.549		
11,700.0	7,405.0	11,786.2	7,495.0	73.1	73.1	105.06	3,994.9	94.8	350.3	209.0	141.31	2.479		
11,800.0	7,405.0	11,886.2	7,495.0	74.8	74.8	105.12	4,094.9	94.4	348.8	204.2	144.60	2.412		
11,900.0	7,405.0	11,986.1	7,495.0	76.6	76.5	105.19	4,194.9	94.1	347.3	199.4	147.89	2.348		
12,000.0	7,405.0	12,086.1	7,495.0	78.3	78.2	105.26	4,294.9	93.7	345.8	194.6	151.18	2.287		
12,100.0	7,405.0	12,186.1	7,495.0	80.0	80.0	105.33	4,394.9	93.4	344.3	189.8	154.47	2.229		
12,200.0	7,405.0	12,286.1	7,495.0	81.7	81.7	105.40	4,494.8	93.0	342.7	185.0	157.75	2.173		
12,300.0	7,405.0	12,386.1	7,495.0	83.5	83.4	105.47	4,594.8	92.7	341.2	180.2	161.04	2.119		
12,400.0	7,405.0	12,486.1	7,495.0	85.2	85.2	105.54	4,694.8	92.3	339.7	175.4	164.33	2.067		
12,500.0	7,405.0	12,586.1	7,495.0	86.9	86.9	105.61	4,794.8	92.0	338.2	170.6	167.61	2.018		
12,600.0	7,405.0	12,686.1	7,495.0	88.7	88.6	105.68	4,894.8	91.6	336.7	165.8	170.89	1.970		
12,700.0	7,405.0	12,786.0	7,495.0	90.4	90.4	105.76	4,994.8	91.3	335.2	161.0	174.17	1.924		
12,800.0	7,405.0	12,886.0	7,495.0	92.1	92.1	105.83	5,094.8	90.9	333.7	156.2	177.45	1.880		
12,900.0	7,405.0	12,986.0	7,495.0	93.9	93.8	105.90	5,194.8	90.6	332.2	151.4	180.73	1.838		
13,000.0	7,405.0	13,086.0	7,495.0	95.6	95.6	105.98	5,294.7	90.2	330.6	146.6	184.01	1.797		
13,100.0	7,405.0	13,189.2	7,495.0	97.3	97.4	106.07	5,397.9	89.6	328.9	141.5	187.32	1.756		
13,200.0	7,405.0	13,294.9	7,495.0	99.1	99.2	106.25	5,503.6	89.2	327.5	136.9	190.59	1.708		
13,300.0	7,405.0	13,400.5	7,495.0	100.8	101.0	106.53	5,609.1	88.8	326.4	126.6	193.75	1.654		
13,400.0	7,405.0	13,503.7	7,495.0	102.5	102.8	106.91	5,712.1	88.4	325.6	116.9	196.76	1.594		
13,500.0	7,405.0	13,603.4	7,495.0	104.3	104.5	107.31	5,811.6	88.0	325.0	106.9	199.67	1.535		
13,600.0	7,405.0	13,703.1	7,495.0	106.0	106.3	107.73	5,911.2	87.6	324.5	97.0	202.54	1.479 Level 3		
13,700.0	7,405.0	13,802.9	7,495.0	107.7	108.0	108.17	6,010.7	87.2	324.0	87.1	205.36	1.424 Level 3		
13,800.0	7,405.0	13,902.6	7,495.0	109.5	109.7	108.64	6,110.3	86.8	323.5	77.4	208.13	1.372 Level 3		
13,900.0	7,405.0	14,002.3	7,495.0	111.2	111.5	109.12	6,209.8	86.4	323.0	67.7	210.84	1.321 Level 3		
14,000.0	7,405.0	14,102.0	7,495.0	113.0	113.2	109.63	6,309.3	86.0	322.5	58.0	213.48	1.272 Level 3		
14,100.0	7,405.0	14,201.8	7,495.0	114.7	114.9	110.17	6,408.9	85.6	322.0	48.5	216.06	1.225 Level 2		
14,200.0	7,405.0	14,301.5	7,495.0	116.4	116.7	110.73	6,508.4	85.2	321.5	39.1	218.55	1.179 Level 2		
14,300.0	7,405.0	14,401.2	7,495.0	118.2	118.4	111.33	6,607.9	84.8	321.0	29.8	220.96	1.135 Level 2, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4K-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.05	0.0	20.1	20.2					
100.0	100.0	99.0	99.0	0.1	0.1	90.05	0.0	20.1	20.1	19.9	0.24	85.276		
200.0	200.0	199.0	199.0	0.3	0.3	90.05	0.0	20.1	20.1	19.6	0.58	34.447		
300.0	300.0	299.0	299.0	0.5	0.5	90.05	0.0	20.1	20.1	19.2	0.93	21.569		
400.0	400.0	399.0	399.0	0.6	0.6	90.05	0.0	20.1	20.1	18.9	1.28	15.700		
500.0	500.0	499.0	499.0	0.8	0.8	90.05	0.0	20.1	20.1	18.5	1.63	12.342		
600.0	600.0	599.0	599.0	1.0	1.0	90.05	0.0	20.1	20.1	18.2	1.98	10.167		
700.0	700.0	699.0	699.0	1.2	1.2	90.05	0.0	20.1	20.1	17.8	2.33	8.644		
800.0	800.0	799.0	799.0	1.3	1.3	90.05	0.0	20.1	20.1	17.5	2.68	7.518		
900.0	900.0	899.0	899.0	1.5	1.5	90.05	0.0	20.1	20.1	17.1	3.03	6.651		
1,000.0	1,000.0	999.0	999.0	1.7	1.7	90.05	0.0	20.1	20.1	16.8	3.38	5.964	CC, ES	
1,100.0	1,100.0	1,098.7	1,098.7	1.9	1.9	-117.45	-1.6	20.8	21.6	17.8	3.73	5.785		
1,200.0	1,199.8	1,198.3	1,198.2	2.0	2.0	-116.96	-6.4	22.6	25.8	21.8	4.09	6.326		
1,300.0	1,299.5	1,297.8	1,297.3	2.2	2.2	-116.60	-14.3	25.6	32.9	28.5	4.47	7.376		
1,400.0	1,398.9	1,397.5	1,396.5	2.4	2.4	-117.26	-23.0	29.0	41.0	36.2	4.86	8.443		
1,500.0	1,498.4	1,497.2	1,495.8	2.7	2.6	-117.71	-31.8	32.3	49.2	43.9	5.27	9.330		
1,600.0	1,597.9	1,596.8	1,595.0	2.9	2.9	-118.02	-40.5	35.7	57.3	51.6	5.69	10.073		
1,700.0	1,697.3	1,696.5	1,694.2	3.1	3.1	-118.26	-49.2	39.0	65.4	59.3	6.11	10.703		
1,800.0	1,796.8	1,796.2	1,793.5	3.3	3.3	-118.45	-57.9	42.4	73.5	67.0	6.54	11.242		
1,900.0	1,896.3	1,895.8	1,892.7	3.6	3.5	-118.60	-66.6	45.7	81.6	74.6	6.97	11.706		
2,000.0	1,995.8	1,995.5	1,991.9	3.8	3.7	-118.72	-75.3	49.1	89.7	82.3	7.41	12.110		
2,100.0	2,095.2	2,095.2	2,091.2	4.0	4.0	-118.82	-84.1	52.4	97.9	90.0	7.85	12.463		
2,200.0	2,194.7	2,194.9	2,190.4	4.3	4.2	-118.91	-92.8	55.8	106.0	97.7	8.30	12.775		
2,300.0	2,294.2	2,294.5	2,289.6	4.5	4.4	-118.98	-101.5	59.1	114.1	105.3	8.74	13.052		
2,400.0	2,393.7	2,394.2	2,388.8	4.7	4.6	-119.05	-110.2	62.5	122.2	113.0	9.19	13.299		
2,500.0	2,493.1	2,493.9	2,488.1	5.0	4.9	-119.10	-118.9	65.8	130.3	120.7	9.64	13.520		
2,600.0	2,592.6	2,593.5	2,587.3	5.2	5.1	-119.15	-127.7	69.2	138.4	128.4	10.09	13.720		
2,700.0	2,692.1	2,693.2	2,686.5	5.5	5.3	-119.20	-136.4	72.5	146.6	136.0	10.54	13.902		
2,800.0	2,791.5	2,792.9	2,785.8	5.7	5.6	-119.24	-145.1	75.9	154.7	143.7	11.00	14.066		
2,900.0	2,891.0	2,892.5	2,885.0	6.0	5.8	-119.27	-153.8	79.2	162.8	151.3	11.45	14.217		
3,000.0	2,990.5	2,992.2	2,984.2	6.2	6.0	-119.30	-162.5	82.6	170.9	159.0	11.91	14.355		
3,100.0	3,090.0	3,091.9	3,083.5	6.4	6.3	-119.33	-171.2	85.9	179.0	166.7	12.36	14.482		
3,200.0	3,189.4	3,191.6	3,182.7	6.7	6.5	-119.36	-180.0	89.3	187.2	174.3	12.82	14.599		
3,300.0	3,288.9	3,291.2	3,281.9	6.9	6.7	-119.38	-188.7	92.6	195.3	182.0	13.28	14.708		
3,400.0	3,388.4	3,390.9	3,381.2	7.2	7.0	-119.41	-197.4	96.0	203.4	189.7	13.73	14.808		
3,500.0	3,487.9	3,490.6	3,480.4	7.4	7.2	-119.43	-206.1	99.3	211.5	197.3	14.19	14.902		
3,600.0	3,587.3	3,590.2	3,579.6	7.7	7.4	-119.45	-214.8	102.7	219.6	205.0	14.65	14.989		
3,700.0	3,686.8	3,689.9	3,678.9	7.9	7.7	-119.46	-223.6	106.0	227.7	212.6	15.11	15.070		
3,800.0	3,786.3	3,789.6	3,778.1	8.2	7.9	-119.48	-232.3	109.4	235.9	220.3	15.57	15.147		
3,900.0	3,885.7	3,889.2	3,877.3	8.4	8.1	-119.50	-241.0	112.7	244.0	228.0	16.03	15.218		
4,000.0	3,985.2	3,988.9	3,976.6	8.7	8.4	-119.51	-249.7	116.1	252.1	235.6	16.49	15.286		
4,100.0	4,084.7	4,088.6	4,075.8	8.9	8.6	-119.52	-258.4	119.4	260.2	243.3	16.95	15.349		
4,200.0	4,184.2	4,188.3	4,175.0	9.2	8.9	-119.54	-267.1	122.8	268.3	250.9	17.41	15.409		
4,300.0	4,283.6	4,287.9	4,274.2	9.4	9.1	-119.55	-275.9	126.1	276.5	258.6	17.88	15.466		
4,400.0	4,383.1	4,387.6	4,373.5	9.7	9.3	-119.56	-284.6	129.5	284.6	266.2	18.34	15.519		
4,500.0	4,482.6	4,487.3	4,472.7	9.9	9.6	-119.57	-293.3	132.8	292.7	273.9	18.80	15.570		
4,600.0	4,582.1	4,586.9	4,571.9	10.1	9.8	-119.58	-302.0	136.2	300.8	281.6	19.26	15.618		
4,700.0	4,681.5	4,686.6	4,671.2	10.4	10.0	-119.59	-310.7	139.5	308.9	289.2	19.72	15.664		
4,800.0	4,781.0	4,786.3	4,770.4	10.6	10.3	-119.60	-319.4	142.9	317.1	296.9	20.19	15.707		
4,900.0	4,880.5	4,885.9	4,869.6	10.9	10.5	-119.61	-328.2	146.2	325.2	304.5	20.65	15.749		
5,000.0	4,979.9	4,985.6	4,968.9	11.1	10.7	-119.62	-336.9	149.6	333.3	312.2	21.11	15.788		
5,100.0	5,079.4	5,085.3	5,068.1	11.4	11.0	-119.63	-345.6	152.9	341.4	319.8	21.57	15.826		

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 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4K-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			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	5,178.9	5,185.0	5,167.3	11.6	11.2	-119.63	-354.3	156.3	349.5	327.5	22.04	15.862		
5,300.0	5,278.4	5,284.6	5,266.6	11.9	11.5	-119.64	-363.0	159.6	357.6	335.1	22.50	15.896		
5,400.0	5,377.8	5,384.3	5,365.8	12.1	11.7	-119.65	-371.8	163.0	365.8	342.8	22.96	15.929		
5,500.0	5,477.3	5,484.0	5,465.0	12.4	11.9	-119.65	-380.5	166.3	373.9	350.5	23.43	15.961		
5,600.0	5,576.8	5,583.6	5,564.3	12.6	12.2	-119.66	-389.2	169.7	382.0	358.1	23.89	15.991		
5,700.0	5,676.3	5,683.3	5,663.5	12.9	12.4	-119.67	-397.9	173.0	390.1	365.8	24.35	16.020		
5,800.0	5,775.7	5,783.0	5,762.7	13.1	12.6	-119.67	-406.6	176.4	398.2	373.4	24.82	16.048		
5,900.0	5,875.2	5,882.6	5,861.9	13.4	12.9	-119.68	-415.3	179.7	406.4	381.1	25.28	16.075		
6,000.0	5,974.7	5,982.3	5,961.2	13.6	13.1	-119.68	-424.1	183.1	414.5	388.7	25.74	16.101		
6,100.0	6,074.1	6,082.0	6,060.4	13.9	13.4	-119.69	-432.8	186.4	422.6	396.4	26.21	16.126		
6,200.0	6,173.6	6,181.6	6,159.6	14.1	13.6	-119.69	-441.5	189.8	430.7	404.0	26.67	16.150		
6,300.0	6,273.1	6,281.3	6,258.9	14.4	13.8	-119.70	-450.2	193.1	438.8	411.7	27.13	16.173		
6,400.0	6,372.6	6,381.0	6,358.1	14.6	14.1	-119.70	-458.9	196.5	447.0	419.4	27.60	16.195		
6,500.0	6,472.0	6,480.7	6,457.3	14.9	14.3	-119.71	-467.7	199.8	455.1	427.0	28.06	16.217		
6,600.0	6,571.5	6,580.3	6,556.6	15.1	14.5	-119.71	-476.4	203.2	463.2	434.7	28.53	16.238		
6,700.0	6,671.0	6,680.0	6,655.8	15.4	14.8	-119.71	-485.1	206.5	471.3	442.3	28.99	16.258		
6,800.0	6,770.5	6,779.7	6,755.0	15.6	15.0	-119.72	-493.8	209.9	479.4	450.0	29.45	16.277		
6,900.0	6,870.2	6,879.0	6,853.9	15.8	15.3	122.93	-502.5	213.2	487.2	457.4	29.82	16.342		
7,000.0	6,968.8	6,975.7	6,950.2	15.7	15.5	100.51	-511.0	216.4	494.9	464.9	30.01	16.492		
7,100.0	7,063.3	7,070.0	7,044.2	15.5	15.7	99.28	-518.0	219.6	504.5	474.5	29.98	16.828		
7,200.0	7,150.7	7,173.3	7,147.0	15.3	15.7	101.06	-511.1	223.1	516.8	487.2	29.59	17.467		
7,300.0	7,228.5	7,286.7	7,256.5	14.9	15.6	103.63	-482.4	226.8	530.9	502.1	28.85	18.404		
7,400.0	7,294.3	7,412.8	7,368.9	14.6	15.2	106.41	-426.0	230.6	545.9	518.0	27.85	19.597		
7,500.0	7,346.0	7,553.5	7,476.4	14.3	14.8	109.10	-335.7	234.2	559.8	533.0	26.79	20.897		
7,600.0	7,382.2	7,709.5	7,565.9	14.2	14.3	111.33	-208.6	237.2	570.7	544.8	25.98	21.972		
7,700.0	7,401.6	7,877.8	7,620.3	14.3	14.2	112.74	-50.1	239.1	576.6	550.8	25.83	22.322		
7,800.0	7,405.0	8,022.4	7,630.0	14.6	14.6	113.07	94.0	239.4	576.7	550.2	26.50	21.765		
7,900.0	7,405.0	8,122.4	7,630.0	15.1	15.1	113.12	194.0	239.4	575.6	548.1	27.48	20.943		
8,000.0	7,405.0	8,222.4	7,630.0	15.8	15.8	113.17	294.0	239.4	574.4	545.6	28.80	19.948		
8,100.0	7,405.0	8,322.4	7,630.0	16.6	16.6	113.22	394.0	239.4	573.3	542.9	30.40	18.860		
8,200.0	7,405.0	8,422.4	7,630.0	17.6	17.6	113.27	494.0	239.4	572.2	540.0	32.24	17.747		
8,300.0	7,405.0	8,522.4	7,630.0	18.7	18.7	113.31	594.0	239.4	571.1	536.8	34.29	16.655		
8,400.0	7,405.0	8,622.4	7,630.0	19.9	19.9	113.36	694.0	239.4	570.0	533.4	36.50	15.614		
8,500.0	7,405.0	8,722.4	7,630.0	21.1	21.2	113.41	794.0	239.4	568.8	530.0	38.86	14.639		
8,600.0	7,405.0	8,822.4	7,630.0	22.4	22.5	113.46	894.0	239.4	567.7	526.4	41.32	13.738		
8,700.0	7,405.0	8,922.4	7,630.0	23.8	23.9	113.51	994.0	239.4	566.6	522.7	43.89	12.910		
8,800.0	7,405.0	9,022.4	7,630.0	25.2	25.3	113.56	1,093.9	239.4	565.5	518.9	46.53	12.153		
8,900.0	7,405.0	9,122.4	7,630.0	26.7	26.8	113.61	1,193.9	239.4	564.3	515.1	49.23	11.463		
9,000.0	7,405.0	9,222.4	7,630.0	28.2	28.3	113.66	1,293.9	239.4	563.2	511.2	52.00	10.832		
9,100.0	7,405.0	9,322.4	7,630.0	29.7	29.8	113.71	1,393.9	239.4	562.1	507.3	54.80	10.257		
9,200.0	7,405.0	9,422.3	7,630.0	31.3	31.4	113.76	1,493.9	239.4	561.0	503.3	57.65	9.731		
9,300.0	7,405.0	9,522.3	7,630.0	32.9	32.9	113.81	1,593.9	239.4	559.9	499.3	60.53	9.250		
9,400.0	7,405.0	9,622.3	7,630.0	34.5	34.5	113.86	1,693.9	239.4	558.8	495.3	63.43	8.808		
9,500.0	7,405.0	9,722.3	7,630.0	36.1	36.1	113.91	1,793.9	239.4	557.6	491.3	66.36	8.403		
9,600.0	7,405.0	9,822.3	7,630.0	37.7	37.8	113.96	1,893.9	239.4	556.5	487.2	69.32	8.029		
9,700.0	7,405.0	9,922.3	7,630.0	39.3	39.4	114.01	1,993.9	239.4	555.4	483.1	72.28	7.684		
9,800.0	7,405.0	10,022.3	7,630.0	40.9	41.0	114.06	2,093.9	239.4	554.3	479.0	75.27	7.364		
9,900.0	7,405.0	10,122.3	7,630.0	42.6	42.7	114.12	2,193.9	239.4	553.2	474.9	78.27	7.068		
10,000.0	7,405.0	10,222.3	7,630.0	44.3	44.3	114.17	2,293.9	239.4	552.1	470.8	81.27	6.793		
10,100.0	7,405.0	10,322.3	7,630.0	45.9	46.0	114.22	2,393.9	239.4	550.9	466.7	84.29	6.536		
10,200.0	7,405.0	10,422.3	7,630.0	47.6	47.7	114.27	2,493.8	239.4	549.8	462.5	87.32	6.297		
10,300.0	7,405.0	10,522.3	7,630.0	49.3	49.3	114.32	2,593.8	239.4	548.7	458.4	90.35	6.073		

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 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4K-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			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	10,622.3	7,630.0	50.9	51.0	114.38	2,693.8	239.4	547.6	454.2	93.39	5.863		
10,500.0	7,405.0	10,722.2	7,630.0	52.6	52.7	114.43	2,793.8	239.4	546.5	450.1	96.44	5.667		
10,600.0	7,405.0	10,822.2	7,630.0	54.3	54.4	114.48	2,893.8	239.4	545.4	445.9	99.49	5.482		
10,700.0	7,405.0	10,922.2	7,630.0	56.0	56.1	114.54	2,993.8	239.4	544.3	441.7	102.54	5.308		
10,800.0	7,405.0	11,022.2	7,630.0	57.7	57.8	114.59	3,093.8	239.4	543.2	437.6	105.60	5.143		
10,900.0	7,405.0	11,122.2	7,630.0	59.4	59.5	114.64	3,193.8	239.4	542.0	433.4	108.66	4.988		
11,000.0	7,405.0	11,222.2	7,630.0	61.1	61.2	114.70	3,293.8	239.4	540.9	429.2	111.72	4.842		
11,100.0	7,405.0	11,322.2	7,630.0	62.8	62.9	114.75	3,393.8	239.4	539.8	425.0	114.79	4.703		
11,200.0	7,405.0	11,422.2	7,630.0	64.5	64.6	114.81	3,493.8	239.4	538.7	420.9	117.85	4.571		
11,300.0	7,405.0	11,522.2	7,630.0	66.2	66.3	114.86	3,593.8	239.4	537.6	416.7	120.92	4.446		
11,400.0	7,405.0	11,622.2	7,630.0	68.0	68.0	114.92	3,693.8	239.4	536.5	412.5	123.99	4.327		
11,500.0	7,405.0	11,722.2	7,630.0	69.7	69.8	114.97	3,793.7	239.4	535.4	408.3	127.05	4.214		
11,600.0	7,405.0	11,822.2	7,630.0	71.4	71.5	115.03	3,893.7	239.4	534.3	404.2	130.12	4.106		
11,700.0	7,405.0	11,922.2	7,630.0	73.1	73.2	115.08	3,993.7	239.4	533.2	400.0	133.19	4.003		
11,800.0	7,405.0	12,022.2	7,630.0	74.8	74.9	115.14	4,093.7	239.4	532.1	395.8	136.25	3.905		
11,900.0	7,405.0	12,122.1	7,630.0	76.6	76.6	115.19	4,193.7	239.4	531.0	391.6	139.32	3.811		
12,000.0	7,405.0	12,222.1	7,630.0	78.3	78.4	115.25	4,293.7	239.4	529.9	387.5	142.39	3.721		
12,100.0	7,405.0	12,322.1	7,630.0	80.0	80.1	115.31	4,393.7	239.4	528.8	383.3	145.45	3.635		
12,200.0	7,405.0	12,422.1	7,630.0	81.7	81.8	115.36	4,493.7	239.4	527.6	379.1	148.51	3.553		
12,300.0	7,405.0	12,522.1	7,630.0	83.5	83.6	115.42	4,593.7	239.4	526.5	375.0	151.57	3.474		
12,400.0	7,405.0	12,622.1	7,630.0	85.2	85.3	115.48	4,693.7	239.4	525.4	370.8	154.64	3.398		
12,500.0	7,405.0	12,722.1	7,630.0	86.9	87.0	115.53	4,793.7	239.4	524.3	366.6	157.69	3.325		
12,600.0	7,405.0	12,822.1	7,630.0	88.7	88.7	115.59	4,893.7	239.4	523.2	362.5	160.75	3.255		
12,700.0	7,405.0	12,922.1	7,630.0	90.4	90.5	115.65	4,993.7	239.4	522.1	358.3	163.81	3.188		
12,800.0	7,405.0	13,022.1	7,630.0	92.1	92.2	115.71	5,093.7	239.4	521.0	354.2	166.86	3.123		
12,900.0	7,405.0	13,122.1	7,630.0	93.9	93.9	115.77	5,193.6	239.4	519.9	350.0	169.91	3.060		
13,000.0	7,405.0	13,222.1	7,630.0	95.6	95.7	115.82	5,293.6	239.4	518.8	345.9	172.96	3.000		
13,100.0	7,405.0	13,322.1	7,630.0	97.3	97.4	115.88	5,393.6	239.4	517.7	341.7	176.00	2.942		
13,200.0	7,405.0	13,422.0	7,630.0	99.1	99.1	115.94	5,493.6	239.4	516.6	337.6	179.05	2.885		
13,300.0	7,405.0	13,522.0	7,630.0	100.8	100.9	116.00	5,593.6	239.4	515.5	333.4	182.09	2.831		
13,400.0	7,405.0	13,622.0	7,630.0	102.5	102.6	116.06	5,693.6	239.4	514.4	329.3	185.13	2.779		
13,500.0	7,405.0	13,722.0	7,630.0	104.3	104.4	116.12	5,793.6	239.4	513.3	325.2	188.16	2.728		
13,600.0	7,405.0	13,822.0	7,630.0	106.0	106.1	116.18	5,893.6	239.4	512.2	321.1	191.20	2.679		
13,700.0	7,405.0	13,922.0	7,630.0	107.7	107.8	116.24	5,993.6	239.4	511.1	316.9	194.23	2.632		
13,800.0	7,405.0	14,022.0	7,630.0	109.5	109.6	116.30	6,093.6	239.4	510.1	312.8	197.25	2.586		
13,900.0	7,405.0	14,122.0	7,630.0	111.2	111.3	116.36	6,193.6	239.4	509.0	308.7	200.28	2.541		
14,000.0	7,405.0	14,222.0	7,630.0	113.0	113.0	116.43	6,293.6	239.4	507.9	304.6	203.30	2.498		
14,100.0	7,405.0	14,322.0	7,630.0	114.7	114.8	116.49	6,393.6	239.4	506.8	300.5	206.31	2.456		
14,200.0	7,405.0	14,422.0	7,630.0	116.4	116.5	116.55	6,493.5	239.4	505.7	296.3	209.33	2.416		
14,300.0	7,405.0	14,522.0	7,630.0	118.2	118.3	116.61	6,593.5	239.4	504.6	292.2	212.34	2.376 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4L-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	90.65	-0.3	29.9	29.9					
100.0	100.0	99.0	99.0	0.1	0.1	90.65	-0.3	29.9	29.9	29.7	0.24	126.738		
200.0	200.0	199.0	199.0	0.3	0.3	90.65	-0.3	29.9	29.9	29.3	0.58	51.195		
300.0	300.0	299.0	299.0	0.5	0.5	90.65	-0.3	29.9	29.9	29.0	0.93	32.056		
400.0	400.0	399.0	399.0	0.6	0.6	90.65	-0.3	29.9	29.9	28.6	1.28	23.334		
500.0	500.0	499.0	499.0	0.8	0.8	90.65	-0.3	29.9	29.9	28.3	1.63	18.342		
600.0	600.0	599.0	599.0	1.0	1.0	90.65	-0.3	29.9	29.9	28.0	1.98	15.110		
700.0	700.0	699.0	699.0	1.2	1.2	90.65	-0.3	29.9	29.9	27.6	2.33	12.847		
800.0	800.0	799.0	799.0	1.3	1.3	90.65	-0.3	29.9	29.9	27.3	2.68	11.173		
900.0	900.0	899.0	899.0	1.5	1.5	90.65	-0.3	29.9	29.9	26.9	3.03	9.885		
1,000.0	1,000.0	999.0	999.0	1.7	1.7	90.65	-0.3	29.9	29.9	26.6	3.38	8.863	CC, ES	
1,100.0	1,100.0	1,098.2	1,098.2	1.9	1.9	-117.55	-1.6	31.1	31.9	28.2	3.73	8.563		
1,200.0	1,199.8	1,197.2	1,197.1	2.0	2.0	-118.80	-5.3	34.6	37.9	33.8	4.08	9.281		
1,300.0	1,299.5	1,295.8	1,295.2	2.2	2.2	-120.13	-11.4	40.4	47.9	43.4	4.45	10.746		
1,400.0	1,398.9	1,394.2	1,393.0	2.4	2.4	-120.03	-19.9	48.4	60.7	55.9	4.84	12.530		
1,500.0	1,498.4	1,493.3	1,491.3	2.7	2.7	-119.52	-28.9	56.9	74.0	68.8	5.25	14.101		
1,600.0	1,597.9	1,592.4	1,589.6	2.9	2.9	-119.17	-38.0	65.5	87.4	81.7	5.67	15.421		
1,700.0	1,697.3	1,691.5	1,687.9	3.1	3.1	-118.91	-47.0	74.0	100.7	94.6	6.09	16.540		
1,800.0	1,796.8	1,790.6	1,786.2	3.3	3.4	-118.71	-56.1	82.6	114.1	107.6	6.52	17.497		
1,900.0	1,896.3	1,889.7	1,884.6	3.6	3.6	-118.56	-65.1	91.1	127.4	120.5	6.95	18.322		
2,000.0	1,995.8	1,988.8	1,982.9	3.8	3.9	-118.43	-74.2	99.6	140.8	133.4	7.39	19.039		
2,100.0	2,095.2	2,087.9	2,081.2	4.0	4.2	-118.33	-83.2	108.2	154.1	146.3	7.84	19.668		
2,200.0	2,194.7	2,187.0	2,179.5	4.3	4.4	-118.24	-92.3	116.7	167.5	159.2	8.28	20.221		
2,300.0	2,294.2	2,286.1	2,277.8	4.5	4.7	-118.16	-101.3	125.3	180.8	172.1	8.73	20.713		
2,400.0	2,393.7	2,385.2	2,376.2	4.7	4.9	-118.10	-110.4	133.8	194.2	185.0	9.18	21.151		
2,500.0	2,493.1	2,484.3	2,474.5	5.0	5.2	-118.04	-119.4	142.4	207.5	197.9	9.63	21.545		
2,600.0	2,592.6	2,583.4	2,572.8	5.2	5.5	-117.99	-128.5	150.9	220.9	210.8	10.09	21.900		
2,700.0	2,692.1	2,682.5	2,671.1	5.5	5.7	-117.95	-137.5	159.5	234.2	223.7	10.54	22.221		
2,800.0	2,791.5	2,781.6	2,769.4	5.7	6.0	-117.91	-146.5	168.0	247.6	236.6	11.00	22.513		
2,900.0	2,891.0	2,880.7	2,867.8	6.0	6.3	-117.88	-155.6	176.5	260.9	249.5	11.45	22.780		
3,000.0	2,990.5	2,979.9	2,966.1	6.2	6.6	-117.84	-164.6	185.1	274.3	262.4	11.91	23.025		
3,100.0	3,090.0	3,079.0	3,064.4	6.4	6.8	-117.81	-173.7	193.6	287.6	275.2	12.37	23.250		
3,200.0	3,189.4	3,178.1	3,162.7	6.7	7.1	-117.79	-182.7	202.2	301.0	288.1	12.83	23.458		
3,300.0	3,288.9	3,277.2	3,261.0	6.9	7.4	-117.76	-191.8	210.7	314.3	301.0	13.29	23.650		
3,400.0	3,388.4	3,376.3	3,359.4	7.2	7.6	-117.74	-200.8	219.3	327.7	313.9	13.75	23.828		
3,500.0	3,487.9	3,475.4	3,457.7	7.4	7.9	-117.72	-209.9	227.8	341.0	326.8	14.21	23.993		
3,600.0	3,587.3	3,574.5	3,556.0	7.7	8.2	-117.70	-218.9	236.3	354.4	339.7	14.68	24.148		
3,700.0	3,686.8	3,673.6	3,654.3	7.9	8.5	-117.69	-228.0	244.9	367.7	352.6	15.14	24.292		
3,800.0	3,786.3	3,772.7	3,752.6	8.2	8.7	-117.67	-237.0	253.4	381.1	365.5	15.60	24.427		
3,900.0	3,885.7	3,871.8	3,851.0	8.4	9.0	-117.65	-246.1	262.0	394.4	378.4	16.06	24.554		
4,000.0	3,985.2	3,970.9	3,949.3	8.7	9.3	-117.64	-255.1	270.5	407.8	391.2	16.53	24.673		
4,100.0	4,084.7	4,070.0	4,047.6	8.9	9.6	-117.63	-264.2	279.1	421.1	404.1	16.99	24.785		
4,200.0	4,184.2	4,169.1	4,145.9	9.2	9.8	-117.61	-273.2	287.6	434.5	417.0	17.46	24.891		
4,300.0	4,283.6	4,268.2	4,244.3	9.4	10.1	-117.60	-282.3	296.1	447.8	429.9	17.92	24.991		
4,400.0	4,383.1	4,367.3	4,342.6	9.7	10.4	-117.59	-291.3	304.7	461.2	442.8	18.38	25.085		
4,500.0	4,482.6	4,466.4	4,440.9	9.9	10.7	-117.58	-300.4	313.2	474.5	455.7	18.85	25.175		
4,600.0	4,582.1	4,565.5	4,539.2	10.1	10.9	-117.57	-309.4	321.8	487.9	468.6	19.31	25.260		
4,700.0	4,681.5	4,664.6	4,637.5	10.4	11.2	-117.56	-318.5	330.3	501.2	481.4	19.78	25.341		
4,800.0	4,781.0	4,763.7	4,735.9	10.6	11.5	-117.55	-327.5	338.9	514.6	494.3	20.25	25.417		
4,900.0	4,880.5	4,862.8	4,834.2	10.9	11.8	-117.55	-336.5	347.4	527.9	507.2	20.71	25.491		
5,000.0	4,979.9	4,961.9	4,932.5	11.1	12.0	-117.54	-345.6	356.0	541.3	520.1	21.18	25.560		
5,100.0	5,079.4	5,061.1	5,030.8	11.4	12.3	-117.53	-354.6	364.5	554.6	533.0	21.64	25.627		

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 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4L-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			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	5,178.9	5,160.2	5,129.1	11.6	12.6	-117.52	-363.7	373.0	568.0	545.9	22.11	25.691		
5,300.0	5,278.4	5,259.3	5,227.5	11.9	12.9	-117.52	-372.7	381.6	581.3	558.8	22.57	25.751		
5,400.0	5,377.8	5,358.4	5,325.8	12.1	13.1	-117.51	-381.8	390.1	594.7	571.6	23.04	25.810		
5,500.0	5,477.3	5,457.5	5,424.1	12.4	13.4	-117.50	-390.8	398.7	608.0	584.5	23.51	25.865		
5,600.0	5,576.8	5,556.6	5,522.4	12.6	13.7	-117.50	-399.9	407.2	621.4	597.4	23.97	25.919		
5,700.0	5,676.3	5,655.7	5,620.7	12.9	14.0	-117.49	-408.9	415.8	634.7	610.3	24.44	25.970		
5,800.0	5,775.7	5,754.8	5,719.1	13.1	14.3	-117.49	-418.0	424.3	648.1	623.2	24.91	26.020		
5,900.0	5,875.2	5,853.9	5,817.4	13.4	14.5	-117.48	-427.0	432.8	661.4	636.1	25.37	26.067		
6,000.0	5,974.7	5,953.0	5,915.7	13.6	14.8	-117.48	-436.1	441.4	674.8	648.9	25.84	26.113		
6,100.0	6,074.1	6,052.1	6,014.0	13.9	15.1	-117.47	-445.1	449.9	688.1	661.8	26.31	26.157		
6,200.0	6,173.6	6,151.2	6,112.3	14.1	15.4	-117.47	-454.2	458.5	701.5	674.7	26.78	26.199		
6,300.0	6,273.1	6,250.3	6,210.7	14.4	15.6	-117.46	-463.2	467.0	714.8	687.6	27.24	26.240		
6,400.0	6,372.6	6,349.4	6,309.0	14.6	15.9	-117.46	-472.3	475.6	728.2	700.5	27.71	26.279		
6,500.0	6,472.0	6,448.5	6,407.3	14.9	16.2	-117.45	-481.3	484.1	741.5	713.4	28.18	26.317		
6,600.0	6,571.5	6,547.6	6,505.6	15.1	16.5	-117.45	-490.4	492.6	754.9	726.3	28.64	26.354		
6,700.0	6,671.0	6,646.7	6,603.9	15.4	16.7	-117.44	-499.4	501.2	768.2	739.1	29.11	26.389		
6,800.0	6,770.5	6,745.8	6,702.3	15.6	17.0	-117.44	-508.5	509.7	781.6	752.0	29.58	26.423		
6,900.0	6,870.2	6,845.0	6,800.7	15.8	17.3	124.37	-517.2	518.3	794.9	764.9	29.96	26.533		
7,000.0	6,968.8	6,946.8	6,901.9	15.7	17.4	99.62	-514.0	526.9	807.8	777.8	29.98	26.943		
7,100.0	7,063.3	7,051.1	7,003.4	15.5	17.4	94.77	-492.2	535.3	819.8	790.2	29.66	27.638		
7,200.0	7,150.7	7,157.9	7,101.5	15.3	17.2	92.66	-451.1	543.1	830.7	801.6	29.07	28.578		
7,300.0	7,228.5	7,267.2	7,192.3	14.9	16.9	91.49	-390.9	550.0	839.9	811.6	28.30	29.680		
7,400.0	7,294.3	7,378.7	7,271.5	14.6	16.6	90.78	-312.8	555.7	847.2	819.7	27.51	30.796		
7,500.0	7,346.0	7,492.1	7,335.1	14.3	16.4	90.34	-219.3	559.9	852.2	825.3	26.88	31.704		
7,600.0	7,382.2	7,606.7	7,379.5	14.2	16.3	90.10	-113.9	562.2	854.8	828.2	26.60	32.134		
7,700.0	7,401.6	7,721.7	7,402.2	14.3	16.4	90.03	-1.3	562.6	854.8	828.0	26.81	31.883		
7,800.0	7,405.0	7,829.1	7,405.0	14.6	16.6	90.07	105.9	561.3	852.6	825.1	27.52	30.979		
7,900.0	7,405.0	7,929.0	7,405.0	15.1	17.1	90.07	205.9	559.9	850.0	821.3	28.61	29.706		
8,000.0	7,405.0	8,029.0	7,405.0	15.8	17.7	90.07	305.8	558.5	847.3	817.3	30.08	28.174		
8,100.0	7,405.0	8,129.0	7,405.0	16.6	18.5	90.07	405.8	557.1	844.7	812.9	31.86	26.515		
8,200.0	7,405.0	8,228.9	7,405.0	17.6	19.4	90.07	505.8	555.7	842.1	808.2	33.91	24.832		
8,300.0	7,405.0	8,328.9	7,405.0	18.7	20.4	90.07	605.7	554.3	839.5	803.3	36.19	23.197		
8,400.0	7,405.0	8,428.9	7,405.0	19.9	21.5	90.07	705.7	552.9	836.9	798.2	38.65	21.652		
8,500.0	7,405.0	8,528.8	7,405.0	21.1	22.6	90.07	805.6	551.5	834.2	793.0	41.26	20.217		
8,600.0	7,405.0	8,628.8	7,405.0	22.4	23.9	90.07	905.6	550.1	831.6	787.6	44.00	18.899		
8,700.0	7,405.0	8,728.8	7,405.0	23.8	25.2	90.07	1,005.5	548.8	829.0	782.2	46.84	17.697		
8,800.0	7,405.0	8,828.7	7,405.0	25.2	26.6	90.07	1,105.5	547.4	826.4	776.6	49.77	16.604		
8,900.0	7,405.0	8,928.7	7,405.0	26.7	28.0	90.07	1,205.4	546.0	823.8	771.0	52.77	15.612		
9,000.0	7,405.0	9,028.7	7,405.0	28.2	29.4	90.07	1,305.4	544.6	821.2	765.3	55.82	14.710		
9,100.0	7,405.0	9,128.6	7,405.0	29.7	30.9	90.07	1,405.4	543.2	818.5	759.6	58.93	13.890		
9,200.0	7,405.0	9,228.6	7,405.0	31.3	32.4	90.07	1,505.3	541.8	815.9	753.8	62.08	13.143		
9,300.0	7,405.0	9,328.6	7,405.0	32.9	33.9	90.07	1,605.3	540.4	813.3	748.0	65.27	12.461		
9,400.0	7,405.0	9,428.5	7,405.0	34.5	35.5	90.07	1,705.2	539.0	810.7	742.2	68.48	11.838		
9,500.0	7,405.0	9,528.5	7,405.0	36.1	37.0	90.07	1,805.2	537.6	808.1	736.3	71.73	11.266		
9,600.0	7,405.0	9,628.5	7,405.0	37.7	38.6	90.07	1,905.1	536.2	805.5	730.5	75.00	10.740		
9,700.0	7,405.0	9,728.4	7,405.0	39.3	40.2	90.07	2,005.1	534.8	802.8	724.5	78.29	10.255		
9,800.0	7,405.0	9,828.4	7,405.0	40.9	41.8	90.07	2,105.0	533.4	800.2	718.6	81.59	9.807		
9,900.0	7,405.0	9,928.4	7,405.0	42.6	43.4	90.07	2,205.0	532.0	797.6	712.7	84.92	9.393		
10,000.0	7,405.0	10,028.3	7,405.0	44.3	45.1	90.07	2,305.0	530.6	795.0	706.7	88.25	9.008		
10,100.0	7,405.0	10,128.3	7,405.0	45.9	46.7	90.07	2,404.9	529.2	792.4	700.8	91.60	8.650		
10,200.0	7,405.0	10,228.2	7,405.0	47.6	48.4	90.07	2,504.9	527.8	789.7	694.8	94.97	8.316		
10,300.0	7,405.0	10,328.2	7,405.0	49.3	50.0	90.07	2,604.8	526.4	787.1	688.8	98.34	8.004		

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 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - Sullivan 4L-26H-P268 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)				Between Centres (ft)	Between Ellipses (ft)	
10,400.0	7,405.0	10,428.2	7,405.0	50.9	51.7	90.07	2,704.8	525.0	784.5	682.8	101.72	7.713		
10,500.0	7,405.0	10,528.1	7,405.0	52.6	53.3	90.07	2,804.7	523.6	781.9	676.8	105.11	7.439		
10,600.0	7,405.0	10,628.1	7,405.0	54.3	55.0	90.07	2,904.7	522.2	779.3	670.8	108.50	7.182		
10,700.0	7,405.0	10,728.1	7,405.0	56.0	56.7	90.07	3,004.7	520.8	776.7	664.7	111.91	6.940		
10,800.0	7,405.0	10,828.0	7,405.0	57.7	58.4	90.07	3,104.6	519.4	774.0	658.7	115.32	6.712		
10,900.0	7,405.0	10,928.0	7,405.0	59.4	60.1	90.07	3,204.6	518.0	771.4	652.7	118.73	6.497		
11,000.0	7,405.0	11,028.0	7,405.0	61.1	61.8	90.07	3,304.5	516.6	768.8	646.6	122.15	6.294		
11,100.0	7,405.0	11,127.9	7,405.0	62.8	63.4	90.07	3,404.5	515.3	766.2	640.6	125.58	6.101		
11,200.0	7,405.0	11,227.9	7,405.0	64.5	65.1	90.08	3,504.4	513.9	763.6	634.6	129.01	5.919		
11,300.0	7,405.0	11,327.9	7,405.0	66.2	66.8	90.08	3,604.4	512.5	760.9	628.5	132.44	5.746		
11,400.0	7,405.0	11,427.8	7,405.0	68.0	68.5	90.08	3,704.3	511.1	758.3	622.5	135.88	5.581		
11,500.0	7,405.0	11,527.8	7,405.0	69.7	70.2	90.08	3,804.3	509.7	755.7	616.4	139.32	5.424		
11,600.0	7,405.0	11,627.8	7,405.0	71.4	72.0	90.08	3,904.3	508.3	753.1	610.3	142.76	5.275		
11,700.0	7,405.0	11,727.7	7,405.0	73.1	73.7	90.08	4,004.2	506.9	750.5	604.3	146.21	5.133		
11,800.0	7,405.0	11,827.7	7,405.0	74.8	75.4	90.08	4,104.2	505.5	747.9	598.2	149.66	4.997		
11,900.0	7,405.0	11,927.7	7,405.0	76.6	77.1	90.08	4,204.1	504.1	745.2	592.1	153.11	4.867		
12,000.0	7,405.0	12,027.6	7,405.0	78.3	78.8	90.08	4,304.1	502.7	742.6	586.1	156.57	4.743		
12,100.0	7,405.0	12,127.6	7,405.0	80.0	80.5	90.08	4,404.0	501.3	740.0	580.0	160.03	4.624		
12,200.0	7,405.0	12,227.6	7,405.0	81.7	82.2	90.08	4,504.0	499.9	737.4	573.9	163.49	4.510		
12,300.0	7,405.0	12,327.5	7,405.0	83.5	84.0	90.08	4,603.9	498.5	734.8	567.8	166.95	4.401		
12,400.0	7,405.0	12,427.5	7,405.0	85.2	85.7	90.08	4,703.9	497.1	732.2	561.7	170.41	4.296		
12,500.0	7,405.0	12,527.5	7,405.0	86.9	87.4	90.08	4,803.9	495.7	729.5	555.7	173.88	4.196		
12,600.0	7,405.0	12,627.4	7,405.0	88.7	89.1	90.08	4,903.8	494.3	726.9	549.6	177.34	4.099		
12,700.0	7,405.0	12,727.4	7,405.0	90.4	90.8	90.08	5,003.8	492.9	724.3	543.5	180.81	4.006		
12,800.0	7,405.0	12,827.4	7,405.0	92.1	92.6	90.08	5,103.7	491.5	721.7	537.4	184.28	3.916		
12,900.0	7,405.0	12,927.3	7,405.0	93.9	94.3	90.08	5,203.7	490.1	719.1	531.3	187.75	3.830		
13,000.0	7,405.0	13,027.3	7,405.0	95.6	96.0	90.08	5,303.6	488.7	716.4	525.2	191.22	3.747		
13,100.0	7,405.0	13,127.3	7,405.0	97.3	97.8	90.08	5,403.6	487.3	713.8	519.1	194.70	3.666		
13,200.0	7,405.0	13,227.2	7,405.0	99.1	99.5	90.08	5,503.6	485.9	711.2	513.0	198.17	3.589		
13,300.0	7,405.0	13,327.2	7,405.0	100.8	101.2	90.08	5,603.5	484.5	708.6	506.9	201.65	3.514		
13,400.0	7,405.0	13,427.2	7,405.0	102.5	102.9	90.08	5,703.5	483.1	706.0	500.8	205.13	3.442		
13,500.0	7,405.0	13,527.1	7,405.0	104.3	104.7	90.08	5,803.4	481.8	703.4	494.8	208.60	3.372		
13,600.0	7,405.0	13,627.1	7,405.0	106.0	106.4	90.08	5,903.4	480.4	700.7	488.7	212.08	3.304		
13,700.0	7,405.0	13,727.0	7,405.0	107.7	108.1	90.08	6,003.3	479.0	698.1	482.6	215.56	3.239		
13,800.0	7,405.0	13,827.0	7,405.0	109.5	109.9	90.08	6,103.3	477.6	695.5	476.5	219.04	3.175		
13,900.0	7,405.0	13,927.0	7,405.0	111.2	111.6	90.08	6,203.2	476.2	692.9	470.4	222.52	3.114		
14,000.0	7,405.0	14,026.9	7,405.0	113.0	113.3	90.08	6,303.2	474.8	690.3	464.3	226.01	3.054		
14,100.0	7,405.0	14,126.9	7,405.0	114.7	115.1	90.08	6,403.2	473.4	687.7	458.2	229.49	2.996		
14,200.0	7,405.0	14,226.9	7,405.0	116.4	116.8	90.08	6,503.1	472.0	685.0	452.1	232.97	2.940		
14,300.0	7,405.0	14,326.8	7,405.0	118.2	118.6	90.08	6,603.1	470.6	682.4	446.0	236.46	2.886 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S26-T2N-R68W (Sullivan) - SULLIVAN 6-8-26 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 165-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				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)				
3,600.0	3,587.3	3,838.7	3,722.7	7.7	17.3	52.29	-407.0	-1,058.7	975.7	956.7	19.01	51.323		
3,700.0	3,686.8	3,916.9	3,798.6	7.9	17.7	51.85	-417.9	-1,043.3	952.5	932.9	19.56	48.705		
3,800.0	3,786.3	3,997.4	3,877.3	8.2	18.0	51.53	-426.9	-1,029.3	931.2	911.2	20.05	46.445		
3,900.0	3,885.7	4,080.8	3,959.5	8.4	18.3	51.35	-434.0	-1,016.7	911.6	891.1	20.50	44.461		
4,000.0	3,985.2	4,164.3	4,042.0	8.7	18.5	51.26	-440.0	-1,005.5	893.6	872.7	20.93	42.698		
4,100.0	4,084.7	4,246.8	4,123.8	8.9	18.7	51.24	-445.1	-996.2	877.3	856.0	21.32	41.141		
4,200.0	4,184.2	4,328.1	4,204.6	9.2	18.9	51.27	-449.7	-988.6	862.9	841.2	21.70	39.763		
4,300.0	4,283.6	4,412.7	4,288.9	9.4	19.1	51.36	-454.2	-982.6	850.5	828.5	22.06	38.548		
4,400.0	4,383.1	4,508.7	4,384.6	9.7	19.2	51.51	-458.6	-976.6	838.9	816.5	22.43	37.406		
4,500.0	4,482.6	4,598.5	4,474.2	9.9	19.4	51.75	-461.5	-972.1	828.2	805.4	22.74	36.417		
4,600.0	4,582.1	4,690.3	4,566.0	10.1	19.5	52.11	-463.2	-968.7	818.6	795.6	23.03	35.549		
4,700.0	4,681.5	4,786.1	4,661.8	10.4	19.6	52.54	-464.4	-966.0	809.7	786.4	23.30	34.748		
4,800.0	4,781.0	4,885.0	4,760.6	10.6	19.7	53.04	-465.0	-963.5	801.1	777.5	23.56	34.001		
4,900.0	4,880.5	4,988.1	4,863.6	10.9	19.8	53.64	-464.8	-960.8	792.3	768.5	23.80	33.292		
5,000.0	4,979.9	5,086.0	4,961.5	11.1	19.9	54.26	-464.1	-957.8	783.1	759.1	24.03	32.590		
5,100.0	5,079.4	5,175.4	5,050.9	11.4	20.0	54.84	-463.3	-955.7	774.8	750.5	24.27	31.928		
5,200.0	5,178.9	5,261.0	5,136.5	11.6	20.1	55.40	-463.0	-955.4	768.4	743.9	24.51	31.356		
5,300.0	5,278.4	5,360.3	5,235.8	11.9	20.1	56.06	-462.6	-955.8	763.0	738.3	24.74	30.843		
5,400.0	5,377.8	5,460.2	5,335.7	12.1	20.2	56.77	-461.8	-956.3	757.7	732.7	24.97	30.343		
5,500.0	5,477.3	5,559.3	5,434.7	12.4	20.3	57.50	-460.7	-956.7	752.5	727.3	25.20	29.859		
5,600.0	5,576.8	5,663.2	5,538.7	12.6	20.4	58.28	-459.6	-957.1	747.3	721.8	25.45	29.367		
5,700.0	5,676.3	5,772.3	5,647.8	12.9	20.5	59.03	-459.3	-956.2	741.1	715.3	25.72	28.813		
5,800.0	5,775.7	5,864.0	5,739.4	13.1	20.5	59.65	-459.4	-955.1	734.7	708.7	25.97	28.285		
5,900.0	5,875.2	5,959.0	5,834.4	13.4	20.6	60.38	-458.6	-955.5	729.8	703.6	26.22	27.834		
6,000.0	5,974.7	6,048.1	5,923.5	13.6	20.6	61.12	-457.2	-956.7	726.0	699.6	26.46	27.441		
6,100.0	6,074.1	6,143.5	6,018.9	13.9	20.7	61.94	-455.4	-958.5	723.0	696.3	26.70	27.083		
6,200.0	6,173.6	6,241.7	6,117.0	14.1	20.7	62.82	-453.2	-960.7	720.5	693.6	26.94	26.751		
6,300.0	6,273.1	6,339.7	6,215.0	14.4	20.8	63.74	-450.6	-963.1	718.4	691.2	27.18	26.433		
6,400.0	6,372.6	6,437.9	6,313.1	14.6	20.8	64.67	-447.9	-965.6	716.6	689.2	27.43	26.126		
6,500.0	6,472.0	6,537.7	6,412.8	14.9	20.9	65.62	-445.2	-968.3	715.1	687.4	27.69	25.828		
6,600.0	6,571.5	6,638.8	6,513.9	15.1	20.9	66.59	-442.4	-970.8	713.5	685.6	27.95	25.527		
6,700.0	6,671.0	6,740.4	6,615.4	15.4	21.0	67.58	-439.5	-973.0	711.9	683.7	28.23	25.221		
6,800.0	6,770.5	6,842.3	6,717.2	15.6	21.0	68.58	-436.6	-974.8	710.2	681.7	28.51	24.908		
6,900.0	6,870.2	6,946.1	6,821.0	15.8	21.1	69.58	-433.7	-976.2	707.4	678.7	28.74	24.617		
7,000.0	6,968.8	7,047.6	6,922.4	15.7	21.2	70.58	-431.1	-977.1	702.5	673.5	28.93	24.280		
7,100.0	7,063.3	7,143.2	7,018.0	15.5	21.2	71.58	-428.8	-977.7	696.8	667.7	29.12	23.928		
7,200.0	7,150.7	7,232.1	7,106.8	15.3	21.3	72.58	-426.7	-978.3	692.8	663.5	29.28	23.664		
7,238.6	7,182.0	7,263.9	7,138.7	15.1	21.3	73.58	-426.0	-978.5	692.4	663.1	29.31	23.626	CC, ES, SF	
7,300.0	7,228.5	7,311.3	7,186.1	14.9	21.4	74.58	-425.0	-978.8	693.7	664.4	29.30	23.672		
7,400.0	7,294.3	7,379.5	7,254.3	14.6	21.4	75.58	-423.7	-979.2	703.0	673.8	29.14	24.120		
7,500.0	7,346.0	7,434.6	7,309.4	14.3	21.5	76.58	-422.8	-979.3	723.5	694.7	28.85	25.079		
7,600.0	7,382.2	7,472.9	7,347.7	14.2	21.6	77.58	-422.4	-979.3	757.1	728.5	28.58	26.490		
7,700.0	7,401.6	7,493.7	7,368.4	14.3	21.6	78.58	-422.2	-979.2	803.3	774.8	28.51	28.174		
7,800.0	7,405.0	7,497.9	7,372.6	14.6	21.6	79.58	-422.1	-979.2	860.1	831.4	28.75	29.921		
7,900.0	7,405.0	7,498.6	7,373.4	15.1	21.6	80.58	-422.1	-979.2	924.5	895.3	29.27	31.582		
8,000.0	7,405.0	7,499.4	7,374.1	15.8	21.6	81.58	-422.1	-979.2	994.8	964.8	29.99	33.172		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Sullivan 4I-26H-P268
Project:	DJ Wattenberg	TVD Reference:	well @ 4997.0ft
Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

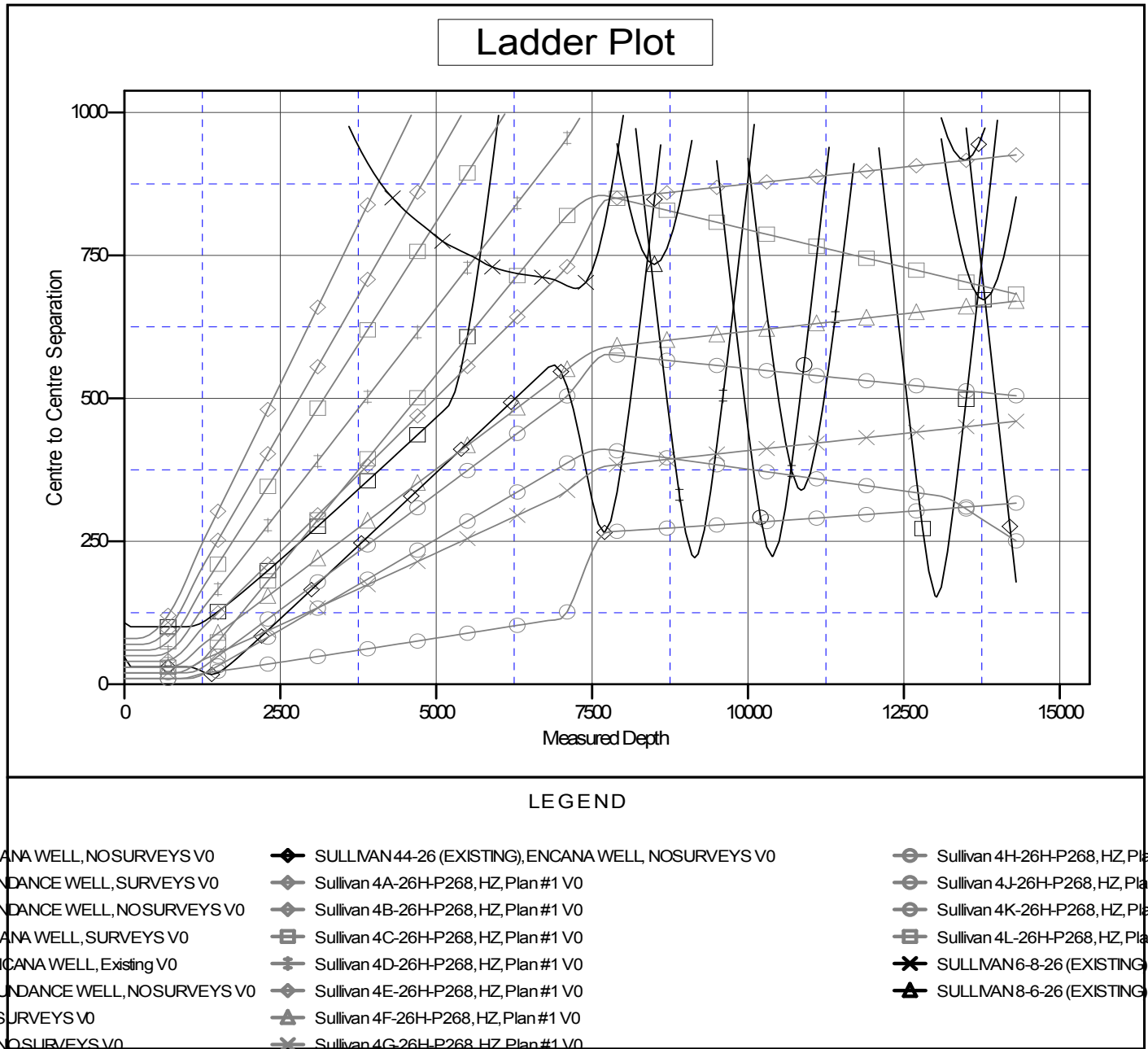
Offset Design S26-T2N-R68W (Sullivan) - SULLIVAN 8-6-26 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 966-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (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		
7,900.0	7,405.0	7,480.2	7,391.7	15.1	20.7	89.82	780.5	451.5	945.4	913.7	31.70	29.819		
8,000.0	7,405.0	7,479.5	7,391.0	15.8	20.7	89.77	780.5	451.5	885.8	853.4	32.42	27.325		
8,100.0	7,405.0	7,478.8	7,390.3	16.6	20.7	89.71	780.5	451.5	834.0	800.7	33.29	25.050		
8,200.0	7,405.0	7,478.2	7,389.6	17.6	20.7	89.66	780.5	451.5	791.5	757.2	34.31	23.071		
8,300.0	7,405.0	7,477.5	7,388.9	18.7	20.7	89.60	780.5	451.5	759.8	724.4	35.44	21.443		
8,400.0	7,405.0	7,476.8	7,388.2	19.9	20.7	89.55	780.5	451.5	740.5	703.8	36.66	20.199		
8,495.5	7,405.0	7,476.1	7,387.6	21.1	20.7	89.50	780.5	451.5	734.3	696.4	37.90	19.374 CC		
8,500.0	7,405.0	7,476.1	7,387.5	21.1	20.7	89.49	780.5	451.5	734.3	696.3	37.96	19.345 ES		
8,600.0	7,405.0	7,475.3	7,386.8	22.4	20.7	89.44	780.5	451.5	741.7	702.3	39.32	18.862		
8,700.0	7,405.0	7,474.6	7,386.1	23.8	20.7	89.38	780.5	451.5	762.2	721.5	40.74	18.710 SF		
8,800.0	7,405.0	7,473.9	7,385.4	25.2	20.7	89.32	780.5	451.5	794.9	752.7	42.20	18.838		
8,900.0	7,405.0	7,473.1	7,384.6	26.7	20.7	89.27	780.6	451.5	838.3	794.6	43.69	19.187		
9,000.0	7,405.0	7,472.4	7,383.9	28.2	20.7	89.21	780.6	451.5	890.9	845.6	45.21	19.703		
9,100.0	7,405.0	7,471.6	7,383.1	29.7	20.7	89.15	780.6	451.5	951.1	904.3	46.77	20.337		

Anticollision Report

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Reference Site:	S26-T2N-R68W (Sullivan)	MD Reference:	well @ 4997.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Sullivan 4I-26H-P268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to well @ 4997.0ft
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Sullivan 4I-26H-P268
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.35°



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