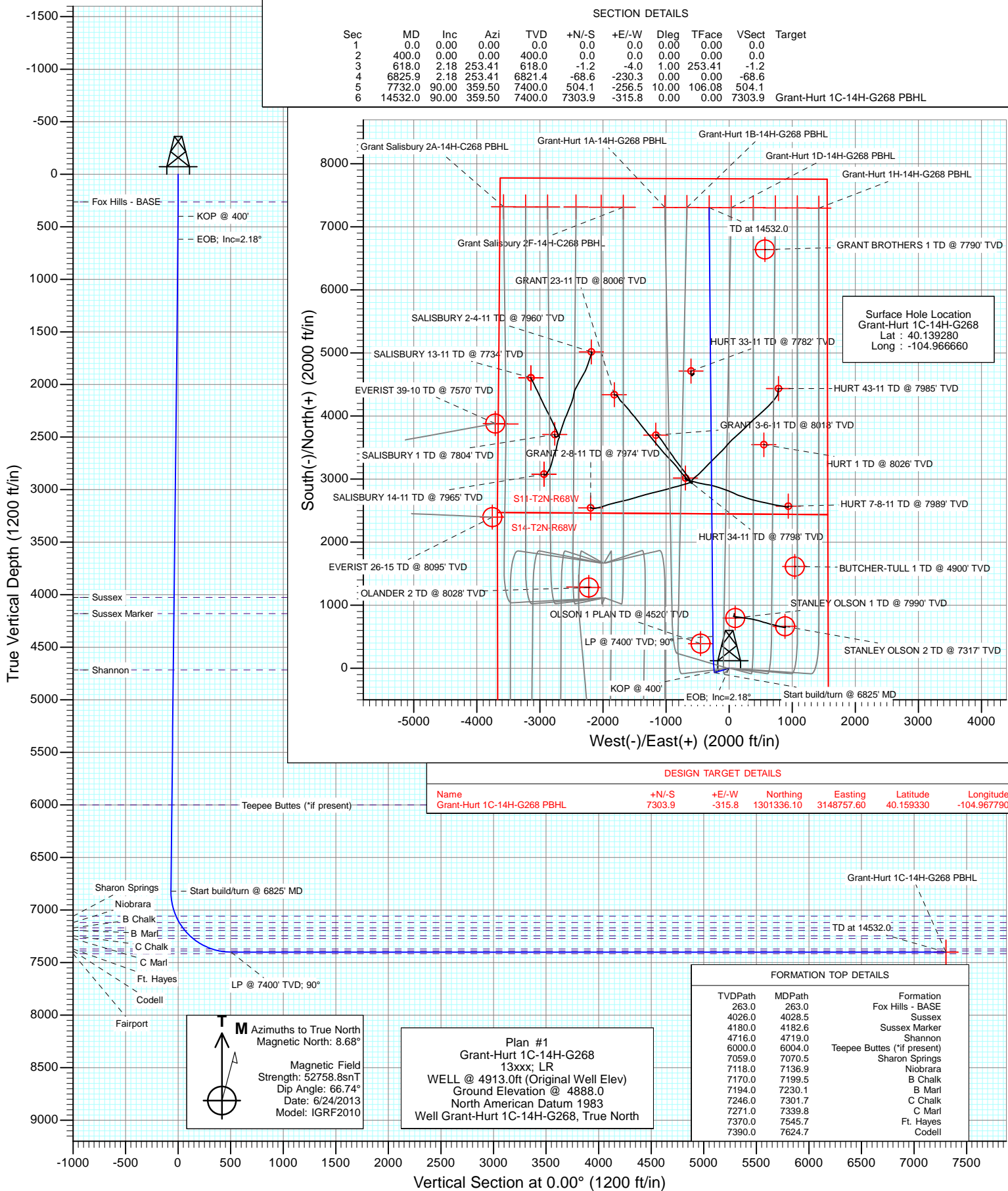




Project: DJ Wattenberg
Site: S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)
Well: Grant-Hurt 1C-14H-G268
Wellbore: Hz
Design: Plan #1



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Grant-Hurt 1C-14H-G268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	North Reference:	True
Well:	Grant-Hurt 1C-14H-G268	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	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)				
Site Position:		Northing:	1,295,686.81 ft	Latitude:	40.143850
From:	Lat/Long	Easting:	3,147,060.98 ft	Longitude:	-104.973980
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.34 °

Well	Grant-Hurt 1C-14H-G268					
Well Position	+N/-S	0.0 ft	Northing:	1,294,034.28 ft	Latitude:	40.139280
	+E/-W	0.0 ft	Easting:	3,149,117.36 ft	Longitude:	-104.966660
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,888.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/24/2013	8.68	66.74	52,759

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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
618.0	2.18	253.41	618.0	-1.2	-4.0	1.00	1.00	0.00	253.41	
6,825.9	2.18	253.41	6,821.4	-68.6	-230.3	0.00	0.00	0.00	0.00	
7,732.0	90.00	359.50	7,400.0	504.1	-256.5	10.00	9.69	11.71	106.08	
14,532.0	90.00	359.50	7,400.0	7,303.9	-315.8	0.00	0.00	0.00	0.00	Grant-Hurt 1C-14H-G

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Grant-Hurt 1C-14H-G268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	North Reference:	True
Well:	Grant-Hurt 1C-14H-G268	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	
263.0	0.00	0.00	263.0	0.0	0.0	0.0	0.00	0.00	Fox Hills - BASE
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	KOP @ 400'
500.0	1.00	253.41	500.0	-0.2	-0.8	-0.2	1.00	1.00	
600.0	2.00	253.41	600.0	-1.0	-3.3	-1.0	1.00	1.00	
618.0	2.18	253.41	618.0	-1.2	-4.0	-1.2	1.00	1.00	EOB; Inc=2.18°
700.0	2.18	253.41	699.9	-2.1	-7.0	-2.1	0.00	0.00	
800.0	2.18	253.41	799.8	-3.2	-10.6	-3.2	0.00	0.00	
900.0	2.18	253.41	899.7	-4.2	-14.3	-4.2	0.00	0.00	
1,000.0	2.18	253.41	999.7	-5.3	-17.9	-5.3	0.00	0.00	
1,100.0	2.18	253.41	1,099.6	-6.4	-21.5	-6.4	0.00	0.00	
1,200.0	2.18	253.41	1,199.5	-7.5	-25.2	-7.5	0.00	0.00	
1,300.0	2.18	253.41	1,299.5	-8.6	-28.8	-8.6	0.00	0.00	
1,400.0	2.18	253.41	1,399.4	-9.7	-32.5	-9.7	0.00	0.00	
1,500.0	2.18	253.41	1,499.3	-10.8	-36.1	-10.8	0.00	0.00	
1,600.0	2.18	253.41	1,599.2	-11.8	-39.8	-11.8	0.00	0.00	
1,700.0	2.18	253.41	1,699.2	-12.9	-43.4	-12.9	0.00	0.00	
1,800.0	2.18	253.41	1,799.1	-14.0	-47.1	-14.0	0.00	0.00	
1,900.0	2.18	253.41	1,899.0	-15.1	-50.7	-15.1	0.00	0.00	
2,000.0	2.18	253.41	1,998.9	-16.2	-54.4	-16.2	0.00	0.00	
2,100.0	2.18	253.41	2,098.9	-17.3	-58.0	-17.3	0.00	0.00	
2,200.0	2.18	253.41	2,198.8	-18.4	-61.7	-18.4	0.00	0.00	
2,300.0	2.18	253.41	2,298.7	-19.5	-65.3	-19.5	0.00	0.00	
2,400.0	2.18	253.41	2,398.7	-20.5	-68.9	-20.5	0.00	0.00	
2,500.0	2.18	253.41	2,498.6	-21.6	-72.6	-21.6	0.00	0.00	
2,600.0	2.18	253.41	2,598.5	-22.7	-76.2	-22.7	0.00	0.00	
2,700.0	2.18	253.41	2,698.4	-23.8	-79.9	-23.8	0.00	0.00	
2,800.0	2.18	253.41	2,798.4	-24.9	-83.5	-24.9	0.00	0.00	
2,900.0	2.18	253.41	2,898.3	-26.0	-87.2	-26.0	0.00	0.00	
3,000.0	2.18	253.41	2,998.2	-27.1	-90.8	-27.1	0.00	0.00	
3,100.0	2.18	253.41	3,098.2	-28.1	-94.5	-28.1	0.00	0.00	
3,200.0	2.18	253.41	3,198.1	-29.2	-98.1	-29.2	0.00	0.00	
3,300.0	2.18	253.41	3,298.0	-30.3	-101.8	-30.3	0.00	0.00	
3,400.0	2.18	253.41	3,397.9	-31.4	-105.4	-31.4	0.00	0.00	
3,500.0	2.18	253.41	3,497.9	-32.5	-109.1	-32.5	0.00	0.00	
3,600.0	2.18	253.41	3,597.8	-33.6	-112.7	-33.6	0.00	0.00	
3,700.0	2.18	253.41	3,697.7	-34.7	-116.4	-34.7	0.00	0.00	
3,800.0	2.18	253.41	3,797.6	-35.7	-120.0	-35.7	0.00	0.00	
3,900.0	2.18	253.41	3,897.6	-36.8	-123.6	-36.8	0.00	0.00	
4,000.0	2.18	253.41	3,997.5	-37.9	-127.3	-37.9	0.00	0.00	
4,028.5	2.18	253.41	4,026.0	-38.2	-128.3	-38.2	0.00	0.00	Sussex
4,100.0	2.18	253.41	4,097.4	-39.0	-130.9	-39.0	0.00	0.00	
4,182.6	2.18	253.41	4,180.0	-39.9	-133.9	-39.9	0.00	0.00	Sussex Marker
4,200.0	2.18	253.41	4,197.4	-40.1	-134.6	-40.1	0.00	0.00	
4,300.0	2.18	253.41	4,297.3	-41.2	-138.2	-41.2	0.00	0.00	
4,400.0	2.18	253.41	4,397.2	-42.3	-141.9	-42.3	0.00	0.00	
4,500.0	2.18	253.41	4,497.1	-43.3	-145.5	-43.3	0.00	0.00	
4,600.0	2.18	253.41	4,597.1	-44.4	-149.2	-44.4	0.00	0.00	
4,700.0	2.18	253.41	4,697.0	-45.5	-152.8	-45.5	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Grant-Hurt 1C-14H-G268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	North Reference:	True
Well:	Grant-Hurt 1C-14H-G268	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
4,719.0	2.18	253.41	4,716.0	-45.7	-153.5	-45.7	0.00	0.00	Shannon
4,800.0	2.18	253.41	4,796.9	-46.6	-156.5	-46.6	0.00	0.00	
4,900.0	2.18	253.41	4,896.8	-47.7	-160.1	-47.7	0.00	0.00	
5,000.0	2.18	253.41	4,996.8	-48.8	-163.8	-48.8	0.00	0.00	
5,100.0	2.18	253.41	5,096.7	-49.9	-167.4	-49.9	0.00	0.00	
5,200.0	2.18	253.41	5,196.6	-50.9	-171.0	-50.9	0.00	0.00	
5,300.0	2.18	253.41	5,296.6	-52.0	-174.7	-52.0	0.00	0.00	
5,400.0	2.18	253.41	5,396.5	-53.1	-178.3	-53.1	0.00	0.00	
5,500.0	2.18	253.41	5,496.4	-54.2	-182.0	-54.2	0.00	0.00	
5,600.0	2.18	253.41	5,596.3	-55.3	-185.6	-55.3	0.00	0.00	
5,700.0	2.18	253.41	5,696.3	-56.4	-189.3	-56.4	0.00	0.00	
5,800.0	2.18	253.41	5,796.2	-57.5	-192.9	-57.5	0.00	0.00	
5,900.0	2.18	253.41	5,896.1	-58.6	-196.6	-58.6	0.00	0.00	
6,000.0	2.18	253.41	5,996.1	-59.6	-200.2	-59.6	0.00	0.00	
6,004.0	2.18	253.41	6,000.0	-59.7	-200.4	-59.7	0.00	0.00	Teepee Buttes (*if present)
6,100.0	2.18	253.41	6,096.0	-60.7	-203.9	-60.7	0.00	0.00	
6,200.0	2.18	253.41	6,195.9	-61.8	-207.5	-61.8	0.00	0.00	
6,300.0	2.18	253.41	6,295.8	-62.9	-211.2	-62.9	0.00	0.00	
6,400.0	2.18	253.41	6,395.8	-64.0	-214.8	-64.0	0.00	0.00	
6,500.0	2.18	253.41	6,495.7	-65.1	-218.4	-65.1	0.00	0.00	
6,600.0	2.18	253.41	6,595.6	-66.2	-222.1	-66.2	0.00	0.00	
6,700.0	2.18	253.41	6,695.5	-67.2	-225.7	-67.2	0.00	0.00	
6,800.0	2.18	253.41	6,795.5	-68.3	-229.4	-68.3	0.00	0.00	
6,825.9	2.18	253.41	6,821.4	-68.6	-230.3	-68.6	0.00	0.00	Start build/turn @ 6825' MD
6,900.0	7.12	342.46	6,895.2	-64.6	-233.1	-64.6	10.00	6.66	
7,000.0	16.93	352.60	6,992.9	-44.2	-236.8	-44.2	10.00	9.81	
7,070.5	23.94	354.77	7,059.0	-19.8	-239.4	-19.8	10.00	9.94	Sharon Springs
7,100.0	26.88	355.36	7,085.6	-7.2	-240.5	-7.2	10.00	9.96	
7,136.9	30.56	355.95	7,118.0	10.5	-241.9	10.5	10.00	9.97	Niobrara
7,199.5	36.80	356.70	7,170.0	45.1	-244.1	45.1	10.00	9.98	B Chalk
7,200.0	36.85	356.70	7,170.4	45.4	-244.1	45.4	10.00	9.98	
7,230.1	39.85	356.99	7,194.0	64.1	-245.1	64.1	10.00	9.98	B Marl
7,300.0	46.84	357.53	7,244.8	112.0	-247.4	112.0	10.00	9.99	
7,301.7	47.01	357.55	7,246.0	113.2	-247.4	113.2	10.00	9.99	C Chalk
7,339.8	50.81	357.79	7,271.0	141.9	-248.6	141.9	10.00	9.99	C Marl
7,400.0	56.83	358.13	7,306.5	190.4	-250.3	190.4	10.00	9.99	
7,500.0	66.82	358.60	7,353.7	278.4	-252.8	278.4	10.00	9.99	
7,545.7	71.38	358.79	7,370.0	321.1	-253.8	321.1	10.00	9.99	Ft. Hayes
7,600.0	76.81	359.01	7,384.9	373.3	-254.8	373.3	10.00	9.99	
7,624.7	79.28	359.10	7,390.0	397.5	-255.2	397.5	10.00	9.99	Codell
7,700.0	86.80	359.38	7,399.1	472.2	-256.2	472.2	10.00	9.99	
7,732.0	90.00	359.50	7,400.0	504.1	-256.5	504.1	10.00	9.99	LP @ 7400' TVD; 90°
7,800.0	90.00	359.50	7,400.0	572.1	-257.1	572.1	0.00	0.00	
7,900.0	90.00	359.50	7,400.0	672.1	-258.0	672.1	0.00	0.00	
8,000.0	90.00	359.50	7,400.0	772.1	-258.8	772.1	0.00	0.00	
8,100.0	90.00	359.50	7,400.0	872.1	-259.7	872.1	0.00	0.00	
8,200.0	90.00	359.50	7,400.0	972.1	-260.6	972.1	0.00	0.00	
8,300.0	90.00	359.50	7,400.0	1,072.1	-261.5	1,072.1	0.00	0.00	
8,400.0	90.00	359.50	7,400.0	1,172.1	-262.3	1,172.1	0.00	0.00	
8,500.0	90.00	359.50	7,400.0	1,272.1	-263.2	1,272.1	0.00	0.00	
8,600.0	90.00	359.50	7,400.0	1,372.1	-264.1	1,372.1	0.00	0.00	
8,700.0	90.00	359.50	7,400.0	1,472.1	-264.9	1,472.1	0.00	0.00	

Planning Report

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Project:	DJ Wattenberg	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	North Reference:	True
Well:	Grant-Hurt 1C-14H-G268	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
8,800.0	90.00	359.50	7,400.0	1,572.1	-265.8	1,572.1	0.00	0.00	
8,900.0	90.00	359.50	7,400.0	1,672.1	-266.7	1,672.1	0.00	0.00	
9,000.0	90.00	359.50	7,400.0	1,772.1	-267.6	1,772.1	0.00	0.00	
9,100.0	90.00	359.50	7,400.0	1,872.1	-268.4	1,872.1	0.00	0.00	
9,200.0	90.00	359.50	7,400.0	1,972.1	-269.3	1,972.1	0.00	0.00	
9,300.0	90.00	359.50	7,400.0	2,072.1	-270.2	2,072.1	0.00	0.00	
9,400.0	90.00	359.50	7,400.0	2,172.1	-271.1	2,172.1	0.00	0.00	
9,500.0	90.00	359.50	7,400.0	2,272.1	-271.9	2,272.1	0.00	0.00	
9,600.0	90.00	359.50	7,400.0	2,372.1	-272.8	2,372.1	0.00	0.00	
9,700.0	90.00	359.50	7,400.0	2,472.1	-273.7	2,472.1	0.00	0.00	
9,800.0	90.00	359.50	7,400.0	2,572.1	-274.5	2,572.1	0.00	0.00	
9,900.0	90.00	359.50	7,400.0	2,672.1	-275.4	2,672.1	0.00	0.00	
10,000.0	90.00	359.50	7,400.0	2,772.0	-276.3	2,772.0	0.00	0.00	
10,100.0	90.00	359.50	7,400.0	2,872.0	-277.2	2,872.0	0.00	0.00	
10,200.0	90.00	359.50	7,400.0	2,972.0	-278.0	2,972.0	0.00	0.00	
10,300.0	90.00	359.50	7,400.0	3,072.0	-278.9	3,072.0	0.00	0.00	
10,400.0	90.00	359.50	7,400.0	3,172.0	-279.8	3,172.0	0.00	0.00	
10,500.0	90.00	359.50	7,400.0	3,272.0	-280.6	3,272.0	0.00	0.00	
10,600.0	90.00	359.50	7,400.0	3,372.0	-281.5	3,372.0	0.00	0.00	
10,700.0	90.00	359.50	7,400.0	3,472.0	-282.4	3,472.0	0.00	0.00	
10,800.0	90.00	359.50	7,400.0	3,572.0	-283.3	3,572.0	0.00	0.00	
10,900.0	90.00	359.50	7,400.0	3,672.0	-284.1	3,672.0	0.00	0.00	
11,000.0	90.00	359.50	7,400.0	3,772.0	-285.0	3,772.0	0.00	0.00	
11,100.0	90.00	359.50	7,400.0	3,872.0	-285.9	3,872.0	0.00	0.00	
11,200.0	90.00	359.50	7,400.0	3,972.0	-286.8	3,972.0	0.00	0.00	
11,300.0	90.00	359.50	7,400.0	4,072.0	-287.6	4,072.0	0.00	0.00	
11,400.0	90.00	359.50	7,400.0	4,172.0	-288.5	4,172.0	0.00	0.00	
11,500.0	90.00	359.50	7,400.0	4,272.0	-289.4	4,272.0	0.00	0.00	
11,600.0	90.00	359.50	7,400.0	4,372.0	-290.2	4,372.0	0.00	0.00	
11,700.0	90.00	359.50	7,400.0	4,472.0	-291.1	4,472.0	0.00	0.00	
11,800.0	90.00	359.50	7,400.0	4,572.0	-292.0	4,572.0	0.00	0.00	
11,900.0	90.00	359.50	7,400.0	4,672.0	-292.9	4,672.0	0.00	0.00	
12,000.0	90.00	359.50	7,400.0	4,772.0	-293.7	4,772.0	0.00	0.00	
12,100.0	90.00	359.50	7,400.0	4,872.0	-294.6	4,872.0	0.00	0.00	
12,200.0	90.00	359.50	7,400.0	4,972.0	-295.5	4,972.0	0.00	0.00	
12,300.0	90.00	359.50	7,400.0	5,072.0	-296.4	5,072.0	0.00	0.00	
12,400.0	90.00	359.50	7,400.0	5,172.0	-297.2	5,172.0	0.00	0.00	
12,500.0	90.00	359.50	7,400.0	5,272.0	-298.1	5,272.0	0.00	0.00	
12,600.0	90.00	359.50	7,400.0	5,371.9	-299.0	5,371.9	0.00	0.00	
12,700.0	90.00	359.50	7,400.0	5,471.9	-299.8	5,471.9	0.00	0.00	
12,800.0	90.00	359.50	7,400.0	5,571.9	-300.7	5,571.9	0.00	0.00	
12,900.0	90.00	359.50	7,400.0	5,671.9	-301.6	5,671.9	0.00	0.00	
13,000.0	90.00	359.50	7,400.0	5,771.9	-302.5	5,771.9	0.00	0.00	
13,100.0	90.00	359.50	7,400.0	5,871.9	-303.3	5,871.9	0.00	0.00	
13,200.0	90.00	359.50	7,400.0	5,971.9	-304.2	5,971.9	0.00	0.00	
13,300.0	90.00	359.50	7,400.0	6,071.9	-305.1	6,071.9	0.00	0.00	
13,400.0	90.00	359.50	7,400.0	6,171.9	-306.0	6,171.9	0.00	0.00	
13,500.0	90.00	359.50	7,400.0	6,271.9	-306.8	6,271.9	0.00	0.00	
13,600.0	90.00	359.50	7,400.0	6,371.9	-307.7	6,371.9	0.00	0.00	
13,700.0	90.00	359.50	7,400.0	6,471.9	-308.6	6,471.9	0.00	0.00	
13,800.0	90.00	359.50	7,400.0	6,571.9	-309.4	6,571.9	0.00	0.00	
13,900.0	90.00	359.50	7,400.0	6,671.9	-310.3	6,671.9	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Grant-Hurt 1C-14H-G268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	North Reference:	True
Well:	Grant-Hurt 1C-14H-G268	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
14,000.0	90.00	359.50	7,400.0	6,771.9	-311.2	6,771.9	0.00	0.00	
14,100.0	90.00	359.50	7,400.0	6,871.9	-312.1	6,871.9	0.00	0.00	
14,200.0	90.00	359.50	7,400.0	6,971.9	-312.9	6,971.9	0.00	0.00	
14,300.0	90.00	359.50	7,400.0	7,071.9	-313.8	7,071.9	0.00	0.00	
14,400.0	90.00	359.50	7,400.0	7,171.9	-314.7	7,171.9	0.00	0.00	
14,500.0	90.00	359.50	7,400.0	7,271.9	-315.6	7,271.9	0.00	0.00	
14,532.0	90.00	359.50	7,400.0	7,303.9	-315.8	7,303.9	0.00	0.00	TD at 14532.0 - Grant-Hurt 1C-14H-G268 PBHI

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Grant-Hurt 1C-14H-G268 - plan hits target center - Point	0.00	0.00	7,400.0	7,303.9	-315.8	1,301,336.10	3,148,757.60	40.159330	-104.967790

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
263.0	263.0	Fox Hills - BASE			
4,028.5	4,026.0	Sussex			
4,182.6	4,180.0	Sussex Marker			
4,719.0	4,716.0	Shannon			
6,004.0	6,000.0	Teepee Buttes (*if present)			
7,070.5	7,059.0	Sharon Springs			
7,136.9	7,118.0	Niobrara			
7,199.5	7,170.0	B Chalk			
7,230.1	7,194.0	B Marl			
7,301.7	7,246.0	C Chalk			
7,339.8	7,271.0	C Marl			
7,545.7	7,370.0	Ft. Hayes			
7,624.7	7,390.0	Codell			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
400.0	400.0	0.0	0.0	KOP @ 400'
618.0	618.0	-1.2	-4.0	EOB; Inc=2.18°
6,825.9	6,821.4	-68.6	-230.3	Start build/turn @ 6825' MD
7,732.0	7,400.0	504.1	-256.5	LP @ 7400' TVD; 90°
14,532.0	7,400.0	7,303.9	-315.8	TD at 14532.0

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)

Grant-Hurt 1C-14H-G268

Hz

Plan #1

Anticollision Report

09 July, 2013

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1C-14H-G268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Grant-Hurt 1C-14H-G268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

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

Survey Tool Program		Date	7/9/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	14,532.0	Plan #1 (Hz)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1C-14H-G268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Grant-Hurt 1C-14H-G268	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						
S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)						
BERGER 32-23 (EXISTING) - EXISTING - NO SURVEY						Out of range
BUTCHER-TULL 1 (EXISTING) - VESSELS WELL - NO						Out of range
DEL CAMINO 11-14 (EXISTING) - EXISTING - NO SURV						Out of range
ELMQUIST 0-0-23 (EXISTING) - EXISTING - SURVEYS						Out of range
ELMQUIST 1 (EXISTING) - EXISTING - GYRO						Out of range
ELMQUIST 11-23 (EXISTING) - EXISTING - GYRO						Out of range
ELMQUIST 12-23 (EXISTING) - EXISTING - NO SURVE						Out of range
ELMQUIST 21-23 (EXISTING) - EXISTING - SURVEYS						Out of range
ELMQUIST 2-4-23 (EXISTING) - EXISTING - SURVEYS						Out of range
ELMQUIST 4-2-23 (EXISTING) - EXISTING - SURVEYS						Out of range
ELMQUIST 4-4-23 (EXISTING) - EXISTING - SURVEYS						Out of range
EVERIST 26-15 (EXISTING) - KMG WELL - PLAN ONLY						Out of range
EVERIST 39-10 (EXISTING) - EXISTING - NO SURVEY						Out of range
GRANT 23-11 (EXISTING) - EXISTING - SURVEYS						Out of range
GRANT 2-8-11 (EXISTING) - EXISTING - SURVEYS						Out of range
GRANT 3-6-11 (EXISTING) - EXISTING - SURVEYS						Out of range
GRANT BROTHERS 1 (EXISTING) - PDC WELL - NO S						Out of range
Grant Elmquist 2A-14H-C268 - Hz - Plan #2						Out of range
Grant Elmquist 2B-14H-C268 - Hz - Plan #2						Out of range
Grant Elmquist 2C-14H-C268 - Hz - Plan #2						Out of range
Grant Elmquist 2D-14H-C268 - Hz - Plan #2						Out of range
Grant Elmquist 2E-14H-C268 - Hz - Plan #2						Out of range
Grant Elmquist 2F-14H-C268 - Hz - Plan #2						Out of range
Grant Elmquist 2G-14H-C268 - Hz - Plan #2						Out of range
Grant Salisbury 2A-14H-C268 - Hz - Plan #2						Out of range
Grant Salisbury 2B-14H-C268 - Hz - Plan #1						Out of range
Grant Salisbury 2C-14H-C268 - Hz - Plan #1						Out of range
Grant Salisbury 2D-14H-C268 - Hz - Plan #1						Out of range
Grant Salisbury 2E-14H-C268 - Hz - Plan #1						Out of range
Grant Salisbury 2F-14H-C268 - Hz - Plan #1						Out of range
Grant-Hurt 1A-14H-G268 - Hz - Plan #1	200.0	200.0	19.6	19.0	32.038	CC, ES
Grant-Hurt 1A-14H-G268 - Hz - Plan #1	700.0	697.5	34.4	32.1	14.622	SF
Grant-Hurt 1B-14H-G268 - Hz - Plan #1	300.0	300.0	11.2	10.2	11.650	CC, ES
Grant-Hurt 1B-14H-G268 - Hz - Plan #1	14,532.0	14,379.1	415.3	192.5	1.864	SF
Grant-Hurt 1D-14H-G268 - Hz - Plan #1	400.0	400.0	8.4	7.1	6.408	CC, ES
Grant-Hurt 1D-14H-G268 - Hz - Plan #1	14,532.0	14,326.2	412.9	190.8	1.859	SF
Grant-Hurt 1E-14H-G268 - Hz - Plan #1	400.0	400.0	19.6	18.3	14.951	CC, ES
Grant-Hurt 1E-14H-G268 - Hz - Plan #1	600.0	599.6	23.8	21.8	11.849	SF
Grant-Hurt 1F-14H-G268 - Hz - Plan #1	400.0	400.0	28.0	26.6	21.358	CC, ES
Grant-Hurt 1F-14H-G268 - Hz - Plan #1	600.0	598.8	34.7	32.7	17.329	SF
Grant-Hurt 1G-14H-G268 - Hz - Plan #1	300.0	300.0	39.1	38.2	40.775	CC, ES
Grant-Hurt 1G-14H-G268 - Hz - Plan #1	600.0	597.5	50.2	48.2	25.093	SF
Grant-Hurt 1H-14H-G268 - Hz - Plan #1	200.0	200.0	50.3	49.7	82.383	CC, ES
Grant-Hurt 1H-14H-G268 - Hz - Plan #1	700.0	693.7	78.8	76.4	33.601	SF
HSR-BEAR 13-14A (EXISTING) - EXISTING - SURVEYS						Out of range
HURT 1 (EXISTING) - ENCANA WELL - NO SURVEYS						Out of range
HURT 33-11 (EXISTING) - EXISTING - SURVEYS	11,920.7	7,350.0	312.4	214.6	3.194	CC, ES, SF
HURT 34-11 (EXISTING) - EXISTING - SURVEYS	10,243.5	7,358.3	415.8	346.9	6.032	CC, ES
HURT 34-11 (EXISTING) - EXISTING - SURVEYS	10,300.0	7,359.0	419.6	349.7	6.004	SF
HURT 43-11 (EXISTING) - EXISTING - SURVEYS						Out of range
HURT 7-8-11 (EXISTING) - EXISTING - SURVEYS						Out of range
MDM 33-14 (EXISTING) - EXISTING - NO SURVEYS						Out of range
MDM 34-14 (EXISTING) - EXISTING - NO SURVEYS						Out of range

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1C-14H-G268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Grant-Hurt 1C-14H-G268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)		Separation Factor	Warning
Offset Well - Wellbore - Design						
S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)						
NELSON 1 (EXISTING) - EXISTING - NO SURVEYS						Out of range
NELSON 23-23C (EXISTING) - EXISTING - NO SURVEY						Out of range
OLANDER 1 (EXISTING) - EXISTING - NO SURVEYS						Out of range
OLANDER 2 (EXISTING) - EXISTING - NO SURVEYS						Out of range
OLANDER U 14-11 (EXISTING) - EXISTING - NO SURV						Out of range
OLANDER U 14-14 (EXISTING) - EXISTING - NO SURV						Out of range
OLSON 1 (EXISTING) - PLAN ONLY - PLAN #1						Out of range
SALISBURY 1 (EXISTING) - EXISTING - GYRO						Out of range
SALISBURY 13-11 (EXISTING) - EXISTING - SURVEYS						Out of range
SALISBURY 14-11 (EXISTING) - EXISTING - SURVEYS						Out of range
SALISBURY 2-4-11 (EXISTING) - EXISTING - SURVEYS						Out of range
STANLEY OLSON 1 (EXISTING) - WHITEWING WELL	8,022.5	7,366.0	356.9	324.0	10.861	CC, ES
STANLEY OLSON 1 (EXISTING) - WHITEWING WELL	8,100.0	7,366.0	365.2	331.3	10.761	SF
STANLEY OLSON 2 (EXISTING) - WHITEWING WELL						Out of range

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1C-14H-G268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Grant-Hurt 1C-14H-G268	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 S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - Grant-Hurt 1A-14H-G268 - 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	-90.00	0.0	-19.6	19.6					
100.0	100.0	100.0	100.0	0.1	0.1	-90.00	0.0	-19.6	19.6	19.3	0.26	74.755		
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-19.6	19.6	19.0	0.61	32.038 CC, ES		
300.0	300.0	299.7	299.7	0.5	0.5	-89.31	0.2	-20.4	20.4	19.4	0.96	21.250		
400.0	400.0	399.3	399.2	0.7	0.7	-87.55	1.0	-22.9	22.9	21.6	1.31	17.449		
500.0	500.0	498.8	498.6	0.8	0.8	21.92	2.2	-27.0	26.4	24.7	1.66	15.907		
600.0	600.0	598.2	597.9	1.0	1.0	25.99	3.9	-32.8	30.0	28.0	2.01	14.945		
700.0	699.9	697.5	696.9	1.2	1.3	30.31	6.1	-40.3	34.4	32.1	2.35	14.622 SF		
800.0	799.8	796.7	795.6	1.4	1.5	33.61	8.8	-49.3	40.8	38.0	2.71	15.063		
900.0	899.7	895.5	893.8	1.6	1.7	35.92	11.9	-60.0	48.9	45.8	3.06	15.993		
1,000.0	999.7	994.4	991.9	1.7	2.0	37.44	15.5	-72.2	58.7	55.3	3.41	17.216		
1,100.0	1,099.6	1,093.9	1,090.5	1.9	2.3	38.50	19.3	-84.9	68.9	65.2	3.76	18.310		
1,200.0	1,199.5	1,193.4	1,189.1	2.1	2.6	39.28	23.0	-97.5	79.2	75.1	4.12	19.216		
1,300.0	1,299.5	1,292.8	1,287.7	2.3	2.8	39.89	26.7	-110.2	89.4	85.0	4.48	19.977		
1,400.0	1,399.4	1,392.3	1,386.3	2.5	3.1	40.37	30.4	-122.8	99.7	94.9	4.83	20.626		
1,500.0	1,499.3	1,491.8	1,484.9	2.7	3.4	40.76	34.2	-135.5	110.0	104.8	5.19	21.185		
1,600.0	1,599.2	1,591.3	1,583.5	2.9	3.7	41.09	37.9	-148.1	120.3	114.7	5.55	21.671		
1,700.0	1,699.2	1,690.7	1,682.0	3.0	4.0	41.36	41.6	-160.8	130.5	124.6	5.91	22.098		
1,800.0	1,799.1	1,790.2	1,780.6	3.2	4.3	41.59	45.4	-173.4	140.8	134.6	6.27	22.476		
1,900.0	1,899.0	1,889.7	1,879.2	3.4	4.5	41.79	49.1	-186.1	151.1	144.5	6.62	22.812		
2,000.0	1,998.9	1,989.1	1,977.8	3.6	4.8	41.97	52.8	-198.7	161.4	154.4	6.98	23.114		
2,100.0	2,098.9	2,088.6	2,076.4	3.8	5.1	42.13	56.6	-211.4	171.7	164.3	7.34	23.386		
2,200.0	2,198.8	2,188.1	2,175.0	4.0	5.4	42.26	60.3	-224.0	182.0	174.3	7.70	23.632		
2,300.0	2,298.7	2,287.5	2,273.6	4.2	5.7	42.39	64.0	-236.7	192.2	184.2	8.06	23.856		
2,400.0	2,398.7	2,387.0	2,372.2	4.3	6.0	42.50	67.7	-249.3	202.5	194.1	8.42	24.061		
2,500.0	2,498.6	2,486.5	2,470.8	4.5	6.3	42.59	71.5	-262.0	212.8	204.1	8.78	24.249		
2,600.0	2,598.5	2,585.9	2,569.4	4.7	6.5	42.69	75.2	-274.6	223.1	214.0	9.14	24.422		
2,700.0	2,698.4	2,685.4	2,668.0	4.9	6.8	42.77	78.9	-287.2	233.4	223.9	9.50	24.581		
2,800.0	2,798.4	2,784.9	2,766.5	5.1	7.1	42.84	82.7	-299.9	243.7	233.8	9.85	24.729		
2,900.0	2,898.3	2,884.3	2,865.1	5.3	7.4	42.91	86.4	-312.5	254.0	243.8	10.21	24.867		
3,000.0	2,998.2	2,983.8	2,963.7	5.5	7.7	42.98	90.1	-325.2	264.3	253.7	10.57	24.995		
3,100.0	3,098.2	3,083.3	3,062.3	5.6	8.0	43.04	93.9	-337.8	274.6	263.6	10.93	25.115		
3,200.0	3,198.1	3,182.7	3,160.9	5.8	8.3	43.09	97.6	-350.5	284.9	273.6	11.29	25.226		
3,300.0	3,298.0	3,282.2	3,259.5	6.0	8.6	43.14	101.3	-363.1	295.2	283.5	11.65	25.331		
3,400.0	3,397.9	3,381.7	3,358.1	6.2	8.9	43.19	105.0	-375.8	305.5	293.4	12.01	25.430		
3,500.0	3,497.9	3,481.2	3,456.7	6.4	9.1	43.23	108.8	-388.4	315.8	303.4	12.37	25.523		
3,600.0	3,597.8	3,580.6	3,555.3	6.6	9.4	43.27	112.5	-401.1	326.0	313.3	12.73	25.610		
3,700.0	3,697.7	3,680.1	3,653.9	6.8	9.7	43.31	116.2	-413.7	336.3	323.3	13.09	25.693		
3,800.0	3,797.6	3,779.6	3,752.4	7.0	10.0	43.35	120.0	-426.4	346.6	333.2	13.45	25.771		
3,900.0	3,897.6	3,879.0	3,851.0	7.1	10.3	43.39	123.7	-439.0	356.9	343.1	13.81	25.845		
4,000.0	3,997.5	3,978.5	3,949.6	7.3	10.6	43.42	127.4	-451.7	367.2	353.1	14.17	25.916		
4,100.0	4,097.4	4,078.0	4,048.2	7.5	10.9	43.45	131.1	-464.3	377.5	363.0	14.53	25.982		
4,200.0	4,197.4	4,177.4	4,146.8	7.7	11.2	43.48	134.9	-477.0	387.8	372.9	14.89	26.046		
4,300.0	4,297.3	4,276.9	4,245.4	7.9	11.5	43.51	138.6	-489.6	398.1	382.9	15.25	26.106		
4,400.0	4,397.2	4,376.4	4,344.0	8.1	11.7	43.53	142.3	-502.3	408.4	392.8	15.61	26.164		
4,500.0	4,497.1	4,475.8	4,442.6	8.3	12.0	43.56	146.1	-514.9	418.7	402.7	15.97	26.219		
4,600.0	4,597.1	4,575.3	4,541.2	8.4	12.3	43.58	149.8	-527.6	429.0	412.7	16.33	26.272		
4,700.0	4,697.0	4,674.8	4,639.8	8.6	12.6	43.60	153.5	-540.2	439.3	422.6	16.69	26.322		
4,800.0	4,796.9	4,774.2	4,738.4	8.8	12.9	43.63	157.3	-552.9	449.6	432.5	17.05	26.371		
4,900.0	4,896.8	4,873.7	4,836.9	9.0	13.2	43.65	161.0	-565.5	459.9	442.5	17.41	26.417		
5,000.0	4,996.8	4,973.2	4,935.5	9.2	13.5	43.67	164.7	-578.2	470.2	452.4	17.77	26.461		
5,100.0	5,096.7	5,072.7	5,034.1	9.4	13.8	43.69	168.4	-590.8	480.5	462.3	18.13	26.504		

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 Grant-Hurt 1C-14H-G268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Grant-Hurt 1C-14H-G268	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 S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - Grant-Hurt 1A-14H-G268 - 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 +N/-S	+E/-W	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)			
5,200.0	5,196.6	5,172.1	5,132.7	9.6	14.1	43.70	172.2	-603.5	490.8	472.3	18.49	26.545	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1C-14H-G268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Grant-Hurt 1C-14H-G268	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 S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - Grant-Hurt 1B-14H-G268 - 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	-90.00	0.0	-11.2	11.2					
100.0	100.0	100.0	100.0	0.1	0.1	-90.00	0.0	-11.2	11.2	10.9	0.26	42.717		
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-11.2	11.2	10.6	0.61	18.307		
300.0	300.0	300.0	300.0	0.5	0.5	-90.00	0.0	-11.2	11.2	10.2	0.96	11.650	CC, ES	
400.0	400.0	399.8	399.8	0.7	0.7	-90.48	-0.1	-12.0	12.0	10.7	1.31	9.203		
500.0	500.0	499.6	499.5	0.8	0.8	15.92	-0.4	-14.6	13.8	12.1	1.66	8.331		
600.0	600.0	599.3	599.1	1.0	1.0	16.87	-0.9	-18.9	15.6	13.6	2.01	7.787		
700.0	699.9	699.0	698.6	1.2	1.2	17.98	-1.6	-25.0	18.1	15.7	2.36	7.665		
800.0	799.8	798.5	797.9	1.4	1.4	18.15	-2.5	-32.7	22.2	19.5	2.71	8.200		
900.0	899.7	897.9	896.9	1.6	1.7	17.75	-3.7	-42.1	28.0	25.0	3.06	9.175		
1,000.0	999.7	997.1	995.4	1.7	1.9	17.12	-5.0	-53.2	35.6	32.2	3.41	10.456		
1,100.0	1,099.6	1,096.6	1,094.1	1.9	2.2	16.54	-6.4	-65.5	44.3	40.5	3.76	11.798		
1,200.0	1,199.5	1,196.2	1,193.0	2.1	2.4	16.14	-7.9	-77.8	53.0	48.9	4.11	12.918		
1,300.0	1,299.5	1,295.8	1,291.8	2.3	2.7	15.85	-9.3	-90.1	61.8	57.3	4.45	13.863		
1,400.0	1,399.4	1,395.5	1,390.7	2.5	2.9	15.64	-10.8	-102.4	70.5	65.7	4.80	14.670		
1,500.0	1,499.3	1,495.1	1,489.5	2.7	3.2	15.47	-12.2	-114.7	79.2	74.1	5.15	15.368		
1,600.0	1,599.2	1,594.7	1,588.3	2.9	3.5	15.34	-13.7	-127.0	88.0	82.4	5.50	15.978		
1,700.0	1,699.2	1,694.3	1,687.2	3.0	3.8	15.23	-15.1	-139.3	96.7	90.8	5.85	16.514		
1,800.0	1,799.1	1,793.9	1,786.0	3.2	4.0	15.13	-16.6	-151.6	105.4	99.2	6.20	16.991		
1,900.0	1,899.0	1,893.6	1,884.9	3.4	4.3	15.06	-18.0	-163.9	114.1	107.6	6.55	17.416		
2,000.0	1,998.9	1,993.2	1,983.7	3.6	4.6	14.99	-19.5	-176.3	122.9	116.0	6.90	17.798		
2,100.0	2,098.9	2,092.8	2,082.6	3.8	4.9	14.93	-20.9	-188.6	131.6	124.4	7.25	18.144		
2,200.0	2,198.8	2,192.4	2,181.4	4.0	5.1	14.88	-22.4	-200.9	140.3	132.7	7.60	18.457		
2,300.0	2,298.7	2,292.0	2,280.3	4.2	5.4	14.84	-23.8	-213.2	149.1	141.1	7.95	18.744		
2,400.0	2,398.7	2,391.6	2,379.1	4.3	5.7	14.80	-25.3	-225.5	157.8	149.5	8.30	19.006		
2,500.0	2,498.6	2,491.3	2,477.9	4.5	6.0	14.76	-26.7	-237.8	166.5	157.9	8.65	19.246		
2,600.0	2,598.5	2,590.9	2,576.8	4.7	6.2	14.73	-28.2	-250.1	175.3	166.3	9.00	19.468		
2,700.0	2,698.4	2,690.5	2,675.6	4.9	6.5	14.70	-29.6	-262.4	184.0	174.7	9.35	19.674		
2,800.0	2,798.4	2,790.1	2,774.5	5.1	6.8	14.67	-31.1	-274.7	192.7	183.0	9.70	19.865		
2,900.0	2,898.3	2,889.7	2,873.3	5.3	7.1	14.65	-32.5	-287.0	201.5	191.4	10.05	20.042		
3,000.0	2,998.2	2,989.4	2,972.2	5.5	7.3	14.63	-34.0	-299.3	210.2	199.8	10.40	20.208		
3,100.0	3,098.2	3,089.0	3,071.0	5.6	7.6	14.61	-35.4	-311.6	218.9	208.2	10.75	20.362		
3,200.0	3,198.1	3,188.6	3,169.9	5.8	7.9	14.59	-36.9	-323.9	227.7	216.6	11.10	20.507		
3,300.0	3,298.0	3,288.2	3,268.7	6.0	8.2	14.57	-38.3	-336.2	236.4	225.0	11.45	20.644		
3,400.0	3,397.9	3,387.8	3,367.5	6.2	8.4	14.55	-39.8	-348.5	245.1	233.3	11.80	20.772		
3,500.0	3,497.9	3,487.4	3,466.4	6.4	8.7	14.54	-41.2	-360.8	253.9	241.7	12.15	20.892		
3,600.0	3,597.8	3,587.1	3,565.2	6.6	9.0	14.53	-42.7	-373.1	262.6	250.1	12.50	21.006		
3,700.0	3,697.7	3,686.7	3,664.1	6.8	9.3	14.51	-44.1	-385.4	271.3	258.5	12.85	21.114		
3,800.0	3,797.6	3,786.3	3,762.9	7.0	9.6	14.50	-45.6	-397.7	280.1	266.9	13.20	21.216		
3,900.0	3,897.6	3,885.9	3,861.8	7.1	9.8	14.49	-47.0	-410.0	288.8	275.3	13.55	21.313		
4,000.0	3,997.5	3,985.5	3,960.6	7.3	10.1	14.48	-48.5	-422.3	297.5	283.6	13.90	21.405		
4,100.0	4,097.4	4,085.2	4,059.5	7.5	10.4	14.47	-49.9	-434.6	306.3	292.0	14.25	21.492		
4,200.0	4,197.4	4,184.8	4,158.3	7.7	10.7	14.46	-51.4	-447.0	315.0	300.4	14.60	21.575		
4,300.0	4,297.3	4,284.4	4,257.1	7.9	10.9	14.45	-52.8	-459.3	323.7	308.8	14.95	21.655		
4,400.0	4,397.2	4,384.0	4,356.0	8.1	11.2	14.44	-54.3	-471.6	332.5	317.2	15.30	21.730		
4,500.0	4,497.1	4,483.6	4,454.8	8.3	11.5	14.43	-55.7	-483.9	341.2	325.6	15.65	21.803		
4,600.0	4,597.1	4,583.2	4,553.7	8.4	11.8	14.42	-57.2	-496.2	349.9	333.9	16.00	21.872		
4,700.0	4,697.0	4,682.9	4,652.5	8.6	12.1	14.42	-58.6	-508.5	358.7	342.3	16.35	21.938		
4,800.0	4,796.9	4,782.5	4,751.4	8.8	12.3	14.41	-60.1	-520.8	367.4	350.7	16.70	22.001		
4,900.0	4,896.8	4,882.1	4,850.2	9.0	12.6	14.40	-61.5	-533.1	376.1	359.1	17.05	22.062		
5,000.0	4,996.8	4,981.7	4,949.1	9.2	12.9	14.40	-63.0	-545.4	384.9	367.5	17.40	22.121		
5,100.0	5,096.7	5,081.3	5,047.9	9.4	13.2	14.39	-64.5	-557.7	393.6	375.9	17.75	22.177		

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 Grant-Hurt 1C-14H-G268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Grant-Hurt 1C-14H-G268	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 S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - Grant-Hurt 1B-14H-G268 - 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	5,196.6	5,180.9	5,146.7	9.6	13.5	14.38	-65.9	-570.0	402.3	384.2	18.10	22.231		
5,300.0	5,296.6	5,280.6	5,245.6	9.8	13.7	14.38	-67.4	-582.3	411.1	392.6	18.45	22.282		
5,400.0	5,396.5	5,380.2	5,344.4	9.9	14.0	14.37	-68.8	-594.6	419.8	401.0	18.80	22.332		
5,500.0	5,496.4	5,479.8	5,443.3	10.1	14.3	14.37	-70.3	-606.9	428.5	409.4	19.15	22.380		
5,600.0	5,596.3	5,579.4	5,542.1	10.3	14.6	14.36	-71.7	-619.2	437.3	417.8	19.50	22.427		
5,700.0	5,696.3	5,679.0	5,641.0	10.5	14.8	14.36	-73.2	-631.5	446.0	426.2	19.85	22.472		
5,800.0	5,796.2	5,778.7	5,739.8	10.7	15.1	14.35	-74.6	-643.8	454.7	434.5	20.20	22.515		
5,900.0	5,896.1	5,878.3	5,838.7	10.9	15.4	14.35	-76.1	-656.1	463.5	442.9	20.55	22.556		
6,000.0	5,996.1	5,977.9	5,937.5	11.1	15.7	14.34	-77.5	-668.4	472.2	451.3	20.90	22.597		
6,100.0	6,096.0	6,077.5	6,036.3	11.2	16.0	14.34	-79.0	-680.7	480.9	459.7	21.25	22.636		
6,200.0	6,195.9	6,177.1	6,135.2	11.4	16.2	14.34	-80.4	-693.0	489.7	468.1	21.60	22.673		
6,300.0	6,295.8	6,276.7	6,234.0	11.6	16.5	14.33	-81.9	-705.3	498.4	476.5	21.95	22.710		
11,300.0	7,400.0	11,152.2	7,180.0	74.3	75.3	-63.84	4,081.4	-735.6	499.2	364.9	134.27	3.718		
11,400.0	7,400.0	11,252.2	7,180.0	76.0	77.0	-63.69	4,181.3	-733.5	496.5	359.3	137.20	3.619		
11,500.0	7,400.0	11,352.2	7,180.0	77.8	78.7	-63.54	4,281.2	-731.4	493.9	353.7	140.13	3.524		
11,600.0	7,400.0	11,452.1	7,180.0	79.5	80.4	-63.38	4,381.2	-729.3	491.2	348.1	143.06	3.434		
11,700.0	7,400.0	11,552.1	7,180.0	81.2	82.2	-63.23	4,481.1	-727.2	488.5	342.6	145.97	3.347		
11,800.0	7,400.0	11,652.0	7,180.0	83.0	83.9	-63.07	4,581.1	-725.1	485.9	337.0	148.87	3.264		
11,900.0	7,400.0	11,752.0	7,180.0	84.7	85.6	-62.91	4,681.0	-723.0	483.3	331.5	151.76	3.184		
12,000.0	7,400.0	11,851.9	7,180.0	86.4	87.3	-62.75	4,780.9	-721.0	480.6	326.0	154.64	3.108		
12,100.0	7,400.0	11,951.9	7,180.0	88.2	89.0	-62.59	4,880.9	-718.9	478.0	320.5	157.51	3.035		
12,200.0	7,400.0	12,051.9	7,180.0	89.9	90.7	-62.42	4,980.8	-716.8	475.3	315.0	160.37	2.964		
12,300.0	7,400.0	12,151.8	7,180.0	91.6	92.4	-62.25	5,080.7	-714.7	472.7	309.5	163.22	2.896		
12,400.0	7,400.0	12,251.8	7,180.0	93.4	94.1	-62.09	5,180.7	-712.6	470.1	304.0	166.05	2.831		
12,500.0	7,400.0	12,351.7	7,180.0	95.1	95.9	-61.92	5,280.6	-710.5	467.5	298.6	168.88	2.768		
12,600.0	7,400.0	12,451.7	7,180.0	96.8	97.6	-61.74	5,380.5	-708.4	464.9	293.2	171.69	2.708		
12,700.0	7,400.0	12,551.6	7,180.0	98.6	99.3	-61.57	5,480.5	-706.3	462.3	287.8	174.48	2.649		
12,800.0	7,400.0	12,651.6	7,180.0	100.3	101.0	-61.39	5,580.4	-704.2	459.6	282.4	177.27	2.593		
12,900.0	7,400.0	12,751.5	7,180.0	102.1	102.8	-61.22	5,680.3	-702.1	457.0	277.0	180.03	2.539		
13,000.0	7,400.0	12,851.5	7,180.0	103.8	104.5	-61.04	5,780.3	-700.0	454.4	271.7	182.79	2.486		
13,100.0	7,400.0	12,951.5	7,180.0	105.5	106.2	-60.85	5,880.2	-697.9	451.8	266.3	185.53	2.435		
13,200.0	7,400.0	13,051.4	7,180.0	107.3	107.9	-60.67	5,980.1	-695.8	449.3	261.0	188.25	2.386		
13,300.0	7,400.0	13,151.4	7,180.0	109.0	109.7	-60.48	6,080.1	-693.7	446.7	255.7	190.96	2.339		
13,400.0	7,400.0	13,251.3	7,180.0	110.8	111.4	-60.29	6,180.0	-691.6	444.1	250.4	193.65	2.293		
13,500.0	7,400.0	13,351.3	7,180.0	112.5	113.1	-60.10	6,279.9	-689.6	441.5	245.2	196.33	2.249		
13,600.0	7,400.0	13,451.2	7,180.0	114.2	114.8	-59.91	6,379.9	-687.5	439.0	240.0	198.98	2.206		
13,700.0	7,400.0	13,551.2	7,180.0	116.0	116.6	-59.71	6,479.8	-685.4	436.4	234.8	201.63	2.164		
13,800.0	7,400.0	13,651.1	7,180.0	117.7	118.3	-59.52	6,579.7	-683.3	433.8	229.6	204.25	2.124		
13,900.0	7,400.0	13,751.1	7,180.0	119.5	120.0	-59.32	6,679.7	-681.2	431.3	224.4	206.85	2.085		
14,000.0	7,400.0	13,851.1	7,180.0	121.2	121.8	-59.12	6,779.6	-679.1	428.7	219.3	209.44	2.047		
14,100.0	7,400.0	13,951.0	7,180.0	123.0	123.5	-58.91	6,879.5	-677.0	426.2	214.2	212.00	2.010		
14,200.0	7,400.0	14,051.0	7,180.0	124.7	125.2	-58.70	6,979.5	-674.9	423.6	209.1	214.55	1.975		
14,300.0	7,400.0	14,150.9	7,180.0	126.5	127.0	-58.49	7,079.4	-672.8	421.1	204.0	217.07	1.940		
14,400.0	7,400.0	14,250.9	7,180.0	128.2	128.7	-58.28	7,179.3	-670.7	418.6	199.0	219.57	1.906		
14,500.0	7,400.0	14,350.8	7,180.0	129.9	130.4	-58.07	7,279.3	-668.6	416.1	194.0	222.06	1.874		
14,532.0	7,400.0	14,379.1	7,180.0	130.5	130.9	-58.01	7,307.5	-668.0	415.3	192.5	222.81	1.864 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1C-14H-G268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Grant-Hurt 1C-14H-G268	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 S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - Grant-Hurt 1D-14H-G268 - 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		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	8.4	8.4					
100.0	100.0	100.0	100.0	0.1	0.1	90.00	0.0	8.4	8.4	8.1	0.26	32.038		
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	8.4	8.4	7.8	0.61	13.730		
300.0	300.0	300.0	300.0	0.5	0.5	90.00	0.0	8.4	8.4	7.4	0.96	8.738		
400.0	400.0	400.0	400.0	0.7	0.7	90.00	0.0	8.4	8.4	7.1	1.31	6.408 CC, ES		
500.0	500.0	500.0	500.0	0.8	0.8	-164.96	0.0	8.4	9.2	7.6	1.66	5.565		
600.0	600.0	600.0	600.0	1.0	1.0	-168.26	0.0	8.4	11.8	9.8	2.01	5.868		
700.0	699.9	699.9	699.9	1.2	1.2	-171.10	0.0	8.4	15.5	13.1	2.36	6.577		
800.0	799.8	799.8	799.8	1.4	1.4	-172.85	0.0	8.4	19.3	16.6	2.70	7.121		
900.0	899.7	899.7	899.7	1.6	1.5	-174.03	0.0	8.4	23.0	20.0	3.05	7.546		
1,000.0	999.7	999.7	999.7	1.7	1.7	-174.88	0.0	8.4	26.8	23.4	3.40	7.885		
1,100.0	1,099.6	1,099.6	1,099.6	1.9	1.9	-175.51	0.0	8.4	30.6	26.9	3.75	8.162		
1,200.0	1,199.5	1,199.5	1,199.5	2.1	2.0	-176.01	0.0	8.4	34.4	30.3	4.10	8.393		
1,300.0	1,299.5	1,299.5	1,299.5	2.3	2.2	-176.40	0.0	8.4	38.2	33.8	4.45	8.588		
1,400.0	1,399.4	1,399.4	1,399.4	2.5	2.4	-176.73	0.0	8.4	42.0	37.2	4.80	8.755		
1,500.0	1,499.3	1,499.3	1,499.3	2.7	2.6	-177.00	0.0	8.4	45.8	40.7	5.15	8.900		
1,600.0	1,599.2	1,599.2	1,599.2	2.9	2.7	-177.23	0.0	8.4	49.6	44.1	5.50	9.026		
1,700.0	1,699.2	1,699.2	1,699.2	3.0	2.9	-177.43	0.0	8.4	53.4	47.6	5.84	9.138		
1,800.0	1,799.1	1,799.1	1,799.1	3.2	3.1	-177.60	0.0	8.4	57.2	51.0	6.19	9.237		
1,900.0	1,899.0	1,899.0	1,899.0	3.4	3.3	-177.75	0.0	8.4	61.0	54.5	6.54	9.325		
2,000.0	1,998.9	1,998.9	1,998.9	3.6	3.4	-177.88	0.0	8.4	64.8	57.9	6.89	9.405		
2,100.0	2,098.9	2,098.9	2,098.9	3.8	3.6	-178.00	0.0	8.4	68.6	61.4	7.24	9.477		
2,200.0	2,198.8	2,198.8	2,198.8	4.0	3.8	-178.10	0.0	8.4	72.4	64.8	7.59	9.542		
2,300.0	2,298.7	2,298.7	2,298.7	4.2	4.0	-178.20	0.0	8.4	76.2	68.3	7.94	9.602		
2,400.0	2,398.7	2,398.7	2,398.7	4.3	4.1	-178.28	0.0	8.4	80.0	71.7	8.29	9.656		
2,500.0	2,498.6	2,498.6	2,498.6	4.5	4.3	-178.36	0.0	8.4	83.8	75.2	8.64	9.707		
2,600.0	2,598.5	2,598.5	2,598.5	4.7	4.5	-178.43	0.0	8.4	87.6	78.6	8.98	9.753		
2,700.0	2,698.4	2,698.4	2,698.4	4.9	4.7	-178.50	0.0	8.4	91.4	82.1	9.33	9.796		
2,800.0	2,798.4	2,798.4	2,798.4	5.1	4.8	-178.56	0.0	8.4	95.2	85.5	9.68	9.836		
2,900.0	2,898.3	2,898.3	2,898.3	5.3	5.0	-178.61	0.0	8.4	99.0	89.0	10.03	9.873		
3,000.0	2,998.2	2,998.2	2,998.2	5.5	5.2	-178.66	0.0	8.4	102.8	92.5	10.38	9.907		
3,100.0	3,098.2	3,098.2	3,098.2	5.6	5.4	-178.26	-0.8	8.6	106.6	95.9	10.73	9.938		
3,200.0	3,198.1	3,198.1	3,198.1	5.8	5.5	-177.10	-3.1	9.2	110.4	99.3	11.08	9.966		
3,300.0	3,298.0	3,298.0	3,297.9	6.0	5.7	-175.92	-5.6	9.8	114.2	102.8	11.43	9.996		
3,400.0	3,397.9	3,397.9	3,397.8	6.2	5.9	-174.82	-8.0	10.4	118.1	106.3	11.78	10.027		
3,500.0	3,497.9	3,497.8	3,497.7	6.4	6.1	-173.79	-10.5	11.0	122.0	109.9	12.13	10.060		
3,600.0	3,597.8	3,597.7	3,597.5	6.6	6.2	-172.82	-13.0	11.6	126.0	113.5	12.48	10.093		
3,700.0	3,697.7	3,697.6	3,697.4	6.8	6.4	-171.91	-15.4	12.2	130.0	117.2	12.84	10.127		
3,800.0	3,797.6	3,797.5	3,797.3	7.0	6.6	-171.06	-17.9	12.8	134.0	120.8	13.19	10.161		
3,900.0	3,897.6	3,897.4	3,897.1	7.1	6.8	-170.26	-20.4	13.4	138.1	124.5	13.54	10.196		
4,000.0	3,997.5	3,997.3	3,997.0	7.3	6.9	-169.50	-22.8	14.0	142.1	128.2	13.89	10.230		
4,100.0	4,097.4	4,097.2	4,096.9	7.5	7.1	-168.78	-25.3	14.7	146.2	132.0	14.25	10.264		
4,200.0	4,197.4	4,197.1	4,196.7	7.7	7.3	-168.11	-27.8	15.3	150.4	135.8	14.60	10.297		
4,300.0	4,297.3	4,297.0	4,296.6	7.9	7.5	-167.47	-30.2	15.9	154.5	139.5	14.96	10.330		
4,400.0	4,397.2	4,396.9	4,396.5	8.1	7.7	-166.86	-32.7	16.5	158.7	143.3	15.31	10.363		
4,500.0	4,497.1	4,496.8	4,496.3	8.3	7.8	-166.28	-35.2	17.1	162.8	147.2	15.66	10.395		
4,600.0	4,597.1	4,596.7	4,596.2	8.4	8.0	-165.74	-37.6	17.7	167.0	151.0	16.02	10.426		
4,700.0	4,697.0	4,696.6	4,696.1	8.6	8.2	-165.22	-40.1	18.3	171.2	154.8	16.37	10.457		
4,800.0	4,796.9	4,796.5	4,795.9	8.8	8.4	-164.72	-42.6	18.9	175.4	158.7	16.73	10.488		
4,900.0	4,896.8	4,896.4	4,895.8	9.0	8.5	-164.25	-45.0	19.5	179.7	162.6	17.08	10.517		
5,000.0	4,996.8	4,996.3	4,995.7	9.2	8.7	-163.80	-47.5	20.2	183.9	166.5	17.44	10.546		
5,100.0	5,096.7	5,096.2	5,095.5	9.4	8.9	-163.37	-50.0	20.8	188.2	170.4	17.79	10.575		

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 Grant-Hurt 1C-14H-G268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Grant-Hurt 1C-14H-G268	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 S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - Grant-Hurt 1D-14H-G268 - 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	5,196.6	5,196.1	5,195.4	9.6	9.1	-162.96	-52.4	21.4	192.4	174.3	18.15	10.603		
5,300.0	5,296.6	5,296.0	5,295.3	9.8	9.3	-162.57	-54.9	22.0	196.7	178.2	18.50	10.630		
5,400.0	5,396.5	5,395.9	5,395.2	9.9	9.4	-162.19	-57.4	22.6	201.0	182.1	18.86	10.657		
5,500.0	5,496.4	5,495.8	5,495.0	10.1	9.6	-161.83	-59.8	23.2	205.3	186.1	19.22	10.683		
5,600.0	5,596.3	5,595.7	5,594.9	10.3	9.8	-161.48	-62.3	23.8	209.6	190.0	19.57	10.708		
5,700.0	5,696.3	5,695.6	5,694.8	10.5	10.0	-161.15	-64.8	24.4	213.9	193.9	19.93	10.733		
5,800.0	5,796.2	5,795.5	5,794.6	10.7	10.1	-160.83	-67.2	25.0	218.2	197.9	20.28	10.757		
5,900.0	5,896.1	5,895.4	5,894.5	10.9	10.3	-160.53	-69.7	25.7	222.5	201.9	20.64	10.781		
6,000.0	5,996.1	5,995.3	5,994.4	11.1	10.5	-160.23	-72.2	26.3	226.8	205.8	20.99	10.804		
6,100.0	6,096.0	6,095.2	6,094.2	11.2	10.7	-159.95	-74.6	26.9	231.2	209.8	21.35	10.827		
6,200.0	6,195.9	6,195.1	6,194.1	11.4	10.9	-159.67	-77.1	27.5	235.5	213.8	21.71	10.849		
6,300.0	6,295.8	6,295.0	6,294.0	11.6	11.0	-159.41	-79.6	28.1	239.8	217.8	22.06	10.871		
6,400.0	6,395.8	6,394.9	6,393.8	11.8	11.2	-159.16	-82.0	28.7	244.2	221.8	22.42	10.892		
6,500.0	6,495.7	6,494.8	6,493.7	12.0	11.4	-158.91	-84.5	29.3	248.5	225.8	22.77	10.913		
6,600.0	6,595.6	6,594.7	6,593.6	12.2	11.6	-158.67	-87.0	29.9	252.9	229.8	23.13	10.933		
6,700.0	6,695.5	6,697.5	6,696.0	12.4	11.7	-160.51	-80.2	30.6	256.6	233.2	23.45	10.945		
6,800.0	6,795.5	6,794.5	6,790.1	12.6	11.9	-165.86	-57.1	31.1	260.8	237.1	23.71	10.999		
6,900.0	6,895.2	6,883.2	6,871.6	12.7	12.0	97.78	-22.4	31.6	269.1	245.1	23.98	11.222		
7,000.0	6,992.9	6,967.6	6,943.3	12.9	12.1	80.90	21.9	32.1	281.3	257.0	24.28	11.585		
7,100.0	7,085.6	7,050.0	7,006.4	13.1	12.4	72.26	75.0	32.5	295.9	271.3	24.59	12.034		
7,200.0	7,170.4	7,127.2	7,057.9	13.3	12.7	66.20	132.3	32.8	311.2	286.4	24.85	12.524		
7,300.0	7,244.8	7,200.0	7,099.1	13.6	13.1	61.66	192.3	33.0	326.1	301.0	25.05	13.017		
7,400.0	7,306.5	7,278.7	7,134.7	14.1	13.6	58.05	262.5	33.2	339.3	314.0	25.30	13.415		
7,500.0	7,353.7	7,350.0	7,158.3	14.7	14.2	55.56	329.7	33.4	350.3	324.7	25.62	13.674		
7,600.0	7,384.9	7,425.7	7,174.1	15.6	14.9	53.84	403.6	33.5	358.4	332.2	26.20	13.678		
7,700.0	7,399.1	7,500.0	7,179.9	16.6	15.7	52.92	477.7	33.5	363.3	336.2	27.10	13.405		
7,800.0	7,400.0	7,594.5	7,180.0	17.7	16.8	52.87	572.1	33.5	364.5	335.7	28.80	12.657		
7,900.0	7,400.0	7,694.5	7,180.0	18.9	18.1	52.95	672.1	33.5	365.2	334.4	30.82	11.849		
8,000.0	7,400.0	7,794.5	7,180.0	20.2	19.4	53.04	772.1	33.5	365.9	332.9	32.97	11.099		
8,100.0	7,400.0	7,894.5	7,180.0	21.5	20.8	53.12	872.1	33.5	366.6	331.4	35.21	10.411		
8,200.0	7,400.0	7,994.5	7,180.0	23.0	22.3	53.20	972.1	33.5	367.3	329.7	37.54	9.783		
8,300.0	7,400.0	8,094.5	7,180.0	24.4	23.8	53.28	1,072.1	33.5	368.0	328.0	39.95	9.212		
8,400.0	7,400.0	8,194.4	7,180.0	25.9	25.3	53.36	1,172.1	33.5	368.7	326.3	42.41	8.693		
8,500.0	7,400.0	8,294.4	7,180.0	27.4	26.8	53.44	1,272.1	33.5	369.4	324.5	44.92	8.222		
8,600.0	7,400.0	8,394.4	7,180.0	29.0	28.4	53.52	1,372.1	33.5	370.1	322.6	47.48	7.794		
8,700.0	7,400.0	8,494.4	7,180.0	30.5	30.0	53.60	1,472.1	33.5	370.8	320.7	50.08	7.404		
8,800.0	7,400.0	8,594.4	7,180.0	32.1	31.6	53.68	1,572.1	33.5	371.5	318.8	52.71	7.048		
8,900.0	7,400.0	8,694.4	7,180.0	33.7	33.2	53.76	1,672.1	33.5	372.2	316.8	55.37	6.722		
9,000.0	7,400.0	8,794.4	7,180.0	35.4	34.9	53.84	1,772.1	33.5	372.9	314.8	58.05	6.423		
9,100.0	7,400.0	8,894.4	7,180.0	37.0	36.5	53.92	1,872.1	33.5	373.6	312.8	60.76	6.149		
9,200.0	7,400.0	8,994.4	7,180.0	38.6	38.2	54.00	1,972.1	33.5	374.3	310.8	63.49	5.895		
9,300.0	7,400.0	9,094.4	7,180.0	40.3	39.9	54.08	2,072.1	33.5	375.0	308.8	66.24	5.661		
9,400.0	7,400.0	9,194.4	7,180.0	41.9	41.5	54.16	2,172.1	33.5	375.7	306.7	69.01	5.445		
9,500.0	7,400.0	9,294.4	7,180.0	43.6	43.2	54.23	2,272.1	33.5	376.4	304.6	71.79	5.243		
9,600.0	7,400.0	9,394.4	7,180.0	45.3	44.9	54.31	2,372.1	33.5	377.1	302.5	74.59	5.056		
9,700.0	7,400.0	9,494.4	7,180.0	47.0	46.6	54.39	2,472.1	33.5	377.8	300.4	77.40	4.882		
9,800.0	7,400.0	9,594.4	7,180.0	48.7	48.3	54.47	2,572.1	33.5	378.6	298.3	80.22	4.719		
9,900.0	7,400.0	9,694.4	7,180.0	50.3	50.0	54.54	2,672.1	33.5	379.3	296.2	83.06	4.566		
10,000.0	7,400.0	9,794.4	7,180.0	52.0	51.7	54.62	2,772.0	33.5	380.0	294.1	85.91	4.423		
10,100.0	7,400.0	9,894.4	7,180.0	53.7	53.4	54.70	2,872.0	33.5	380.7	291.9	88.77	4.289		
10,200.0	7,400.0	9,994.4	7,180.0	55.4	55.1	54.77	2,972.0	33.5	381.4	289.8	91.63	4.162		
10,300.0	7,400.0	10,094.4	7,180.0	57.1	56.8	54.85	3,072.0	33.5	382.1	287.6	94.51	4.043		

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 Grant-Hurt 1C-14H-G268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Grant-Hurt 1C-14H-G268	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 S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - Grant-Hurt 1D-14H-G268 - 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	7,400.0	10,194.4	7,180.0	58.9	58.5	54.92	3,172.0	33.5	382.8	285.4	97.40	3.930		
10,500.0	7,400.0	10,294.4	7,180.0	60.6	60.3	55.00	3,272.0	33.5	383.5	283.2	100.30	3.824		
10,600.0	7,400.0	10,394.4	7,180.0	62.3	62.0	55.07	3,372.0	33.5	384.3	281.1	103.20	3.723		
10,700.0	7,400.0	10,494.4	7,180.0	64.0	63.7	55.15	3,472.0	33.5	385.0	278.9	106.11	3.628		
10,800.0	7,400.0	10,594.4	7,180.0	65.7	65.4	55.22	3,572.0	33.5	385.7	276.7	109.03	3.537		
10,900.0	7,400.0	10,694.4	7,180.0	67.4	67.1	55.29	3,672.0	33.5	386.4	274.4	111.96	3.451		
11,000.0	7,400.0	10,794.4	7,180.0	69.1	68.9	55.37	3,772.0	33.5	387.1	272.2	114.89	3.369		
11,100.0	7,400.0	10,894.3	7,180.0	70.9	70.6	55.44	3,872.0	33.5	387.8	270.0	117.84	3.291		
11,200.0	7,400.0	10,994.3	7,180.0	72.6	72.3	55.51	3,972.0	33.5	388.6	267.8	120.79	3.217		
11,300.0	7,400.0	11,094.3	7,180.0	74.3	74.1	55.59	4,072.0	33.5	389.3	265.5	123.74	3.146		
11,400.0	7,400.0	11,194.3	7,180.0	76.0	75.8	55.66	4,172.0	33.5	390.0	263.3	126.70	3.078		
11,500.0	7,400.0	11,294.3	7,180.0	77.8	77.5	55.73	4,272.0	33.5	390.7	261.0	129.67	3.013		
11,600.0	7,400.0	11,394.3	7,180.0	79.5	79.3	55.80	4,372.0	33.5	391.4	258.8	132.64	2.951		
11,700.0	7,400.0	11,494.3	7,180.0	81.2	81.0	55.87	4,472.0	33.5	392.2	256.5	135.62	2.892		
11,800.0	7,400.0	11,594.3	7,180.0	83.0	82.7	55.95	4,572.0	33.5	392.9	254.3	138.61	2.834		
11,900.0	7,400.0	11,694.3	7,180.0	84.7	84.5	56.02	4,672.0	33.5	393.6	252.0	141.60	2.780		
12,000.0	7,400.0	11,794.3	7,180.0	86.4	86.2	56.09	4,772.0	33.5	394.3	249.7	144.60	2.727		
12,100.0	7,400.0	11,894.3	7,180.0	88.2	87.9	56.16	4,872.0	33.5	395.1	247.5	147.60	2.677		
12,200.0	7,400.0	11,994.3	7,180.0	89.9	89.7	56.23	4,972.0	33.5	395.8	245.2	150.61	2.628		
12,300.0	7,400.0	12,094.3	7,180.0	91.6	91.4	56.30	5,072.0	33.5	396.5	242.9	153.62	2.581		
12,400.0	7,400.0	12,194.3	7,180.0	93.4	93.1	56.37	5,172.0	33.5	397.2	240.6	156.64	2.536		
12,500.0	7,400.0	12,294.3	7,180.0	95.1	94.9	56.44	5,272.0	33.5	398.0	238.3	159.66	2.493		
12,600.0	7,400.0	12,394.3	7,180.0	96.8	96.6	56.51	5,371.9	33.5	398.7	236.0	162.69	2.451		
12,700.0	7,400.0	12,494.3	7,180.0	98.6	98.4	56.58	5,471.9	33.5	399.4	233.7	165.72	2.410		
12,800.0	7,400.0	12,594.3	7,180.0	100.3	100.1	56.65	5,571.9	33.5	400.1	231.4	168.76	2.371		
12,900.0	7,400.0	12,694.3	7,180.0	102.1	101.8	56.71	5,671.9	33.5	400.9	229.1	171.80	2.333		
13,000.0	7,400.0	12,794.3	7,180.0	103.8	103.6	56.78	5,771.9	33.5	401.6	226.8	174.85	2.297		
13,100.0	7,400.0	12,894.3	7,180.0	105.5	105.3	56.85	5,871.9	33.5	402.3	224.4	177.90	2.262		
13,200.0	7,400.0	12,994.3	7,180.0	107.3	107.1	56.92	5,971.9	33.5	403.1	222.1	180.95	2.227		
13,300.0	7,400.0	13,094.3	7,180.0	109.0	108.8	56.99	6,071.9	33.5	403.8	219.8	184.01	2.194		
13,400.0	7,400.0	13,194.3	7,180.0	110.8	110.6	57.05	6,171.9	33.5	404.5	217.5	187.08	2.162		
13,500.0	7,400.0	13,294.3	7,180.0	112.5	112.3	57.12	6,271.9	33.5	405.3	215.1	190.15	2.131		
13,600.0	7,400.0	13,394.3	7,180.0	114.2	114.0	57.19	6,371.9	33.5	406.0	212.8	193.22	2.101		
13,700.0	7,400.0	13,494.2	7,180.0	116.0	115.8	57.25	6,471.9	33.5	406.7	210.4	196.30	2.072		
13,800.0	7,400.0	13,594.2	7,180.0	117.7	117.5	57.32	6,571.9	33.5	407.5	208.1	199.38	2.044		
13,900.0	7,400.0	13,694.2	7,180.0	119.5	119.3	57.39	6,671.9	33.5	408.2	205.7	202.46	2.016		
14,000.0	7,400.0	13,794.2	7,180.0	121.2	121.0	57.45	6,771.9	33.5	408.9	203.4	205.55	1.989		
14,100.0	7,400.0	13,894.2	7,180.0	123.0	122.8	57.52	6,871.9	33.5	409.7	201.0	208.64	1.963		
14,200.0	7,400.0	13,994.2	7,180.0	124.7	124.5	57.58	6,971.9	33.5	410.4	198.7	211.74	1.938		
14,300.0	7,400.0	14,094.2	7,180.0	126.5	126.3	57.65	7,071.9	33.5	411.1	196.3	214.84	1.914		
14,400.0	7,400.0	14,194.2	7,180.0	128.2	128.0	57.71	7,171.9	33.5	411.9	193.9	217.95	1.890		
14,500.0	7,400.0	14,294.2	7,180.0	129.9	129.8	57.78	7,271.9	33.5	412.6	191.6	221.06	1.867		
14,532.0	7,400.0	14,326.2	7,180.0	130.5	130.3	57.80	7,303.8	33.5	412.9	190.8	222.05	1.859 SF		

Anticollision Report

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Project:	DJ Wattenberg	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Grant-Hurt 1C-14H-G268	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 S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - Grant-Hurt 1E-14H-G268 - 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	90.01	0.0	19.6	19.6					
100.0	100.0	100.0	100.0	0.1	0.1	90.01	0.0	19.6	19.6	19.3	0.26	74.755		
200.0	200.0	200.0	200.0	0.3	0.3	90.01	0.0	19.6	19.6	19.0	0.61	32.038		
300.0	300.0	300.0	300.0	0.5	0.5	90.01	0.0	19.6	19.6	18.6	0.96	20.388		
400.0	400.0	400.0	400.0	0.7	0.7	90.01	0.0	19.6	19.6	18.3	1.31	14.951 CC, ES		
500.0	500.0	500.0	500.0	0.8	0.8	-164.10	0.0	19.6	20.4	18.8	1.66	12.310		
600.0	600.0	599.6	599.6	1.0	1.0	-165.26	-0.2	20.4	23.8	21.8	2.01	11.849 SF		
700.0	699.9	698.9	698.9	1.2	1.2	-165.67	-0.9	22.9	29.9	27.6	2.35	12.706		
800.0	799.8	798.1	797.9	1.4	1.4	-165.18	-2.0	27.1	37.7	35.0	2.70	13.964		
900.0	899.7	897.5	897.2	1.6	1.5	-164.46	-3.4	32.4	46.7	43.7	3.05	15.304		
1,000.0	999.7	997.1	996.7	1.7	1.7	-163.95	-4.8	37.7	55.7	52.3	3.40	16.380		
1,100.0	1,099.6	1,096.7	1,096.1	1.9	1.9	-163.59	-6.2	43.1	64.7	61.0	3.75	17.255		
1,200.0	1,199.5	1,196.3	1,195.6	2.1	2.1	-163.31	-7.6	48.5	73.8	69.7	4.10	17.981		
1,300.0	1,299.5	1,295.9	1,295.0	2.3	2.3	-163.09	-9.0	53.8	82.8	78.3	4.45	18.592		
1,400.0	1,399.4	1,395.5	1,394.4	2.5	2.5	-162.92	-10.4	59.2	91.8	87.0	4.80	19.115		
1,500.0	1,499.3	1,495.1	1,493.9	2.7	2.7	-162.78	-11.8	64.5	100.8	95.7	5.15	19.566		
1,600.0	1,599.2	1,594.7	1,593.3	2.9	2.9	-162.66	-13.2	69.9	109.9	104.3	5.50	19.960		
1,700.0	1,699.2	1,694.3	1,692.7	3.0	3.1	-162.56	-14.6	75.3	118.9	113.0	5.85	20.307		
1,800.0	1,799.1	1,793.9	1,792.2	3.2	3.3	-162.47	-16.0	80.6	127.9	121.7	6.20	20.614		
1,900.0	1,899.0	1,893.4	1,891.6	3.4	3.5	-162.40	-17.4	86.0	136.9	130.4	6.55	20.889		
2,000.0	1,998.9	1,993.0	1,991.1	3.6	3.7	-162.33	-18.8	91.3	145.9	139.0	6.91	21.136		
2,100.0	2,098.9	2,092.6	2,090.5	3.8	3.9	-162.27	-20.2	96.7	155.0	147.7	7.26	21.359		
2,200.0	2,198.8	2,192.2	2,189.9	4.0	4.1	-162.22	-21.6	102.1	164.0	156.4	7.61	21.561		
2,300.0	2,298.7	2,291.8	2,289.4	4.2	4.3	-162.18	-23.0	107.4	173.0	165.1	7.96	21.746		
2,400.0	2,398.7	2,391.4	2,388.8	4.3	4.5	-162.13	-24.4	112.8	182.0	173.7	8.31	21.915		
2,500.0	2,498.6	2,491.0	2,488.2	4.5	4.7	-162.10	-25.8	118.1	191.1	182.4	8.66	22.070		
2,600.0	2,598.5	2,590.6	2,587.7	4.7	4.9	-162.06	-27.3	123.5	200.1	191.1	9.01	22.213		
2,700.0	2,698.4	2,690.2	2,687.1	4.9	5.1	-162.03	-28.7	128.9	209.1	199.8	9.36	22.345		
2,800.0	2,798.4	2,789.8	2,786.6	5.1	5.3	-162.00	-30.1	134.2	218.1	208.4	9.71	22.468		
2,900.0	2,898.3	2,889.4	2,886.0	5.3	5.5	-161.98	-31.5	139.6	227.2	217.1	10.06	22.583		
3,000.0	2,998.2	2,989.0	2,985.4	5.5	5.7	-161.95	-32.9	144.9	236.2	225.8	10.41	22.689		
3,100.0	3,098.2	3,088.6	3,084.9	5.6	5.9	-161.93	-34.3	150.3	245.2	234.5	10.76	22.789		
3,200.0	3,198.1	3,188.1	3,184.3	5.8	6.1	-161.91	-35.7	155.7	254.2	243.1	11.11	22.882		
3,300.0	3,298.0	3,287.7	3,283.7	6.0	6.3	-161.89	-37.1	161.0	263.3	251.8	11.46	22.970		
3,400.0	3,397.9	3,387.3	3,383.2	6.2	6.5	-161.87	-38.5	166.4	272.3	260.5	11.81	23.052		
3,500.0	3,497.9	3,486.9	3,482.6	6.4	6.7	-161.85	-39.9	171.7	281.3	269.1	12.16	23.130		
3,600.0	3,597.8	3,586.5	3,582.1	6.6	6.9	-161.84	-41.3	177.1	290.3	277.8	12.51	23.203		
3,700.0	3,697.7	3,686.1	3,681.5	6.8	7.1	-161.82	-42.7	182.5	299.4	286.5	12.86	23.273		
3,800.0	3,797.6	3,785.7	3,780.9	7.0	7.3	-161.81	-44.1	187.8	308.4	295.2	13.21	23.338		
3,900.0	3,897.6	3,885.3	3,880.4	7.1	7.5	-161.79	-45.5	193.2	317.4	303.8	13.56	23.401		
4,000.0	3,997.5	3,984.9	3,979.8	7.3	7.7	-161.78	-46.9	198.5	326.4	312.5	13.91	23.460		
4,100.0	4,097.4	4,084.5	4,079.2	7.5	7.8	-161.77	-48.3	203.9	335.5	321.2	14.27	23.516		
4,200.0	4,197.4	4,184.1	4,178.7	7.7	8.0	-161.76	-49.7	209.3	344.5	329.9	14.62	23.569		
4,300.0	4,297.3	4,283.7	4,278.1	7.9	8.2	-161.75	-51.1	214.6	353.5	338.5	14.97	23.620		
4,400.0	4,397.2	4,383.2	4,377.6	8.1	8.4	-161.74	-52.5	220.0	362.5	347.2	15.32	23.669		
4,500.0	4,497.1	4,482.8	4,477.0	8.3	8.6	-161.73	-53.9	225.3	371.6	355.9	15.67	23.716		
4,600.0	4,597.1	4,582.4	4,576.4	8.4	8.8	-161.72	-55.4	230.7	380.6	364.6	16.02	23.760		
4,700.0	4,697.0	4,682.0	4,675.9	8.6	9.0	-161.71	-56.8	236.1	389.6	373.2	16.37	23.803		
4,800.0	4,796.9	4,781.6	4,775.3	8.8	9.2	-161.70	-58.2	241.4	398.6	381.9	16.72	23.843		
4,900.0	4,896.8	4,881.2	4,874.7	9.0	9.4	-161.69	-59.6	246.8	407.7	390.6	17.07	23.882		
5,000.0	4,996.8	4,980.8	4,974.2	9.2	9.6	-161.68	-61.0	252.1	416.7	399.3	17.42	23.920		
5,100.0	5,096.7	5,080.4	5,073.6	9.4	9.8	-161.68	-62.4	257.5	425.7	407.9	17.77	23.956		

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 Grant-Hurt 1C-14H-G268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Grant-Hurt 1C-14H-G268	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													S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - Grant-Hurt 1E-14H-G268 - 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	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)								
5,200.0	5,196.6	5,180.0	5,173.1	9.6	10.0	-161.67	-63.8	262.9	434.7	416.6	18.12	23.991						
5,300.0	5,296.6	5,279.6	5,272.5	9.8	10.2	-161.66	-65.2	268.2	443.8	425.3	18.47	24.024						
5,400.0	5,396.5	5,379.2	5,371.9	9.9	10.4	-161.66	-66.6	273.6	452.8	434.0	18.82	24.056						
5,500.0	5,496.4	5,478.8	5,471.4	10.1	10.6	-161.65	-68.0	278.9	461.8	442.6	19.17	24.087						
5,600.0	5,596.3	5,578.3	5,570.8	10.3	10.8	-161.64	-69.4	284.3	470.8	451.3	19.52	24.117						
5,700.0	5,696.3	5,677.9	5,670.2	10.5	11.0	-161.64	-70.8	289.7	479.9	460.0	19.87	24.146						
5,800.0	5,796.2	5,777.5	5,769.7	10.7	11.2	-161.63	-72.2	295.0	488.9	468.7	20.22	24.173						
5,900.0	5,896.1	5,877.1	5,869.1	10.9	11.4	-161.63	-73.6	300.4	497.9	477.3	20.57	24.200						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1C-14H-G268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Grant-Hurt 1C-14H-G268	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 S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - Grant-Hurt 1F-14H-G268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	90.01	0.0	28.0	28.0					
100.0	100.0	100.0	100.0	0.1	0.1	90.01	0.0	28.0	28.0	27.7	0.26	106.792		
200.0	200.0	200.0	200.0	0.3	0.3	90.01	0.0	28.0	28.0	27.3	0.61	45.768		
300.0	300.0	300.0	300.0	0.5	0.5	90.01	0.0	28.0	28.0	27.0	0.96	29.125		
400.0	400.0	400.0	400.0	0.7	0.7	90.01	0.0	28.0	28.0	26.6	1.31	21.358 CC, ES		
500.0	500.0	499.5	499.5	0.8	0.8	-163.64	-0.1	28.8	29.7	28.0	1.66	17.895		
600.0	600.0	598.8	598.8	1.0	1.0	-164.19	-0.5	31.4	34.7	32.7	2.00	17.329 SF		
700.0	699.9	697.8	697.7	1.2	1.2	-164.64	-1.1	35.6	42.6	40.3	2.35	18.128		
800.0	799.8	796.6	796.3	1.4	1.4	-164.63	-2.0	41.5	52.3	49.6	2.70	19.360		
900.0	899.7	894.9	894.3	1.6	1.6	-164.37	-3.1	49.1	63.6	60.5	3.05	20.867		
1,000.0	999.7	993.2	992.2	1.7	1.8	-163.99	-4.5	58.3	76.5	73.1	3.39	22.545		
1,100.0	1,099.6	1,092.3	1,090.8	1.9	2.0	-163.67	-5.9	68.0	90.0	86.2	3.74	24.029		
1,200.0	1,199.5	1,191.4	1,189.4	2.1	2.3	-163.44	-7.3	77.7	103.4	99.3	4.09	25.260		
1,300.0	1,299.5	1,290.5	1,288.0	2.3	2.5	-163.25	-8.8	87.4	116.8	112.4	4.44	26.298		
1,400.0	1,399.4	1,389.6	1,386.6	2.5	2.7	-163.11	-10.2	97.1	130.2	125.4	4.79	27.185		
1,500.0	1,499.3	1,488.7	1,485.2	2.7	3.0	-162.99	-11.6	106.8	143.7	138.5	5.14	27.951		
1,600.0	1,599.2	1,587.8	1,583.8	2.9	3.2	-162.89	-13.1	116.5	157.1	151.6	5.49	28.620		
1,700.0	1,699.2	1,686.9	1,682.4	3.0	3.4	-162.81	-14.5	126.2	170.5	164.7	5.84	29.209		
1,800.0	1,799.1	1,786.0	1,781.0	3.2	3.7	-162.74	-15.9	136.0	183.9	177.7	6.19	29.731		
1,900.0	1,899.0	1,885.1	1,879.6	3.4	3.9	-162.68	-17.4	145.7	197.4	190.8	6.54	30.198		
2,000.0	1,998.9	1,984.2	1,978.2	3.6	4.1	-162.63	-18.8	155.4	210.8	203.9	6.88	30.617		
2,100.0	2,098.9	2,083.3	2,076.9	3.8	4.4	-162.58	-20.2	165.1	224.2	217.0	7.23	30.996		
2,200.0	2,198.8	2,182.4	2,175.5	4.0	4.6	-162.54	-21.6	174.8	237.6	230.1	7.58	31.340		
2,300.0	2,298.7	2,281.5	2,274.1	4.2	4.9	-162.50	-23.1	184.5	251.1	243.1	7.93	31.654		
2,400.0	2,398.7	2,380.6	2,372.7	4.3	5.1	-162.47	-24.5	194.2	264.5	256.2	8.28	31.941		
2,500.0	2,498.6	2,479.7	2,471.3	4.5	5.3	-162.44	-25.9	203.9	277.9	269.3	8.63	32.205		
2,600.0	2,598.5	2,578.7	2,569.9	4.7	5.6	-162.41	-27.4	213.7	291.4	282.4	8.98	32.449		
2,700.0	2,698.4	2,677.8	2,668.5	4.9	5.8	-162.39	-28.8	223.4	304.8	295.5	9.33	32.674		
2,800.0	2,798.4	2,776.9	2,767.1	5.1	6.1	-162.37	-30.2	233.1	318.2	308.5	9.68	32.883		
2,900.0	2,898.3	2,876.0	2,865.7	5.3	6.3	-162.35	-31.7	242.8	331.6	321.6	10.03	33.077		
3,000.0	2,998.2	2,975.1	2,964.3	5.5	6.6	-162.33	-33.1	252.5	345.1	334.7	10.38	33.259		
3,100.0	3,098.2	3,074.2	3,062.9	5.6	6.8	-162.31	-34.5	262.2	358.5	347.8	10.72	33.428		
3,200.0	3,198.1	3,173.3	3,161.5	5.8	7.0	-162.29	-36.0	271.9	371.9	360.8	11.07	33.587		
3,300.0	3,298.0	3,272.4	3,260.1	6.0	7.3	-162.28	-37.4	281.6	385.3	373.9	11.42	33.736		
3,400.0	3,397.9	3,371.5	3,358.7	6.2	7.5	-162.26	-38.8	291.4	398.8	387.0	11.77	33.877		
3,500.0	3,497.9	3,470.6	3,457.4	6.4	7.8	-162.25	-40.3	301.1	412.2	400.1	12.12	34.009		
3,600.0	3,597.8	3,569.7	3,556.0	6.6	8.0	-162.24	-41.7	310.8	425.6	413.2	12.47	34.134		
3,700.0	3,697.7	3,668.8	3,654.6	6.8	8.3	-162.22	-43.1	320.5	439.1	426.2	12.82	34.252		
3,800.0	3,797.6	3,767.9	3,753.2	7.0	8.5	-162.21	-44.6	330.2	452.5	439.3	13.17	34.363		
3,900.0	3,897.6	3,867.0	3,851.8	7.1	8.7	-162.20	-46.0	339.9	465.9	452.4	13.52	34.469		
4,000.0	3,997.5	3,966.1	3,950.4	7.3	9.0	-162.19	-47.4	349.6	479.3	465.5	13.87	34.570		
4,100.0	4,097.4	4,065.2	4,049.0	7.5	9.2	-162.18	-48.8	359.3	492.8	478.6	14.21	34.666		

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 Grant-Hurt 1C-14H-G268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Grant-Hurt 1C-14H-G268	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 S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - Grant-Hurt 1G-14H-G268 - 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	90.00	0.0	39.1	39.1						
100.0	100.0	100.0	100.0	0.1	0.1	90.00	0.0	39.1	39.1	38.9	0.26	149.509			
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	39.1	39.1	38.5	0.61	64.075			
300.0	300.0	300.0	300.0	0.5	0.5	90.00	0.0	39.1	39.1	38.2	0.96	40.775 CC, ES			
400.0	400.0	399.3	399.3	0.7	0.7	90.11	-0.1	40.0	40.0	38.7	1.31	30.573			
500.0	500.0	498.5	498.5	0.8	0.8	-163.32	-0.3	42.6	43.4	41.8	1.66	26.235			
600.0	600.0	597.5	597.4	1.0	1.0	-163.71	-0.7	46.8	50.2	48.2	2.00	25.093 SF			
700.0	699.9	696.1	695.8	1.2	1.2	-164.16	-1.2	52.8	59.9	57.5	2.35	25.490			
800.0	799.8	794.3	793.7	1.4	1.4	-164.34	-1.9	60.4	71.2	68.6	2.70	26.429			
900.0	899.7	892.2	891.1	1.6	1.6	-164.35	-2.8	69.6	84.3	81.3	3.04	27.714			
1,000.0	999.7	989.5	987.8	1.7	1.9	-164.25	-3.8	80.4	99.0	95.6	3.39	29.237			
1,100.0	1,099.6	1,086.4	1,083.9	1.9	2.1	-164.09	-4.9	92.8	115.4	111.7	3.73	30.932			
1,200.0	1,199.5	1,182.6	1,179.1	2.1	2.4	-163.90	-6.1	106.7	133.5	129.4	4.08	32.753			
1,300.0	1,299.5	1,280.5	1,275.9	2.3	2.7	-163.71	-7.5	121.9	152.5	148.1	4.42	34.499			
1,400.0	1,399.4	1,378.7	1,372.8	2.5	3.0	-163.56	-8.9	137.1	171.6	166.8	4.77	35.991			
1,500.0	1,499.3	1,476.9	1,469.8	2.7	3.3	-163.45	-10.3	152.3	190.7	185.6	5.11	37.280			
1,600.0	1,599.2	1,575.0	1,566.8	2.9	3.6	-163.35	-11.7	167.4	209.8	204.3	5.46	38.406			
1,700.0	1,699.2	1,673.2	1,663.7	3.0	3.9	-163.27	-13.1	182.6	228.8	223.0	5.81	39.398			
1,800.0	1,799.1	1,771.3	1,760.7	3.2	4.2	-163.20	-14.4	197.8	247.9	241.8	6.15	40.279			
1,900.0	1,899.0	1,869.5	1,857.7	3.4	4.5	-163.15	-15.8	213.0	267.0	260.5	6.50	41.065			
2,000.0	1,998.9	1,967.7	1,954.6	3.6	4.9	-163.10	-17.2	228.2	286.1	279.2	6.85	41.772			
2,100.0	2,098.9	2,065.8	2,051.6	3.8	5.2	-163.05	-18.6	243.4	305.1	297.9	7.19	42.411			
2,200.0	2,198.8	2,164.0	2,148.6	4.0	5.5	-163.01	-20.0	258.6	324.2	316.7	7.54	42.991			
2,300.0	2,298.7	2,262.2	2,245.6	4.2	5.8	-162.98	-21.4	273.8	343.3	335.4	7.89	43.520			
2,400.0	2,398.7	2,360.3	2,342.5	4.3	6.1	-162.95	-22.7	289.0	362.4	354.1	8.23	44.005			
2,500.0	2,498.6	2,458.5	2,439.5	4.5	6.4	-162.92	-24.1	304.2	381.4	372.9	8.58	44.451			
2,600.0	2,598.5	2,556.7	2,536.5	4.7	6.7	-162.90	-25.5	319.4	400.5	391.6	8.93	44.862			
2,700.0	2,698.4	2,654.8	2,633.4	4.9	7.1	-162.87	-26.9	334.6	419.6	410.3	9.27	45.242			
2,800.0	2,798.4	2,753.0	2,730.4	5.1	7.4	-162.85	-28.3	349.8	438.7	429.0	9.62	45.595			
2,900.0	2,898.3	2,851.1	2,827.4	5.3	7.7	-162.83	-29.7	365.0	457.7	447.8	9.97	45.923			
3,000.0	2,998.2	2,949.3	2,924.3	5.5	8.0	-162.82	-31.0	380.2	476.8	466.5	10.31	46.230			
3,100.0	3,098.2	3,047.5	3,021.3	5.6	8.3	-162.80	-32.4	395.4	495.9	485.2	10.66	46.516			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1C-14H-G268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Grant-Hurt 1C-14H-G268	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 S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - Grant-Hurt 1H-14H-G268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total	Separation	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	50.3	50.3					
100.0	100.0	100.0	100.0	0.1	0.1	90.00	0.0	50.3	50.3	50.1	0.26	192.226		
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	50.3	50.3	49.7	0.61	82.383 CC, ES		
300.0	300.0	299.1	299.1	0.5	0.5	90.07	-0.1	51.2	51.2	50.2	0.96	53.359		
400.0	400.0	398.2	398.1	0.7	0.7	90.26	-0.2	53.7	53.8	52.5	1.31	40.995		
500.0	500.0	497.1	496.9	0.8	0.8	-163.11	-0.5	58.0	58.9	57.3	1.65	35.649		
600.0	600.0	595.6	595.3	1.0	1.0	-163.40	-1.0	63.9	67.5	65.5	2.00	33.744		
700.0	699.9	693.7	693.1	1.2	1.3	-163.78	-1.5	71.5	78.8	76.4	2.34	33.601 SF		
800.0	799.8	791.4	790.4	1.4	1.5	-163.99	-2.1	80.7	91.9	89.2	2.69	34.140		
900.0	899.7	888.7	887.0	1.6	1.7	-164.07	-2.9	91.6	106.6	103.6	3.04	35.118		
1,000.0	999.7	985.4	982.9	1.7	2.0	-164.06	-3.7	103.9	123.0	119.6	3.38	36.398		
1,100.0	1,099.6	1,081.5	1,078.1	1.9	2.3	-164.01	-4.7	117.8	141.1	137.3	3.72	37.896		
1,200.0	1,199.5	1,177.1	1,172.3	2.1	2.6	-163.92	-5.8	133.2	160.8	156.7	4.06	39.554		
1,300.0	1,299.5	1,271.9	1,265.7	2.3	2.9	-163.81	-7.0	150.1	182.1	177.7	4.40	41.335		
1,400.0	1,399.4	1,366.1	1,358.1	2.5	3.3	-163.68	-8.2	168.3	205.0	200.2	4.74	43.210		
1,500.0	1,499.3	1,461.1	1,451.0	2.7	3.6	-163.56	-9.6	188.1	229.4	224.3	5.08	45.106		
1,600.0	1,599.2	1,558.1	1,545.7	2.9	4.0	-163.45	-11.1	208.5	254.0	248.5	5.43	46.783		
1,700.0	1,699.2	1,655.0	1,640.5	3.0	4.4	-163.36	-12.5	228.9	278.6	272.8	5.77	48.261		
1,800.0	1,799.1	1,751.9	1,735.2	3.2	4.8	-163.29	-13.9	249.3	303.2	297.1	6.12	49.573		
1,900.0	1,899.0	1,848.8	1,830.0	3.4	5.2	-163.23	-15.3	269.7	327.8	321.4	6.46	50.746		
2,000.0	1,998.9	1,945.7	1,924.7	3.6	5.6	-163.17	-16.8	290.1	352.4	345.6	6.80	51.801		
2,100.0	2,098.9	2,042.7	2,019.4	3.8	6.0	-163.12	-18.2	310.6	377.0	369.9	7.15	52.755		
2,200.0	2,198.8	2,139.6	2,114.2	4.0	6.4	-163.08	-19.6	331.0	401.7	394.2	7.49	53.621		
2,300.0	2,298.7	2,236.5	2,208.9	4.2	6.8	-163.05	-21.0	351.4	426.3	418.4	7.83	54.411		
2,400.0	2,398.7	2,333.4	2,303.6	4.3	7.1	-163.01	-22.5	371.8	450.9	442.7	8.18	55.136		
2,500.0	2,498.6	2,430.4	2,398.4	4.5	7.5	-162.99	-23.9	392.2	475.5	467.0	8.52	55.801		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1C-14H-G268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Grant-Hurt 1C-14H-G268	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 S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - HURT 33-11 (EXISTING) - EXISTING - SURVEYS											Offset Site Error:		0.0 ft	
Survey Program: 100-MWD											Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
11,600.0	7,400.0	7,334.7	7,332.9	79.5	12.8	-87.42	4,689.2	-605.4	447.4	355.3	92.12	4.856	CC, ES, SF	
11,700.0	7,400.0	7,339.4	7,337.6	81.2	12.8	-88.29	4,689.4	-605.4	382.3	288.4	93.91	4.071		
11,800.0	7,400.0	7,344.2	7,342.4	83.0	12.8	-89.15	4,689.6	-605.4	334.8	239.1	95.68	3.499		
11,900.0	7,400.0	7,349.0	7,347.2	84.7	12.9	-90.03	4,689.8	-605.4	313.0	215.6	97.43	3.213		
11,920.7	7,400.0	7,350.0	7,348.1	85.1	12.9	-90.21	4,689.9	-605.4	312.4	214.6	97.79	3.194		
12,000.0	7,400.0	7,353.8	7,352.0	86.4	12.9	-90.91	4,690.1	-605.4	322.3	223.1	99.16	3.250		
12,100.0	7,400.0	7,358.6	7,356.8	88.2	12.9	-91.80	4,690.3	-605.4	360.1	259.2	100.87	3.570		
12,200.0	7,400.0	7,363.5	7,361.7	89.9	12.9	-92.69	4,690.6	-605.3	418.8	316.3	102.56	4.084		
12,300.0	7,400.0	7,368.4	7,366.5	91.6	12.9	-93.58	4,690.8	-605.3	491.1	386.8	104.22	4.712		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1C-14H-G268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Grant-Hurt 1C-14H-G268	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 S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - HURT 34-11 (EXISTING) - EXISTING - SURVEYS												Offset Site Error:	0.0 ft
Survey Program: 100-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
10,000.0	7,400.0	7,355.1	7,353.1	52.0	13.1	-89.74	3,011.8	-694.2	481.8	417.1	64.77	7.439	
10,100.0	7,400.0	7,356.4	7,354.4	53.7	13.1	-89.92	3,011.8	-694.2	439.8	373.4	66.47	6.617	
10,200.0	7,400.0	7,357.7	7,355.8	55.4	13.1	-90.10	3,011.9	-694.2	418.1	349.9	68.18	6.131	
10,243.5	7,400.0	7,358.3	7,356.3	56.2	13.1	-90.18	3,011.9	-694.2	415.8	346.9	68.93	6.032 CC, ES	
10,300.0	7,400.0	7,359.0	7,357.1	57.1	13.1	-90.28	3,011.9	-694.2	419.6	349.7	69.90	6.004 SF	
10,400.0	7,400.0	7,360.3	7,358.4	58.9	13.1	-90.46	3,011.9	-694.2	444.3	372.7	71.61	6.204	
10,500.0	7,400.0	7,361.6	7,359.7	60.6	13.1	-90.64	3,011.9	-694.2	488.6	415.2	73.32	6.663	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1C-14H-G268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Grant-Hurt 1C-14H-G268	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		S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - STANLEY OLSON 1 (EXISTING) - WHITEWING WE										Offset Site Error:		0.0 ft	
Survey Program:		7990-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			
7,700.0	7,399.1	7,365.1	7,365.1	16.6	12.9	87.13	797.8	97.9	481.0	452.2	28.80	16.703			
7,800.0	7,400.0	7,366.0	7,366.0	17.7	12.9	90.00	797.8	97.9	420.6	390.6	29.98	14.030			
7,900.0	7,400.0	7,366.0	7,366.0	18.9	12.9	90.00	797.8	97.9	377.3	346.1	31.22	12.085			
8,000.0	7,400.0	7,366.0	7,366.0	20.2	12.9	90.00	797.8	97.9	357.6	325.1	32.55	10.987			
8,022.5	7,400.0	7,366.0	7,366.0	20.5	12.9	90.00	797.8	97.9	356.9	324.0	32.86	10.861 CC, ES			
8,100.0	7,400.0	7,366.0	7,366.0	21.5	12.9	90.00	797.8	97.9	365.2	331.3	33.94	10.761 SF			
8,200.0	7,400.0	7,366.0	7,366.0	23.0	12.9	90.00	797.8	97.9	398.6	363.2	35.38	11.267			
8,300.0	7,400.0	7,366.0	7,366.0	24.4	12.9	90.00	797.8	97.9	452.1	415.2	36.86	12.266			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1C-14H-G268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4913.0ft (Original Well Elev)
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	WELL @ 4913.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Grant-Hurt 1C-14H-G268	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 @ 4913.0ft (Original Well Elev)
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °

Coordinates are relative to: Grant-Hurt 1C-14H-G268
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.34°

