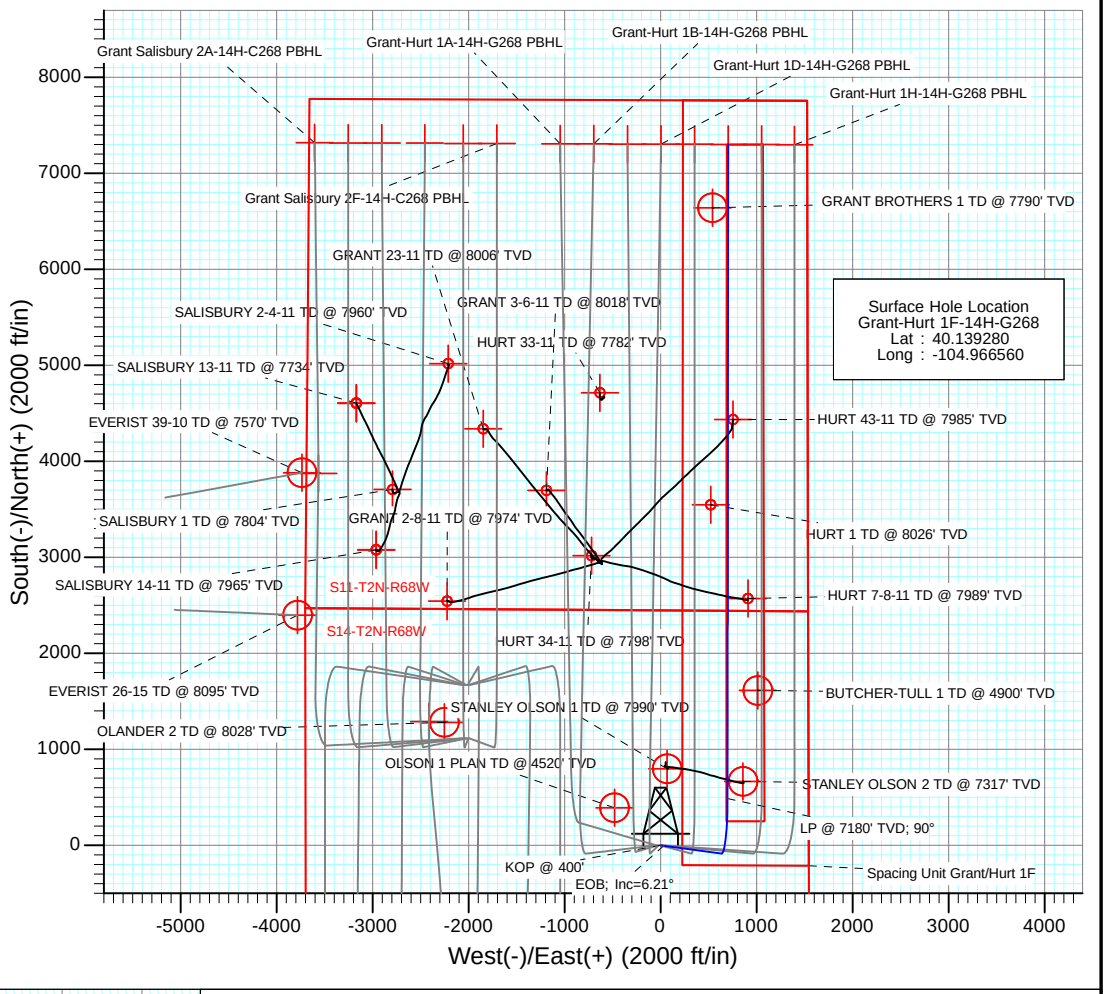
encana natural gas

Project: DJ Wattenberg
Site: S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)
Well: Grant-Hurt 1F-14H-G268
Wellbore: Hz
Design: Plan #2

CATHEDRAL

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	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	1021.4	6.21	97.76	1020.2	-4.5	33.4	1.00	97.76	-4.5	
4	6636.3	6.21	97.76	6602.1	-86.6	635.5	0.00	0.00	-86.6	
5	7544.6	90.00	0.05	7180.0	486.2	698.4	10.00	-97.67	486.2	
6	14358.6	90.00	0.05	7180.0	7300.2	704.3	0.00	0.00	7300.2	Grant-Hurt 1F-14H-G268 PBHL



DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Grant-Hurt 1F-14H-G268 PBHL	7300.2	704.3	1301338.77	3149805.73	40.159320	-104.964040

T M Azimuths to True North
Magnetic North: 8.68°

Magnetic Field
Strength: 52758.8snT
Dip Angle: 66.74°
Date: 6/24/2013
Model: IGRF2010

Plan #2
Grant-Hurt 1F-14H-G268
13xxx; LR
WELL @ 4913.0ft (Original Well Elev)
Ground Elevation @ 4888.0
North American Datum 1983
Well Grant-Hurt 1F-14H-G268, True North

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
263.0	263.0	Fox Hills - BASE
4026.0	4045.0	Sussex
4180.0	4199.9	Sussex Marker
4716.0	4739.1	Shannon
6000.0	6030.6	Teepee Buttes (*if present)
7059.0	7164.2	Sharon Springs
7118.0	7274.8	Niobrara
7170.0	7437.1	B Chalk

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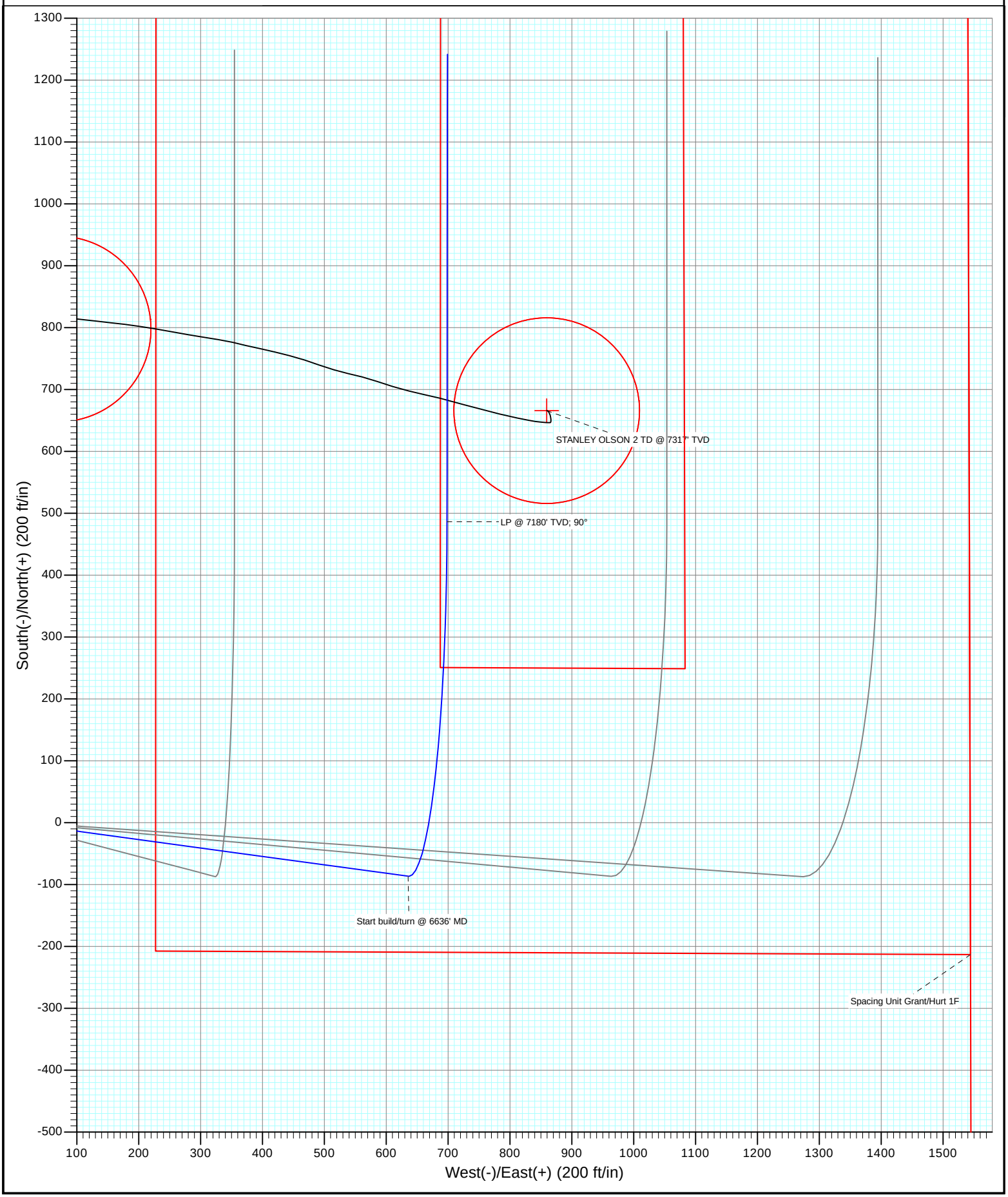

Planning Report

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-14H-G268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Project DJ Wattenberg

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

Site 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 1F-14H-G268

Well Position	**+N/-S**	0.0 ft	**Northing:**	1,294,034.45 ft	**Latitude:**	40.139280
	+E/-W	0.0 ft	**Easting:**	3,149,145.32 ft	**Longitude:**	-104.966560
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 #2

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	0.00

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,021.4	6.21	97.76	1,020.2	-4.5	33.4	1.00	1.00	0.00	97.76	
6,636.3	6.21	97.76	6,602.1	-86.6	635.5	0.00	0.00	0.00	0.00	
7,544.6	90.00	0.05	7,180.0	486.2	698.4	10.00	9.22	-10.76	-97.67	
14,358.6	90.00	0.05	7,180.0	7,300.2	704.3	0.00	0.00	0.00	0.00	Grant-Hurt 1F-14H-G:

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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 1F-14H-G268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
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	97.76	500.0	-0.1	0.9	-0.1	1.00	1.00	
600.0	2.00	97.76	600.0	-0.5	3.5	-0.5	1.00	1.00	
700.0	3.00	97.76	699.9	-1.1	7.8	-1.1	1.00	1.00	
800.0	4.00	97.76	799.7	-1.9	13.8	-1.9	1.00	1.00	
900.0	5.00	97.76	899.4	-2.9	21.6	-2.9	1.00	1.00	
1,000.0	6.00	97.76	998.9	-4.2	31.1	-4.2	1.00	1.00	
1,021.4	6.21	97.76	1,020.2	-4.5	33.4	-4.5	1.00	1.00	EOB; Inc=6.21°
1,100.0	6.21	97.76	1,098.3	-5.7	41.8	-5.7	0.00	0.00	
1,200.0	6.21	97.76	1,197.7	-7.2	52.5	-7.2	0.00	0.00	
1,300.0	6.21	97.76	1,297.1	-8.6	63.2	-8.6	0.00	0.00	
1,400.0	6.21	97.76	1,396.6	-10.1	74.0	-10.1	0.00	0.00	
1,500.0	6.21	97.76	1,496.0	-11.5	84.7	-11.5	0.00	0.00	
1,600.0	6.21	97.76	1,595.4	-13.0	95.4	-13.0	0.00	0.00	
1,700.0	6.21	97.76	1,694.8	-14.5	106.1	-14.5	0.00	0.00	
1,800.0	6.21	97.76	1,794.2	-15.9	116.9	-15.9	0.00	0.00	
1,900.0	6.21	97.76	1,893.6	-17.4	127.6	-17.4	0.00	0.00	
2,000.0	6.21	97.76	1,993.0	-18.9	138.3	-18.9	0.00	0.00	
2,100.0	6.21	97.76	2,092.4	-20.3	149.0	-20.3	0.00	0.00	
2,200.0	6.21	97.76	2,191.9	-21.8	159.8	-21.8	0.00	0.00	
2,300.0	6.21	97.76	2,291.3	-23.2	170.5	-23.2	0.00	0.00	
2,400.0	6.21	97.76	2,390.7	-24.7	181.2	-24.7	0.00	0.00	
2,500.0	6.21	97.76	2,490.1	-26.2	191.9	-26.2	0.00	0.00	
2,600.0	6.21	97.76	2,589.5	-27.6	202.7	-27.6	0.00	0.00	
2,700.0	6.21	97.76	2,688.9	-29.1	213.4	-29.1	0.00	0.00	
2,800.0	6.21	97.76	2,788.3	-30.5	224.1	-30.5	0.00	0.00	
2,900.0	6.21	97.76	2,887.7	-32.0	234.8	-32.0	0.00	0.00	
3,000.0	6.21	97.76	2,987.2	-33.5	245.6	-33.5	0.00	0.00	
3,100.0	6.21	97.76	3,086.6	-34.9	256.3	-34.9	0.00	0.00	
3,200.0	6.21	97.76	3,186.0	-36.4	267.0	-36.4	0.00	0.00	
3,300.0	6.21	97.76	3,285.4	-37.9	277.7	-37.9	0.00	0.00	
3,400.0	6.21	97.76	3,384.8	-39.3	288.5	-39.3	0.00	0.00	
3,500.0	6.21	97.76	3,484.2	-40.8	299.2	-40.8	0.00	0.00	
3,600.0	6.21	97.76	3,583.6	-42.2	309.9	-42.2	0.00	0.00	
3,700.0	6.21	97.76	3,683.0	-43.7	320.6	-43.7	0.00	0.00	
3,800.0	6.21	97.76	3,782.5	-45.2	331.4	-45.2	0.00	0.00	
3,900.0	6.21	97.76	3,881.9	-46.6	342.1	-46.6	0.00	0.00	
4,000.0	6.21	97.76	3,981.3	-48.1	352.8	-48.1	0.00	0.00	
4,045.0	6.21	97.76	4,026.0	-48.7	357.6	-48.7	0.00	0.00	Sussex
4,100.0	6.21	97.76	4,080.7	-49.5	363.5	-49.5	0.00	0.00	
4,199.9	6.21	97.76	4,180.0	-51.0	374.2	-51.0	0.00	0.00	Sussex Marker
4,200.0	6.21	97.76	4,180.1	-51.0	374.3	-51.0	0.00	0.00	
4,300.0	6.21	97.76	4,279.5	-52.5	385.0	-52.5	0.00	0.00	
4,400.0	6.21	97.76	4,378.9	-53.9	395.7	-53.9	0.00	0.00	
4,500.0	6.21	97.76	4,478.3	-55.4	406.4	-55.4	0.00	0.00	
4,600.0	6.21	97.76	4,577.8	-56.9	417.2	-56.9	0.00	0.00	
4,700.0	6.21	97.76	4,677.2	-58.3	427.9	-58.3	0.00	0.00	

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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 1F-14H-G268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,739.1	6.21	97.76	4,716.0	-58.9	432.1	-58.9	0.00	0.00	Shannon
4,800.0	6.21	97.76	4,776.6	-59.8	438.6	-59.8	0.00	0.00	
4,900.0	6.21	97.76	4,876.0	-61.2	449.3	-61.2	0.00	0.00	
5,000.0	6.21	97.76	4,975.4	-62.7	460.1	-62.7	0.00	0.00	
5,100.0	6.21	97.76	5,074.8	-64.2	470.8	-64.2	0.00	0.00	
5,200.0	6.21	97.76	5,174.2	-65.6	481.5	-65.6	0.00	0.00	
5,300.0	6.21	97.76	5,273.6	-67.1	492.2	-67.1	0.00	0.00	
5,400.0	6.21	97.76	5,373.1	-68.5	502.9	-68.5	0.00	0.00	
5,500.0	6.21	97.76	5,472.5	-70.0	513.7	-70.0	0.00	0.00	
5,600.0	6.21	97.76	5,571.9	-71.5	524.4	-71.5	0.00	0.00	
5,700.0	6.21	97.76	5,671.3	-72.9	535.1	-72.9	0.00	0.00	
5,800.0	6.21	97.76	5,770.7	-74.4	545.8	-74.4	0.00	0.00	
5,900.0	6.21	97.76	5,870.1	-75.9	556.6	-75.9	0.00	0.00	
6,000.0	6.21	97.76	5,969.5	-77.3	567.3	-77.3	0.00	0.00	
6,030.6	6.21	97.76	6,000.0	-77.8	570.6	-77.8	0.00	0.00	Teepee Buttes (*if present)
6,100.0	6.21	97.76	6,068.9	-78.8	578.0	-78.8	0.00	0.00	
6,200.0	6.21	97.76	6,168.4	-80.2	588.7	-80.2	0.00	0.00	
6,300.0	6.21	97.76	6,267.8	-81.7	599.5	-81.7	0.00	0.00	
6,400.0	6.21	97.76	6,367.2	-83.2	610.2	-83.2	0.00	0.00	
6,500.0	6.21	97.76	6,466.6	-84.6	620.9	-84.6	0.00	0.00	
6,600.0	6.21	97.76	6,566.0	-86.1	631.6	-86.1	0.00	0.00	
6,636.3	6.21	97.76	6,602.1	-86.6	635.5	-86.6	0.00	0.00	Start build/turn @ 6636' MD
6,700.0	8.28	47.93	6,665.3	-84.0	642.4	-84.0	10.00	3.24	
6,800.0	16.69	21.15	6,763.0	-65.8	652.9	-65.8	10.00	8.41	
6,900.0	26.22	12.70	6,855.9	-30.7	663.0	-30.7	10.00	9.54	
7,000.0	36.00	8.59	6,941.5	20.0	672.2	20.0	10.00	9.78	
7,100.0	45.86	6.06	7,016.9	84.9	680.4	84.9	10.00	9.86	
7,164.2	52.22	4.85	7,059.0	133.2	685.0	133.2	10.00	9.90	Sharon Springs
7,200.0	55.77	4.26	7,080.0	162.0	687.3	162.0	10.00	9.91	
7,274.8	63.19	3.18	7,118.0	226.3	691.5	226.3	10.00	9.92	Niobrara
7,300.0	65.69	2.84	7,128.9	249.0	692.7	249.0	10.00	9.93	
7,400.0	75.63	1.63	7,162.0	343.2	696.3	343.2	10.00	9.93	
7,437.1	79.31	1.22	7,170.0	379.3	697.2	379.3	10.00	9.94	B Chalk
7,500.0	85.57	0.53	7,178.3	441.7	698.2	441.7	10.00	9.94	
7,544.6	90.00	0.05	7,180.0	486.2	698.4	486.2	10.00	9.94	LP @ 7180' TVD; 90°
7,600.0	90.00	0.05	7,180.0	541.6	698.4	541.6	0.00	0.00	
7,700.0	90.00	0.05	7,180.0	641.6	698.5	641.6	0.00	0.00	
7,800.0	90.00	0.05	7,180.0	741.6	698.6	741.6	0.00	0.00	
7,900.0	90.00	0.05	7,180.0	841.6	698.7	841.6	0.00	0.00	
8,000.0	90.00	0.05	7,180.0	941.6	698.8	941.6	0.00	0.00	
8,100.0	90.00	0.05	7,180.0	1,041.6	698.9	1,041.6	0.00	0.00	
8,200.0	90.00	0.05	7,180.0	1,141.6	699.0	1,141.6	0.00	0.00	
8,300.0	90.00	0.05	7,180.0	1,241.6	699.1	1,241.6	0.00	0.00	
8,400.0	90.00	0.05	7,180.0	1,341.6	699.1	1,341.6	0.00	0.00	
8,500.0	90.00	0.05	7,180.0	1,441.6	699.2	1,441.6	0.00	0.00	
8,600.0	90.00	0.05	7,180.0	1,541.6	699.3	1,541.6	0.00	0.00	
8,700.0	90.00	0.05	7,180.0	1,641.6	699.4	1,641.6	0.00	0.00	
8,800.0	90.00	0.05	7,180.0	1,741.6	699.5	1,741.6	0.00	0.00	
8,900.0	90.00	0.05	7,180.0	1,841.6	699.6	1,841.6	0.00	0.00	
9,000.0	90.00	0.05	7,180.0	1,941.6	699.7	1,941.6	0.00	0.00	
9,100.0	90.00	0.05	7,180.0	2,041.6	699.8	2,041.6	0.00	0.00	
9,200.0	90.00	0.05	7,180.0	2,141.6	699.8	2,141.6	0.00	0.00	

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Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	**North Reference:**	True
Well:	Grant-Hurt 1F-14H-G268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
9,300.0	90.00	0.05	7,180.0	2,241.6	699.9	2,241.6	0.00	0.00	
9,400.0	90.00	0.05	7,180.0	2,341.6	700.0	2,341.6	0.00	0.00	
9,500.0	90.00	0.05	7,180.0	2,441.6	700.1	2,441.6	0.00	0.00	
9,600.0	90.00	0.05	7,180.0	2,541.6	700.2	2,541.6	0.00	0.00	
9,700.0	90.00	0.05	7,180.0	2,641.6	700.3	2,641.6	0.00	0.00	
9,800.0	90.00	0.05	7,180.0	2,741.6	700.4	2,741.6	0.00	0.00	
9,900.0	90.00	0.05	7,180.0	2,841.6	700.4	2,841.6	0.00	0.00	
10,000.0	90.00	0.05	7,180.0	2,941.6	700.5	2,941.6	0.00	0.00	
10,100.0	90.00	0.05	7,180.0	3,041.6	700.6	3,041.6	0.00	0.00	
10,200.0	90.00	0.05	7,180.0	3,141.6	700.7	3,141.6	0.00	0.00	
10,300.0	90.00	0.05	7,180.0	3,241.6	700.8	3,241.6	0.00	0.00	
10,400.0	90.00	0.05	7,180.0	3,341.6	700.9	3,341.6	0.00	0.00	
10,500.0	90.00	0.05	7,180.0	3,441.6	701.0	3,441.6	0.00	0.00	
10,600.0	90.00	0.05	7,180.0	3,541.6	701.1	3,541.6	0.00	0.00	
10,700.0	90.00	0.05	7,180.0	3,641.6	701.1	3,641.6	0.00	0.00	
10,800.0	90.00	0.05	7,180.0	3,741.6	701.2	3,741.6	0.00	0.00	
10,900.0	90.00	0.05	7,180.0	3,841.6	701.3	3,841.6	0.00	0.00	
11,000.0	90.00	0.05	7,180.0	3,941.6	701.4	3,941.6	0.00	0.00	
11,100.0	90.00	0.05	7,180.0	4,041.6	701.5	4,041.6	0.00	0.00	
11,200.0	90.00	0.05	7,180.0	4,141.6	701.6	4,141.6	0.00	0.00	
11,300.0	90.00	0.05	7,180.0	4,241.6	701.7	4,241.6	0.00	0.00	
11,400.0	90.00	0.05	7,180.0	4,341.6	701.8	4,341.6	0.00	0.00	
11,500.0	90.00	0.05	7,180.0	4,441.6	701.8	4,441.6	0.00	0.00	
11,600.0	90.00	0.05	7,180.0	4,541.6	701.9	4,541.6	0.00	0.00	
11,700.0	90.00	0.05	7,180.0	4,641.6	702.0	4,641.6	0.00	0.00	
11,800.0	90.00	0.05	7,180.0	4,741.6	702.1	4,741.6	0.00	0.00	
11,900.0	90.00	0.05	7,180.0	4,841.6	702.2	4,841.6	0.00	0.00	
12,000.0	90.00	0.05	7,180.0	4,941.6	702.3	4,941.6	0.00	0.00	
12,100.0	90.00	0.05	7,180.0	5,041.6	702.4	5,041.6	0.00	0.00	
12,200.0	90.00	0.05	7,180.0	5,141.6	702.5	5,141.6	0.00	0.00	
12,300.0	90.00	0.05	7,180.0	5,241.6	702.5	5,241.6	0.00	0.00	
12,400.0	90.00	0.05	7,180.0	5,341.6	702.6	5,341.6	0.00	0.00	
12,500.0	90.00	0.05	7,180.0	5,441.6	702.7	5,441.6	0.00	0.00	
12,600.0	90.00	0.05	7,180.0	5,541.6	702.8	5,541.6	0.00	0.00	
12,700.0	90.00	0.05	7,180.0	5,641.6	702.9	5,641.6	0.00	0.00	
12,800.0	90.00	0.05	7,180.0	5,741.6	703.0	5,741.6	0.00	0.00	
12,900.0	90.00	0.05	7,180.0	5,841.6	703.1	5,841.6	0.00	0.00	
13,000.0	90.00	0.05	7,180.0	5,941.6	703.2	5,941.6	0.00	0.00	
13,100.0	90.00	0.05	7,180.0	6,041.6	703.2	6,041.6	0.00	0.00	
13,200.0	90.00	0.05	7,180.0	6,141.6	703.3	6,141.6	0.00	0.00	
13,300.0	90.00	0.05	7,180.0	6,241.6	703.4	6,241.6	0.00	0.00	
13,400.0	90.00	0.05	7,180.0	6,341.6	703.5	6,341.6	0.00	0.00	
13,500.0	90.00	0.05	7,180.0	6,441.6	703.6	6,441.6	0.00	0.00	
13,600.0	90.00	0.05	7,180.0	6,541.6	703.7	6,541.6	0.00	0.00	
13,700.0	90.00	0.05	7,180.0	6,641.6	703.8	6,641.6	0.00	0.00	
13,800.0	90.00	0.05	7,180.0	6,741.6	703.9	6,741.6	0.00	0.00	
13,900.0	90.00	0.05	7,180.0	6,841.6	703.9	6,841.6	0.00	0.00	
14,000.0	90.00	0.05	7,180.0	6,941.6	704.0	6,941.6	0.00	0.00	
14,100.0	90.00	0.05	7,180.0	7,041.6	704.1	7,041.6	0.00	0.00	
14,200.0	90.00	0.05	7,180.0	7,141.6	704.2	7,141.6	0.00	0.00	
14,300.0	90.00	0.05	7,180.0	7,241.6	704.3	7,241.6	0.00	0.00	
14,358.6	90.00	0.05	7,180.0	7,300.2	704.3	7,300.2	0.00	0.00	TD at 14358.6

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-14H-G268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations

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 1F-14H-G26	0.00	0.00	7,180.0	7,300.2	704.3	1,301,338.77	3,149,805.73	40.159320	-104.964040
- plan hits target center									
- Point									

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
263.0	263.0	Fox Hills - BASE			
4,045.0	4,026.0	Sussex			
4,199.9	4,180.0	Sussex Marker			
4,739.1	4,716.0	Shannon			
6,030.6	6,000.0	Teepee Buttes (*if present)			
7,164.2	7,059.0	Sharon Springs			
7,274.8	7,118.0	Niobrara			
7,437.1	7,170.0	B Chalk			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
400.0	400.0	0.0	0.0	KOP @ 400'
1,021.4	1,020.2	-4.5	33.4	EOB; Inc=6.21°
6,636.3	6,602.1	-86.6	635.5	Start build/turn @ 6636' MD
7,544.6	7,180.0	486.2	698.4	LP @ 7180' TVD; 90°
14,358.6	7,180.0	7,300.2	704.3	TD at 14358.6

EnCana Oil & Gas (USA) Inc

DJ Wattenberg
S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)
Grant-Hurt 1F-14H-G268
Hz
Plan #2

Anticollision Report

19 September, 2013

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**Offset TVD Reference:**	Offset Datum

Reference	Plan #2

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	**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** 9/19/2013

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	14,357.9	Plan #2 (Hz)	Geolink MWD	Geolink MWD

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**Offset TVD Reference:**	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
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) - ENCANA WELL - SURVEYS						Out of range
GRANT 2-8-11 (EXISTING) - ENCANA WELL - SURVEY						Out of range
GRANT 3-6-11 (EXISTING) - ENCANA WELL - SURVEY						Out of range
GRANT BROTHERS 1 (EXISTING) - PDC WELL - NO S	13,700.2	7,112.0	163.5	32.3	1.246	Level 2, CC, ES, SF
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	47.5	46.9	77.806	CC, ES
Grant-Hurt 1A-14H-G268 - Hz - Plan #1	600.0	595.9	64.4	62.4	32.183	SF
Grant-Hurt 1B-14H-G268 - Hz - Plan #1	300.0	300.0	39.1	38.2	40.775	CC, ES
Grant-Hurt 1B-14H-G268 - Hz - Plan #1	600.0	597.5	50.3	48.3	25.142	SF
Grant-Hurt 1C-14H-G268 - Hz - Plan #1	400.0	400.0	28.0	26.6	21.358	CC, ES
Grant-Hurt 1C-14H-G268 - Hz - Plan #1	600.0	598.8	34.7	32.7	17.332	SF
Grant-Hurt 1D-14H-G268 - Hz - Plan #1	400.0	400.0	19.6	18.3	14.951	CC, ES
Grant-Hurt 1D-14H-G268 - Hz - Plan #1	600.0	600.0	23.0	21.0	11.480	SF
Grant-Hurt 1E-14H-G268 - Hz - Plan #1	400.0	400.0	8.4	7.1	6.408	CC, ES
Grant-Hurt 1E-14H-G268 - Hz - Plan #1	14,358.6	14,551.7	412.9	190.8	1.859	SF
Grant-Hurt 1G-14H-G268 - Hz - Plan #1	300.0	300.0	11.2	10.2	11.650	CC, ES
Grant-Hurt 1G-14H-G268 - Hz - Plan #1	14,358.6	14,621.0	412.9	191.0	1.861	SF
Grant-Hurt 1H-14H-G268 - Hz - Plan #1	200.0	200.0	22.4	21.8	36.615	CC, ES
Grant-Hurt 1H-14H-G268 - Hz - Plan #1	1,100.0	1,094.1	50.7	46.9	13.517	SF
HSR-BEAR 13-14A (EXISTING) - EXISTING - SURVEYS						Out of range
HURT 1 (EXISTING) - ENCANA WELL - NO SURVEYS	10,605.6	7,170.0	178.0	100.5	2.297	CC, ES, SF
HURT 33-11 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
HURT 34-11 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
HURT 43-11 (EXISTING) - ENCANA WELL - SURVEYS	11,432.6	7,496.7	46.3	-61.2	0.431	Level 1, CC, ES, SF
HURT 7-8-11 (EXISTING) - ENCANA WELL - SURVEYS	9,617.9	7,419.5	207.4	144.5	3.296	CC, ES, SF
MDM 33-14 (EXISTING) - EXISTING - NO SURVEYS						Out of range
MDM 34-14 (EXISTING) - EXISTING - NO SURVEYS						Out of range
NELSON 1 (EXISTING) - EXISTING - NO SURVEYS						Out of range

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**Offset TVD Reference:**	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)						
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						Out of range
STANLEY OLSON 2 (EXISTING) - WHITEWING WELL	7,724.1	7,264.1	162.3	131.1	5.204	CC, ES, SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - GRANT BROTHERS 1 (EXISTING) - PDC WELL - NO

Offset Site Error: 0.0 ft

Survey Program: 7790-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
13,300.0	7,180.0	7,112.0	7,112.0	112.5	12.4	-90.00	6,642.0	540.3	432.3	308.1	124.20	3.481	
13,400.0	7,180.0	7,112.0	7,112.0	114.2	12.4	-90.00	6,642.0	540.3	341.8	215.9	125.95	2.714	
13,500.0	7,180.0	7,112.0	7,112.0	115.9	12.4	-90.00	6,642.0	540.3	258.5	130.8	127.69	2.024	
13,600.0	7,180.0	7,112.0	7,112.0	117.7	12.4	-90.00	6,642.0	540.3	191.7	62.3	129.43	1.481	Level 3
13,700.0	7,180.0	7,112.0	7,112.0	119.4	12.4	-90.00	6,642.0	540.3	163.5	32.3	131.18	1.246	Level 2
13,700.2	7,180.0	7,112.0	7,112.0	119.4	12.4	-90.00	6,642.0	540.3	163.5	32.3	131.18	1.246	Level 2, CC, ES, SF
13,800.0	7,180.0	7,112.0	7,112.0	121.1	12.4	-90.00	6,642.0	540.3	191.5	58.6	132.92	1.441	Level 3
13,900.0	7,180.0	7,112.0	7,112.0	122.9	12.4	-90.00	6,642.0	540.3	258.2	123.5	134.67	1.917	
14,000.0	7,180.0	7,112.0	7,112.0	124.6	12.4	-90.00	6,642.0	540.3	341.5	205.1	136.41	2.503	
14,100.0	7,180.0	7,112.0	7,112.0	126.3	12.4	-90.00	6,642.0	540.3	431.9	293.8	138.16	3.126	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**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 Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-89.99	0.0	-47.5	47.5				
100.0	100.0	100.0	100.0	0.1	0.1	-89.99	0.0	-47.5	47.5	47.3	0.26	181.547	
200.0	200.0	200.0	200.0	0.3	0.3	-89.99	0.0	-47.5	47.5	46.9	0.61	77.806	CC, ES
300.0	300.0	299.2	299.2	0.5	0.5	-89.71	0.2	-48.4	48.4	47.4	0.96	50.410	
400.0	400.0	398.3	398.3	0.7	0.7	-88.90	1.0	-50.8	50.9	49.5	1.31	38.782	
500.0	500.0	497.3	497.2	0.8	0.8	174.60	2.2	-54.9	55.9	54.3	1.65	33.797	
600.0	600.0	595.9	595.6	1.0	1.0	176.10	3.9	-60.6	64.4	62.4	2.00	32.183	SF
700.0	699.9	694.0	693.4	1.2	1.3	177.57	6.0	-67.9	76.3	74.0	2.35	32.536	
800.0	799.7	791.4	790.4	1.4	1.5	178.85	8.6	-76.8	91.7	89.0	2.69	34.103	
900.0	899.4	887.9	886.3	1.6	1.7	179.90	11.7	-87.1	110.5	107.4	3.03	36.471	
1,000.0	998.9	983.9	981.5	1.8	2.0	-179.27	15.1	-98.8	132.5	129.2	3.37	39.376	
1,021.4	1,020.2	1,004.7	1,002.1	1.9	2.0	-179.11	15.9	-101.5	137.6	134.1	3.44	40.016	
1,100.0	1,098.3	1,081.1	1,077.8	2.1	2.2	-178.64	18.8	-111.2	156.3	152.6	3.71	42.153	
1,200.0	1,197.7	1,178.2	1,174.0	2.3	2.5	-178.19	22.4	-123.5	180.1	176.0	4.05	44.463	
1,300.0	1,297.1	1,275.3	1,270.3	2.5	2.8	-177.84	26.1	-135.9	203.9	199.5	4.39	46.415	
1,400.0	1,396.6	1,372.4	1,366.5	2.8	3.1	-177.56	29.7	-148.2	227.7	223.0	4.74	48.086	
1,500.0	1,496.0	1,469.5	1,462.8	3.0	3.3	-177.34	33.3	-160.6	251.5	246.5	5.08	49.533	
1,600.0	1,595.4	1,566.6	1,559.1	3.3	3.6	-177.15	37.0	-172.9	275.4	270.0	5.42	50.797	
1,700.0	1,694.8	1,663.8	1,655.3	3.5	3.9	-177.00	40.6	-185.3	299.2	293.4	5.76	51.911	
1,800.0	1,794.2	1,760.9	1,751.6	3.8	4.2	-176.86	44.3	-197.6	323.0	316.9	6.11	52.900	
1,900.0	1,893.6	1,858.0	1,847.8	4.0	4.4	-176.75	47.9	-210.0	346.9	340.4	6.45	53.784	
2,000.0	1,993.0	1,955.1	1,944.1	4.3	4.7	-176.65	51.6	-222.3	370.7	363.9	6.79	54.580	
2,100.0	2,092.4	2,052.2	2,040.4	4.5	5.0	-176.56	55.2	-234.7	394.5	387.4	7.13	55.299	
2,200.0	2,191.9	2,149.3	2,136.6	4.8	5.3	-176.48	58.8	-247.0	418.4	410.9	7.48	55.952	
2,300.0	2,291.3	2,246.5	2,232.9	5.0	5.6	-176.41	62.5	-259.4	442.2	434.4	7.82	56.548	
2,400.0	2,390.7	2,343.6	2,329.1	5.3	5.8	-176.35	66.1	-271.7	466.0	457.9	8.16	57.094	
2,500.0	2,490.1	2,440.7	2,425.4	5.6	6.1	-176.29	69.8	-284.1	489.9	481.4	8.51	57.595	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**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 Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-89.99	0.0	-39.1	39.1				
100.0	100.0	100.0	100.0	0.1	0.1	-89.99	0.0	-39.1	39.1	38.9	0.26	149.509	
200.0	200.0	200.0	200.0	0.3	0.3	-89.99	0.0	-39.1	39.1	38.5	0.61	64.075	
300.0	300.0	300.0	300.0	0.5	0.5	-89.99	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	-90.14	-0.1	-40.0	40.0	38.7	1.31	30.571	
500.0	500.0	498.5	498.5	0.8	0.8	171.86	-0.4	-42.6	43.4	41.8	1.66	26.247	
600.0	600.0	597.5	597.4	1.0	1.0	171.73	-0.9	-46.8	50.3	48.3	2.00	25.142	SF
700.0	699.9	696.0	695.7	1.2	1.2	171.69	-1.6	-52.7	60.7	58.3	2.35	25.837	
800.0	799.7	793.9	793.3	1.4	1.4	171.70	-2.5	-60.3	74.4	71.7	2.69	27.636	
900.0	899.4	891.1	890.0	1.6	1.6	171.74	-3.6	-69.4	91.5	88.4	3.03	30.161	
1,000.0	998.9	987.2	985.6	1.8	1.9	171.79	-4.8	-80.0	111.9	108.5	3.37	33.190	
1,021.4	1,020.2	1,007.7	1,005.9	1.9	1.9	171.80	-5.1	-82.5	116.7	113.3	3.44	33.889	
1,100.0	1,098.3	1,084.1	1,081.7	2.1	2.1	171.86	-6.2	-91.9	134.7	131.0	3.72	36.268	
1,200.0	1,197.7	1,181.4	1,178.3	2.3	2.4	171.91	-7.6	-103.9	157.7	153.6	4.06	38.832	
1,300.0	1,297.1	1,278.7	1,274.8	2.5	2.6	171.94	-9.1	-116.0	180.6	176.2	4.41	40.994	
1,400.0	1,396.6	1,376.1	1,371.4	2.8	2.9	171.97	-10.5	-128.0	203.5	198.8	4.75	42.842	
1,500.0	1,496.0	1,473.4	1,468.0	3.0	3.2	172.00	-11.9	-140.0	226.4	221.3	5.10	44.438	
1,600.0	1,595.4	1,570.7	1,564.6	3.3	3.4	172.01	-13.3	-152.0	249.4	243.9	5.44	45.831	
1,700.0	1,694.8	1,668.1	1,661.2	3.5	3.7	172.03	-14.7	-164.1	272.3	266.5	5.79	47.058	
1,800.0	1,794.2	1,765.4	1,757.7	3.8	4.0	172.04	-16.1	-176.1	295.2	289.1	6.13	48.146	
1,900.0	1,893.6	1,862.8	1,854.3	4.0	4.2	172.05	-17.6	-188.1	318.1	311.6	6.48	49.118	
2,000.0	1,993.0	1,960.1	1,950.9	4.3	4.5	172.06	-19.0	-200.1	341.0	334.2	6.82	49.991	
2,100.0	2,092.4	2,057.4	2,047.5	4.5	4.8	172.07	-20.4	-212.1	364.0	356.8	7.17	50.780	
2,200.0	2,191.9	2,154.8	2,144.1	4.8	5.0	172.08	-21.8	-224.2	386.9	379.4	7.51	51.497	
2,300.0	2,291.3	2,252.1	2,240.6	5.0	5.3	172.09	-23.2	-236.2	409.8	402.0	7.86	52.150	
2,400.0	2,390.7	2,349.4	2,337.2	5.3	5.6	172.09	-24.7	-248.2	432.7	424.5	8.20	52.748	
2,500.0	2,490.1	2,446.8	2,433.8	5.6	5.8	172.10	-26.1	-260.2	455.7	447.1	8.55	53.298	
2,600.0	2,589.5	2,544.1	2,530.4	5.8	6.1	172.10	-27.5	-272.3	478.6	469.7	8.89	53.804	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - Grant-Hurt 1C-14H-G268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-89.99	0.0	-28.0	28.0				
100.0	100.0	100.0	100.0	0.1	0.1	-89.99	0.0	-28.0	28.0	27.7	0.26	106.792	
200.0	200.0	200.0	200.0	0.3	0.3	-89.99	0.0	-28.0	28.0	27.3	0.61	45.768	
300.0	300.0	300.0	300.0	0.5	0.5	-89.99	0.0	-28.0	28.0	27.0	0.96	29.125	
400.0	400.0	400.0	400.0	0.7	0.7	-89.99	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	171.99	-0.2	-28.8	29.7	28.0	1.66	17.896	
600.0	600.0	598.8	598.8	1.0	1.0	171.38	-1.0	-31.3	34.7	32.7	2.00	17.332	SF
700.0	699.9	698.4	698.3	1.2	1.2	170.88	-2.1	-34.9	42.7	40.3	2.35	18.145	
800.0	799.7	797.9	797.8	1.4	1.4	170.83	-3.1	-38.5	52.4	49.7	2.70	19.400	
900.0	899.4	897.3	897.0	1.6	1.5	171.04	-4.2	-42.1	63.8	60.7	3.05	20.937	
1,000.0	998.9	996.4	996.1	1.8	1.7	171.38	-5.3	-45.7	76.9	73.5	3.39	22.671	
1,021.4	1,020.2	1,017.6	1,017.2	1.9	1.8	171.46	-5.5	-46.5	79.9	76.4	3.47	23.062	
1,100.0	1,098.3	1,095.4	1,095.0	2.1	1.9	171.74	-6.4	-49.3	91.2	87.4	3.74	24.387	
1,200.0	1,197.7	1,194.4	1,193.9	2.3	2.1	172.01	-7.4	-52.9	105.5	101.4	4.09	25.816	
1,300.0	1,297.1	1,293.3	1,292.8	2.5	2.3	172.21	-8.5	-56.6	119.9	115.4	4.44	27.020	
1,400.0	1,396.6	1,392.3	1,391.7	2.8	2.5	172.37	-9.6	-60.2	134.2	129.4	4.79	28.049	
1,500.0	1,496.0	1,491.2	1,490.6	3.0	2.6	172.50	-10.7	-63.8	148.6	143.4	5.13	28.938	
1,600.0	1,595.4	1,590.2	1,589.5	3.3	2.8	172.61	-11.7	-67.4	162.9	157.4	5.48	29.714	
1,700.0	1,694.8	1,689.2	1,688.4	3.5	3.0	172.70	-12.8	-71.0	177.2	171.4	5.83	30.397	
1,800.0	1,794.2	1,788.1	1,787.2	3.8	3.2	172.78	-13.9	-74.6	191.6	185.4	6.18	31.004	
1,900.0	1,893.6	1,887.1	1,886.1	4.0	3.4	172.84	-15.0	-78.2	205.9	199.4	6.53	31.545	
2,000.0	1,993.0	1,986.1	1,985.0	4.3	3.6	172.90	-16.0	-81.8	220.3	213.4	6.88	32.032	
2,100.0	2,092.4	2,085.0	2,083.9	4.5	3.8	172.95	-17.1	-85.4	234.6	227.4	7.23	32.471	
2,200.0	2,191.9	2,184.0	2,182.8	4.8	3.9	173.00	-18.2	-89.0	249.0	241.4	7.57	32.870	
2,300.0	2,291.3	2,283.0	2,281.7	5.0	4.1	173.04	-19.3	-92.6	263.3	255.4	7.92	33.234	
2,400.0	2,390.7	2,381.9	2,380.6	5.3	4.3	173.07	-20.3	-96.2	277.7	269.4	8.27	33.568	
2,500.0	2,490.1	2,480.9	2,479.5	5.6	4.5	173.10	-21.4	-99.9	292.0	283.4	8.62	33.874	
2,600.0	2,589.5	2,579.9	2,578.4	5.8	4.7	173.13	-22.5	-103.5	306.4	297.4	8.97	34.157	
2,700.0	2,688.9	2,678.8	2,677.3	6.1	4.9	173.16	-23.6	-107.1	320.7	311.4	9.32	34.418	
2,800.0	2,788.3	2,777.8	2,776.2	6.3	5.0	173.18	-24.6	-110.7	335.1	325.4	9.67	34.660	
2,900.0	2,887.7	2,876.8	2,875.1	6.6	5.2	173.21	-25.7	-114.3	349.4	339.4	10.02	34.886	
3,000.0	2,987.2	2,975.7	2,974.0	6.8	5.4	173.23	-26.8	-117.9	363.8	353.4	10.36	35.097	
3,100.0	3,086.6	3,074.7	3,072.9	7.1	5.6	173.24	-27.9	-121.5	378.1	367.4	10.71	35.293	
3,200.0	3,186.0	3,173.7	3,171.8	7.3	5.8	173.26	-28.9	-125.1	392.5	381.4	11.06	35.478	
3,300.0	3,285.4	3,272.6	3,270.6	7.6	6.0	173.28	-30.0	-128.7	406.8	395.4	11.41	35.651	
3,400.0	3,384.8	3,371.6	3,369.5	7.9	6.2	173.29	-31.1	-132.3	421.1	409.4	11.76	35.813	
3,500.0	3,484.2	3,470.6	3,468.4	8.1	6.3	173.31	-32.2	-135.9	435.5	423.4	12.11	35.967	
3,600.0	3,583.6	3,569.5	3,567.3	8.4	6.5	173.32	-33.2	-139.6	449.8	437.4	12.46	36.112	
3,700.0	3,683.0	3,668.5	3,666.2	8.6	6.7	173.33	-34.3	-143.2	464.2	451.4	12.81	36.249	
3,800.0	3,782.5	3,767.5	3,765.1	8.9	6.9	173.35	-35.4	-146.8	478.5	465.4	13.15	36.378	
3,900.0	3,881.9	3,866.4	3,864.0	9.1	7.1	173.36	-36.5	-150.4	492.9	479.4	13.50	36.501	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**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 Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-89.99	0.0	-19.6	19.6				
100.0	100.0	100.0	100.0	0.1	0.1	-89.99	0.0	-19.6	19.6	19.3	0.26	74.755	
200.0	200.0	200.0	200.0	0.3	0.3	-89.99	0.0	-19.6	19.6	19.0	0.61	32.038	
300.0	300.0	300.0	300.0	0.5	0.5	-89.99	0.0	-19.6	19.6	18.6	0.96	20.388	
400.0	400.0	400.0	400.0	0.7	0.7	-89.99	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	172.58	0.0	-19.6	20.4	18.8	1.66	12.326	
600.0	600.0	600.0	600.0	1.0	1.0	173.42	0.0	-19.6	23.0	21.0	2.01	11.480	SF
700.0	699.9	699.9	699.9	1.2	1.2	174.46	0.0	-19.6	27.4	25.0	2.35	11.626	
800.0	799.7	799.7	799.7	1.4	1.4	175.46	0.0	-19.6	33.5	30.8	2.70	12.383	
900.0	899.4	899.4	899.4	1.6	1.5	176.32	0.0	-19.6	41.3	38.2	3.05	13.545	
1,000.0	998.9	998.9	998.9	1.8	1.7	177.01	0.0	-19.6	50.8	47.5	3.39	14.988	
1,021.4	1,020.2	1,020.2	1,020.2	1.9	1.7	177.14	0.0	-19.6	53.1	49.7	3.47	15.325	
1,100.0	1,098.3	1,098.3	1,098.3	2.1	1.9	177.53	0.0	-19.6	61.6	57.9	3.74	16.477	
1,200.0	1,197.7	1,197.7	1,197.7	2.3	2.0	177.90	0.0	-19.6	72.4	68.3	4.09	17.721	
1,300.0	1,297.1	1,297.1	1,297.1	2.5	2.2	178.17	0.0	-19.6	83.3	78.8	4.44	18.771	
1,400.0	1,396.6	1,396.6	1,396.6	2.8	2.4	178.38	0.0	-19.6	94.1	89.3	4.78	19.668	
1,500.0	1,496.0	1,496.0	1,496.0	3.0	2.6	178.55	0.0	-19.6	104.9	99.8	5.13	20.444	
1,600.0	1,595.4	1,595.4	1,595.4	3.3	2.7	178.69	0.0	-19.6	115.7	110.2	5.48	21.121	
1,700.0	1,694.8	1,694.8	1,694.8	3.5	2.9	178.80	0.0	-19.6	126.5	120.7	5.83	21.718	
1,800.0	1,794.2	1,794.2	1,794.2	3.8	3.1	178.89	0.0	-19.6	137.4	131.2	6.17	22.248	
1,900.0	1,893.6	1,893.6	1,893.6	4.0	3.3	178.97	0.0	-19.6	148.2	141.7	6.52	22.721	
2,000.0	1,993.0	1,993.0	1,993.0	4.3	3.4	179.04	0.0	-19.6	159.0	152.1	6.87	23.147	
2,100.0	2,092.4	2,092.4	2,092.4	4.5	3.6	179.10	0.0	-19.6	169.8	162.6	7.22	23.531	
2,200.0	2,191.9	2,191.9	2,191.9	4.8	3.8	179.16	0.0	-19.6	180.6	173.1	7.56	23.881	
2,300.0	2,291.3	2,291.3	2,291.3	5.0	4.0	179.21	0.0	-19.6	191.5	183.6	7.91	24.199	
2,400.0	2,390.7	2,390.7	2,390.7	5.3	4.1	179.25	0.0	-19.6	202.3	194.0	8.26	24.491	
2,500.0	2,490.1	2,490.1	2,490.1	5.6	4.3	179.29	0.0	-19.6	213.1	204.5	8.61	24.759	
2,600.0	2,589.5	2,589.5	2,589.5	5.8	4.5	179.32	0.0	-19.6	223.9	215.0	8.96	25.007	
2,700.0	2,688.9	2,688.9	2,688.9	6.1	4.6	179.35	0.0	-19.6	234.8	225.5	9.30	25.236	
2,800.0	2,788.3	2,788.3	2,788.3	6.3	4.8	179.38	0.0	-19.6	245.6	235.9	9.65	25.448	
2,900.0	2,887.7	2,887.7	2,887.7	6.6	5.0	179.41	0.0	-19.6	256.4	246.4	10.00	25.646	
3,000.0	2,987.2	2,987.2	2,987.2	6.8	5.2	179.43	0.0	-19.6	267.2	256.9	10.35	25.830	
3,100.0	3,086.6	3,084.0	3,084.0	7.1	5.3	179.35	-0.4	-20.0	278.5	267.8	10.69	26.051	
3,200.0	3,186.0	3,180.2	3,180.2	7.3	5.5	179.03	-2.0	-21.6	290.7	279.7	11.03	26.353	
3,300.0	3,285.4	3,278.6	3,278.5	7.6	5.7	178.56	-4.4	-24.1	303.7	292.4	11.38	26.695	
3,400.0	3,384.8	3,377.7	3,377.6	7.9	5.9	178.12	-6.8	-26.6	316.8	305.1	11.73	27.016	
3,500.0	3,484.2	3,476.8	3,476.6	8.1	6.0	177.71	-9.2	-29.1	329.9	317.8	12.08	27.318	
3,600.0	3,583.6	3,575.9	3,575.7	8.4	6.2	177.33	-11.7	-31.7	343.0	330.6	12.43	27.604	
3,700.0	3,683.0	3,675.1	3,674.7	8.6	6.4	176.98	-14.1	-34.2	356.2	343.4	12.78	27.874	
3,800.0	3,782.5	3,774.2	3,773.8	8.9	6.6	176.65	-16.6	-36.7	369.3	356.2	13.13	28.130	
3,900.0	3,881.9	3,873.3	3,872.8	9.1	6.7	176.35	-19.0	-39.3	382.4	369.0	13.48	28.373	
4,000.0	3,981.3	3,972.4	3,971.9	9.4	6.9	176.07	-21.4	-41.8	395.6	381.8	13.83	28.603	
4,100.0	4,080.7	4,071.5	4,070.9	9.7	7.1	175.80	-23.9	-44.3	408.8	394.6	14.18	28.823	
4,200.0	4,180.1	4,170.6	4,170.0	9.9	7.3	175.56	-26.3	-46.8	421.9	407.4	14.53	29.031	
4,300.0	4,279.5	4,269.7	4,269.0	10.2	7.4	175.32	-28.8	-49.4	435.1	420.2	14.89	29.230	
4,400.0	4,378.9	4,368.8	4,368.1	10.4	7.6	175.10	-31.2	-51.9	448.3	433.1	15.24	29.420	
4,500.0	4,478.3	4,468.0	4,467.1	10.7	7.8	174.90	-33.7	-54.4	461.5	445.9	15.59	29.601	
4,600.0	4,577.8	4,567.1	4,566.2	10.9	8.0	174.70	-36.1	-56.9	474.7	458.8	15.94	29.774	
4,700.0	4,677.2	4,666.2	4,665.2	11.2	8.2	174.52	-38.5	-59.5	487.9	471.6	16.30	29.940	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**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 Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance 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	-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	172.97	0.0	-8.4	9.3	7.6	1.66	5.581	
600.0	600.0	600.2	600.1	1.0	1.0	173.54	-0.2	-7.5	11.0	9.0	2.01	5.483	
700.0	699.9	700.3	700.3	1.2	1.2	173.01	-0.9	-5.0	12.8	10.4	2.36	5.429	
800.0	799.7	800.6	800.4	1.4	1.4	171.80	-2.0	-0.8	14.6	11.9	2.70	5.402	
900.0	899.4	900.6	900.3	1.6	1.6	170.71	-3.4	4.6	17.0	14.0	3.05	5.580	
1,000.0	998.9	1,000.5	1,000.0	1.8	1.7	170.69	-4.8	10.0	21.2	17.8	3.40	6.220	
1,021.4	1,020.2	1,021.8	1,021.4	1.9	1.8	170.78	-5.1	11.1	22.3	18.8	3.48	6.404	
1,100.0	1,098.3	1,100.3	1,099.7	2.1	1.9	171.10	-6.2	15.3	26.5	22.7	3.75	7.054	
1,200.0	1,197.7	1,200.2	1,199.4	2.3	2.1	171.39	-7.6	20.7	31.8	27.7	4.11	7.754	
1,300.0	1,297.1	1,300.1	1,299.1	2.5	2.3	171.59	-9.0	26.1	37.2	32.7	4.46	8.344	
1,400.0	1,396.6	1,399.9	1,398.8	2.8	2.5	171.74	-10.4	31.5	42.6	37.7	4.81	8.847	
1,500.0	1,496.0	1,499.8	1,498.5	3.0	2.7	171.86	-11.9	36.8	47.9	42.8	5.16	9.282	
1,600.0	1,595.4	1,599.6	1,598.2	3.3	2.9	171.96	-13.3	42.2	53.3	47.8	5.51	9.661	
1,700.0	1,694.8	1,699.5	1,697.9	3.5	3.1	172.04	-14.7	47.6	58.6	52.8	5.87	9.995	
1,800.0	1,794.2	1,799.3	1,797.7	3.8	3.3	172.10	-16.1	53.0	64.0	57.8	6.22	10.291	
1,900.0	1,893.6	1,899.2	1,897.4	4.0	3.5	172.15	-17.5	58.3	69.3	62.8	6.57	10.555	
2,000.0	1,993.0	1,999.0	1,997.1	4.3	3.7	172.20	-18.9	63.7	74.7	67.8	6.92	10.792	
2,100.0	2,092.4	2,098.9	2,096.8	4.5	3.9	172.24	-20.3	69.1	80.1	72.8	7.27	11.007	
2,200.0	2,191.9	2,198.8	2,196.5	4.8	4.1	172.28	-21.7	74.5	85.4	77.8	7.63	11.201	
2,300.0	2,291.3	2,298.6	2,296.2	5.0	4.3	172.31	-23.1	79.8	90.8	82.8	7.98	11.379	
2,400.0	2,390.7	2,398.5	2,395.9	5.3	4.5	172.34	-24.5	85.2	96.1	87.8	8.33	11.541	
2,500.0	2,490.1	2,498.3	2,495.6	5.6	4.7	172.36	-25.9	90.6	101.5	92.8	8.68	11.690	
2,600.0	2,589.5	2,598.2	2,595.3	5.8	4.9	172.38	-27.4	96.0	106.9	97.8	9.03	11.828	
2,700.0	2,688.9	2,698.0	2,695.0	6.1	5.1	172.40	-28.8	101.3	112.2	102.8	9.39	11.955	
2,800.0	2,788.3	2,797.9	2,794.7	6.3	5.3	172.42	-30.2	106.7	117.6	107.8	9.74	12.073	
2,900.0	2,887.7	2,897.8	2,894.4	6.6	5.5	172.44	-31.6	112.1	122.9	112.8	10.09	12.183	
3,000.0	2,987.2	2,997.6	2,994.1	6.8	5.7	172.45	-33.0	117.5	128.3	117.8	10.44	12.285	
3,100.0	3,086.6	3,097.5	3,093.8	7.1	5.9	172.47	-34.4	122.8	133.6	122.8	10.79	12.381	
3,200.0	3,186.0	3,197.3	3,193.5	7.3	6.1	172.48	-35.8	128.2	139.0	127.9	11.15	12.470	
3,300.0	3,285.4	3,297.2	3,293.2	7.6	6.3	172.49	-37.2	133.6	144.4	132.9	11.50	12.554	
3,400.0	3,384.8	3,397.0	3,392.9	7.9	6.5	172.50	-38.6	139.0	149.7	137.9	11.85	12.633	
3,500.0	3,484.2	3,496.9	3,492.6	8.1	6.7	172.51	-40.0	144.3	155.1	142.9	12.20	12.708	
3,600.0	3,583.6	3,596.7	3,592.3	8.4	6.9	172.52	-41.4	149.7	160.4	147.9	12.56	12.778	
3,700.0	3,683.0	3,696.6	3,692.0	8.6	7.1	172.53	-42.8	155.1	165.8	152.9	12.91	12.845	
3,800.0	3,782.5	3,796.5	3,791.7	8.9	7.3	172.54	-44.3	160.5	171.2	157.9	13.26	12.908	
3,900.0	3,881.9	3,896.3	3,891.4	9.1	7.5	172.55	-45.7	165.8	176.5	162.9	13.61	12.968	
4,000.0	3,981.3	3,996.2	3,991.1	9.4	7.7	172.56	-47.1	171.2	181.9	167.9	13.96	13.024	
4,100.0	4,080.7	4,096.0	4,090.8	9.7	7.9	172.56	-48.5	176.6	187.2	172.9	14.32	13.078	
4,200.0	4,180.1	4,195.9	4,190.5	9.9	8.1	172.57	-49.9	182.0	192.6	177.9	14.67	13.130	
4,300.0	4,279.5	4,295.7	4,290.2	10.2	8.3	172.58	-51.3	187.3	197.9	182.9	15.02	13.178	
4,400.0	4,378.9	4,395.6	4,389.9	10.4	8.5	172.58	-52.7	192.7	203.3	187.9	15.37	13.225	
4,500.0	4,478.3	4,495.5	4,489.6	10.7	8.7	172.59	-54.1	198.1	208.7	192.9	15.72	13.270	
4,600.0	4,577.8	4,595.3	4,589.3	10.9	8.9	172.59	-55.5	203.4	214.0	197.9	16.08	13.312	
4,700.0	4,677.2	4,695.2	4,689.0	11.2	9.1	172.60	-56.9	208.8	219.4	202.9	16.43	13.353	
4,800.0	4,776.6	4,795.0	4,788.7	11.5	9.3	172.60	-58.3	214.2	224.7	208.0	16.78	13.392	
4,900.0	4,876.0	4,894.9	4,888.4	11.7	9.5	172.61	-59.8	219.6	230.1	213.0	17.13	13.430	
5,000.0	4,975.4	4,994.7	4,988.1	12.0	9.7	172.61	-61.2	224.9	235.5	218.0	17.49	13.466	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**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 Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,074.8	5,094.6	5,087.8	12.2	9.9	172.62	-62.6	230.3	240.8	223.0	17.84	13.500	
5,200.0	5,174.2	5,194.4	5,187.5	12.5	10.1	172.62	-64.0	235.7	246.2	228.0	18.19	13.534	
5,300.0	5,273.6	5,294.3	5,287.2	12.7	10.3	172.63	-65.4	241.1	251.5	233.0	18.54	13.566	
5,400.0	5,373.1	5,394.2	5,386.9	13.0	10.5	172.63	-66.8	246.4	256.9	238.0	18.89	13.596	
5,500.0	5,472.5	5,494.0	5,486.6	13.3	10.7	172.63	-68.2	251.8	262.2	243.0	19.25	13.626	
5,600.0	5,571.9	5,593.9	5,586.3	13.5	10.9	172.64	-69.6	257.2	267.6	248.0	19.60	13.654	
5,700.0	5,671.3	5,693.7	5,686.0	13.8	11.1	172.64	-71.0	262.6	273.0	253.0	19.95	13.682	
5,800.0	5,770.7	5,793.6	5,785.7	14.0	11.3	172.64	-72.4	267.9	278.3	258.0	20.30	13.709	
5,900.0	5,870.1	5,893.4	5,885.4	14.3	11.5	172.65	-73.8	273.3	283.7	263.0	20.65	13.734	
6,000.0	5,969.5	5,993.3	5,985.1	14.5	11.7	172.65	-75.3	278.7	289.0	268.0	21.01	13.759	
6,100.0	6,068.9	6,093.2	6,084.8	14.8	11.9	172.65	-76.7	284.1	294.4	273.0	21.36	13.783	
6,200.0	6,168.4	6,193.0	6,184.5	15.1	12.1	172.66	-78.1	289.4	299.8	278.0	21.71	13.806	
6,300.0	6,267.8	6,292.9	6,284.2	15.3	12.3	172.66	-79.5	294.8	305.1	283.0	22.06	13.829	
6,400.0	6,367.2	6,392.7	6,383.9	15.6	12.5	172.66	-80.9	300.2	310.5	288.1	22.42	13.851	
6,500.0	6,466.6	6,492.6	6,483.6	15.8	12.7	172.66	-82.3	305.6	315.8	293.1	22.77	13.872	
6,600.0	6,566.0	6,592.4	6,583.3	16.1	12.9	172.67	-83.7	310.9	321.2	298.1	23.12	13.892	
6,636.3	6,602.1	6,628.7	6,619.5	16.2	12.9	172.67	-84.2	312.9	323.1	299.9	23.25	13.900	
6,650.0	6,615.7	6,642.4	6,633.2	16.2	13.0	-174.63	-84.4	313.6	323.9	300.6	23.29	13.904	
6,700.0	6,665.3	6,692.2	6,682.9	16.3	13.1	-138.12	-85.1	316.3	326.5	303.1	23.47	13.913	
6,750.0	6,714.5	6,741.5	6,732.1	16.5	13.2	-121.52	-85.8	319.0	329.3	305.6	23.66	13.919	
6,800.0	6,763.0	6,789.9	6,780.5	16.6	13.2	-114.60	-86.5	321.6	332.5	308.6	23.86	13.934	
6,850.0	6,810.2	6,837.7	6,828.2	16.7	13.3	-111.97	-87.1	324.1	336.4	312.3	24.06	13.983	
6,900.0	6,855.9	6,888.5	6,878.9	16.8	13.4	-111.39	-84.8	326.9	341.2	317.0	24.23	14.083	
6,950.0	6,899.8	6,941.2	6,931.0	16.9	13.5	-111.73	-77.7	329.7	346.7	322.4	24.35	14.242	
7,000.0	6,941.5	6,995.8	6,984.0	17.0	13.6	-112.58	-65.3	332.5	352.8	328.4	24.41	14.458	
7,050.0	6,980.6	7,052.5	7,037.7	17.2	13.7	-113.70	-47.2	335.4	359.4	335.0	24.41	14.724	
7,100.0	7,016.9	7,111.5	7,091.3	17.3	13.8	-114.96	-22.8	338.3	366.3	341.9	24.37	15.031	
7,150.0	7,050.2	7,173.0	7,144.2	17.5	13.9	-116.28	8.4	341.2	373.3	348.9	24.34	15.339	
7,200.0	7,080.0	7,237.0	7,195.3	17.7	14.1	-117.58	46.7	343.9	380.2	355.8	24.31	15.636	
7,250.0	7,106.3	7,303.5	7,243.7	18.0	14.3	-118.81	92.3	346.5	386.7	362.3	24.37	15.871	
7,300.0	7,128.9	7,372.6	7,287.9	18.2	14.6	-119.92	145.2	348.9	392.7	368.2	24.56	15.991	
7,350.0	7,147.5	7,444.1	7,326.7	18.6	14.9	-120.88	205.2	351.0	398.0	373.0	24.93	15.961	
7,400.0	7,162.0	7,517.6	7,358.4	18.9	15.4	-121.66	271.4	352.7	402.3	376.7	25.56	15.740	
7,450.0	7,172.3	7,592.8	7,381.9	19.3	16.0	-122.23	342.9	354.0	405.4	379.0	26.45	15.330	
7,500.0	7,178.3	7,669.3	7,396.0	19.7	16.7	-122.56	417.9	354.7	407.3	379.7	27.62	14.746	
7,544.6	7,180.0	7,737.7	7,400.0	20.1	17.4	-122.64	486.2	355.0	407.9	379.0	28.89	14.118	
7,600.0	7,180.0	7,793.1	7,400.0	20.6	17.9	-122.64	541.6	355.0	407.9	378.0	29.94	13.622	
7,700.0	7,180.0	7,893.1	7,400.0	21.6	19.1	-122.63	641.6	355.0	408.0	376.0	31.97	12.760	
7,800.0	7,180.0	7,993.1	7,400.0	22.7	20.3	-122.63	741.6	355.0	408.0	373.9	34.14	11.952	
7,900.0	7,180.0	8,093.1	7,400.0	23.8	21.6	-122.62	841.6	355.0	408.1	371.7	36.42	11.207	
8,000.0	7,180.0	8,193.1	7,400.0	25.1	23.0	-122.61	941.6	355.0	408.2	369.4	38.79	10.523	
8,100.0	7,180.0	8,293.1	7,400.0	26.4	24.4	-122.61	1,041.6	355.0	408.3	367.0	41.24	9.900	
8,200.0	7,180.0	8,393.1	7,400.0	27.7	25.8	-122.60	1,141.6	355.0	408.3	364.6	43.75	9.333	
8,300.0	7,180.0	8,493.1	7,400.0	29.1	27.3	-122.59	1,241.6	355.0	408.4	362.1	46.32	8.818	
8,400.0	7,180.0	8,593.1	7,400.0	30.5	28.8	-122.59	1,341.6	355.0	408.5	359.6	48.93	8.349	
8,500.0	7,180.0	8,693.1	7,400.0	32.0	30.4	-122.58	1,441.6	355.0	408.6	357.0	51.58	7.921	
8,600.0	7,180.0	8,793.1	7,400.0	33.5	32.0	-122.57	1,541.6	355.0	408.6	354.4	54.26	7.530	
8,700.0	7,180.0	8,893.1	7,400.0	35.0	33.5	-122.57	1,641.6	355.0	408.7	351.7	56.98	7.173	
8,800.0	7,180.0	8,993.1	7,400.0	36.5	35.1	-122.56	1,741.6	355.0	408.8	349.1	59.71	6.846	
8,900.0	7,180.0	9,093.1	7,400.0	38.1	36.8	-122.55	1,841.6	355.0	408.8	346.4	62.47	6.545	
9,000.0	7,180.0	9,193.1	7,400.0	39.7	38.4	-122.55	1,941.6	355.0	408.9	343.7	65.25	6.267	
9,100.0	7,180.0	9,293.1	7,400.0	41.2	40.0	-122.54	2,041.6	355.0	409.0	341.0	68.04	6.011	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**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 Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,200.0	7,180.0	9,393.1	7,400.0	42.8	41.7	-122.53	2,141.6	355.0	409.1	338.2	70.85	5.774	
9,300.0	7,180.0	9,493.1	7,400.0	44.5	43.3	-122.53	2,241.6	355.0	409.1	335.5	73.67	5.554	
9,400.0	7,180.0	9,593.1	7,400.0	46.1	45.0	-122.52	2,341.6	355.0	409.2	332.7	76.50	5.349	
9,500.0	7,180.0	9,693.1	7,400.0	47.7	46.7	-122.51	2,441.6	355.0	409.3	329.9	79.35	5.158	
9,600.0	7,180.0	9,793.1	7,400.0	49.3	48.3	-122.51	2,541.6	355.0	409.4	327.2	82.20	4.980	
9,700.0	7,180.0	9,893.1	7,400.0	51.0	50.0	-122.50	2,641.6	355.0	409.4	324.4	85.06	4.813	
9,800.0	7,180.0	9,993.1	7,400.0	52.7	51.7	-122.49	2,741.6	355.0	409.5	321.6	87.93	4.657	
9,900.0	7,180.0	10,093.1	7,400.0	54.3	53.4	-122.49	2,841.6	355.0	409.6	318.8	90.81	4.510	
10,000.0	7,180.0	10,193.1	7,400.0	56.0	55.1	-122.48	2,941.6	355.0	409.7	316.0	93.69	4.372	
10,100.0	7,180.0	10,293.1	7,400.0	57.6	56.8	-122.48	3,041.6	355.0	409.7	313.2	96.58	4.242	
10,200.0	7,180.0	10,393.1	7,400.0	59.3	58.5	-122.47	3,141.6	355.0	409.8	310.3	99.47	4.120	
10,300.0	7,180.0	10,493.1	7,400.0	61.0	60.2	-122.46	3,241.6	355.0	409.9	307.5	102.37	4.004	
10,400.0	7,180.0	10,593.1	7,400.0	62.7	61.9	-122.46	3,341.6	355.0	410.0	304.7	105.27	3.894	
10,500.0	7,180.0	10,693.1	7,400.0	64.4	63.6	-122.45	3,441.6	355.0	410.0	301.8	108.18	3.790	
10,600.0	7,180.0	10,793.1	7,400.0	66.1	65.3	-122.44	3,541.6	355.0	410.1	299.0	111.09	3.691	
10,700.0	7,180.0	10,893.1	7,400.0	67.8	67.0	-122.44	3,641.6	355.0	410.2	296.2	114.01	3.598	
10,800.0	7,180.0	10,993.1	7,400.0	69.5	68.7	-122.43	3,741.6	355.0	410.2	293.3	116.93	3.509	
10,900.0	7,180.0	11,093.1	7,400.0	71.2	70.5	-122.42	3,841.6	355.0	410.3	290.5	119.85	3.424	
11,000.0	7,180.0	11,193.1	7,400.0	72.9	72.2	-122.42	3,941.6	355.0	410.4	287.6	122.77	3.343	
11,100.0	7,180.0	11,293.1	7,400.0	74.6	73.9	-122.41	4,041.6	355.0	410.5	284.8	125.70	3.265	
11,200.0	7,180.0	11,393.1	7,400.0	76.3	75.6	-122.40	4,141.6	355.0	410.5	281.9	128.63	3.192	
11,300.0	7,180.0	11,493.1	7,400.0	78.0	77.4	-122.40	4,241.6	355.0	410.6	279.1	131.57	3.121	
11,400.0	7,180.0	11,593.1	7,400.0	79.7	79.1	-122.39	4,341.6	355.0	410.7	276.2	134.50	3.053	
11,500.0	7,180.0	11,693.1	7,400.0	81.4	80.8	-122.38	4,441.6	355.0	410.8	273.3	137.44	2.989	
11,600.0	7,180.0	11,793.1	7,400.0	83.1	82.5	-122.38	4,541.6	355.0	410.8	270.5	140.38	2.927	
11,700.0	7,180.0	11,893.1	7,400.0	84.8	84.3	-122.37	4,641.6	355.0	410.9	267.6	143.32	2.867	
11,800.0	7,180.0	11,993.1	7,400.0	86.6	86.0	-122.36	4,741.6	355.0	411.0	264.7	146.26	2.810	
11,900.0	7,180.0	12,093.1	7,400.0	88.3	87.7	-122.36	4,841.6	355.0	411.1	261.8	149.21	2.755	
12,000.0	7,180.0	12,193.1	7,400.0	90.0	89.5	-122.35	4,941.6	355.0	411.1	259.0	152.16	2.702	
12,100.0	7,180.0	12,293.1	7,400.0	91.7	91.2	-122.34	5,041.6	355.0	411.2	256.1	155.11	2.651	
12,200.0	7,180.0	12,393.1	7,400.0	93.4	92.9	-122.34	5,141.6	355.0	411.3	253.2	158.06	2.602	
12,300.0	7,180.0	12,493.1	7,400.0	95.2	94.7	-122.33	5,241.6	355.0	411.4	250.3	161.01	2.555	
12,400.0	7,180.0	12,593.1	7,400.0	96.9	96.4	-122.33	5,341.6	355.0	411.4	247.5	163.96	2.509	
12,500.0	7,180.0	12,693.1	7,400.0	98.6	98.1	-122.32	5,441.6	355.0	411.5	244.6	166.92	2.465	
12,600.0	7,180.0	12,793.1	7,400.0	100.3	99.9	-122.31	5,541.6	355.0	411.6	241.7	169.87	2.423	
12,700.0	7,180.0	12,893.1	7,400.0	102.1	101.6	-122.31	5,641.6	355.0	411.6	238.8	172.83	2.382	
12,800.0	7,180.0	12,993.1	7,400.0	103.8	103.3	-122.30	5,741.6	355.0	411.7	235.9	175.79	2.342	
12,900.0	7,180.0	13,093.1	7,400.0	105.5	105.1	-122.29	5,841.6	355.0	411.8	233.0	178.75	2.304	
13,000.0	7,180.0	13,193.1	7,400.0	107.3	106.8	-122.29	5,941.6	355.0	411.9	230.2	181.71	2.267	
13,100.0	7,180.0	13,293.1	7,400.0	109.0	108.6	-122.28	6,041.6	355.0	411.9	227.3	184.68	2.231	
13,200.0	7,180.0	13,393.1	7,400.0	110.7	110.3	-122.27	6,141.6	355.0	412.0	224.4	187.64	2.196	
13,300.0	7,180.0	13,493.1	7,400.0	112.5	112.0	-122.27	6,241.6	355.0	412.1	221.5	190.60	2.162	
13,400.0	7,180.0	13,593.1	7,400.0	114.2	113.8	-122.26	6,341.6	355.0	412.2	218.6	193.57	2.129	
13,500.0	7,180.0	13,693.1	7,400.0	115.9	115.5	-122.25	6,441.6	355.0	412.2	215.7	196.54	2.097	
13,600.0	7,180.0	13,793.1	7,400.0	117.7	117.3	-122.25	6,541.6	355.0	412.3	212.8	199.51	2.067	
13,700.0	7,180.0	13,893.1	7,400.0	119.4	119.0	-122.24	6,641.6	355.0	412.4	209.9	202.48	2.037	
13,800.0	7,180.0	13,993.1	7,400.0	121.1	120.7	-122.23	6,741.6	355.0	412.5	207.0	205.45	2.008	
13,900.0	7,180.0	14,093.1	7,400.0	122.9	122.5	-122.23	6,841.6	355.0	412.5	204.1	208.42	1.979	
14,000.0	7,180.0	14,193.1	7,400.0	124.6	124.2	-122.22	6,941.6	355.0	412.6	201.2	211.39	1.952	
14,100.0	7,180.0	14,293.1	7,400.0	126.3	126.0	-122.22	7,041.6	355.0	412.7	198.3	214.36	1.925	
14,200.0	7,180.0	14,393.1	7,400.0	128.1	127.7	-122.21	7,141.6	355.0	412.8	195.4	217.33	1.899	
14,300.0	7,180.0	14,493.1	7,400.0	129.8	129.5	-122.20	7,241.6	355.0	412.8	192.5	220.31	1.874	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**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 Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
14,358.6	7,180.0	14,551.7	7,400.0	130.8	130.5	-122.20	7,300.2	355.0	412.9	190.8	222.05	1.859 SF	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**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 Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	89.98	0.0	11.2	11.2				
100.0	100.0	100.0	100.0	0.1	0.1	89.98	0.0	11.2	11.2	10.9	0.26	42.717	
200.0	200.0	200.0	200.0	0.3	0.3	89.98	0.0	11.2	11.2	10.6	0.61	18.307	
300.0	300.0	300.0	300.0	0.5	0.5	89.98	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	90.35	-0.1	12.0	12.1	10.7	1.31	9.204	
500.0	500.0	499.6	499.5	0.8	0.8	-6.96	-0.3	14.6	13.8	12.1	1.66	8.320	
600.0	600.0	599.3	599.2	1.0	1.0	-6.89	-0.7	19.0	15.5	13.5	2.01	7.744	
700.0	699.9	699.0	698.7	1.2	1.2	-7.10	-1.3	25.0	17.3	14.9	2.35	7.339	
800.0	799.7	798.7	798.0	1.4	1.4	-7.50	-2.0	32.8	19.0	16.3	2.70	7.040	
900.0	899.4	898.3	897.2	1.6	1.7	-8.05	-2.8	42.3	20.8	17.7	3.05	6.809	
1,000.0	998.9	997.9	996.2	1.8	1.9	-8.71	-3.8	53.5	22.5	19.1	3.40	6.626	
1,021.4	1,020.2	1,019.2	1,017.3	1.9	2.0	-8.87	-4.1	56.1	22.9	19.4	3.48	6.591	
1,100.0	1,098.3	1,097.5	1,094.9	2.1	2.2	-9.26	-5.0	66.4	24.8	21.1	3.75	6.614	
1,200.0	1,197.7	1,196.9	1,193.3	2.3	2.5	-9.29	-6.3	81.0	28.8	24.7	4.11	7.015	
1,300.0	1,297.1	1,296.8	1,292.0	2.5	2.8	-9.16	-7.8	96.4	33.6	29.1	4.46	7.535	
1,400.0	1,396.6	1,396.7	1,390.6	2.8	3.1	-9.05	-9.2	111.9	38.4	33.6	4.81	7.978	
1,500.0	1,496.0	1,496.6	1,489.3	3.0	3.4	-8.97	-10.6	127.4	43.2	38.0	5.17	8.361	
1,600.0	1,595.4	1,596.5	1,588.0	3.3	3.7	-8.91	-12.0	142.8	48.0	42.5	5.52	8.694	
1,700.0	1,694.8	1,696.4	1,686.6	3.5	4.0	-8.86	-13.4	158.3	52.8	46.9	5.87	8.987	
1,800.0	1,794.2	1,796.3	1,785.3	3.8	4.3	-8.81	-14.8	173.7	57.6	51.4	6.23	9.247	
1,900.0	1,893.6	1,896.1	1,884.0	4.0	4.6	-8.77	-16.2	189.2	62.4	55.8	6.58	9.479	
2,000.0	1,993.0	1,996.0	1,982.6	4.3	4.9	-8.74	-17.6	204.7	67.2	60.2	6.93	9.688	
2,100.0	2,092.4	2,095.9	2,081.3	4.5	5.3	-8.72	-19.0	220.1	72.0	64.7	7.29	9.876	
2,200.0	2,191.9	2,195.8	2,180.0	4.8	5.6	-8.69	-20.4	235.6	76.8	69.1	7.64	10.047	
2,300.0	2,291.3	2,295.7	2,278.7	5.0	5.9	-8.67	-21.8	251.1	81.6	73.6	8.00	10.202	
2,400.0	2,390.7	2,395.6	2,377.3	5.3	6.2	-8.65	-23.2	266.5	86.4	78.0	8.35	10.344	
2,500.0	2,490.1	2,495.4	2,476.0	5.6	6.5	-8.63	-24.6	282.0	91.2	82.5	8.70	10.475	
2,600.0	2,589.5	2,595.3	2,574.7	5.8	6.9	-8.62	-26.0	297.5	96.0	86.9	9.06	10.596	
2,700.0	2,688.9	2,695.2	2,673.3	6.1	7.2	-8.61	-27.5	312.9	100.8	91.4	9.41	10.707	
2,800.0	2,788.3	2,795.1	2,772.0	6.3	7.5	-8.59	-28.9	328.4	105.6	95.8	9.76	10.811	
2,900.0	2,887.7	2,895.0	2,870.7	6.6	7.8	-8.58	-30.3	343.9	110.4	100.2	10.12	10.907	
3,000.0	2,987.2	2,994.9	2,969.4	6.8	8.2	-8.57	-31.7	359.3	115.2	104.7	10.47	10.997	
3,100.0	3,086.6	3,094.8	3,068.0	7.1	8.5	-8.56	-33.1	374.8	120.0	109.1	10.83	11.080	
3,200.0	3,186.0	3,194.6	3,166.7	7.3	8.8	-8.55	-34.5	390.2	124.8	113.6	11.18	11.159	
3,300.0	3,285.4	3,294.5	3,265.4	7.6	9.1	-8.54	-35.9	405.7	129.6	118.0	11.53	11.233	
3,400.0	3,384.8	3,394.4	3,364.0	7.9	9.5	-8.54	-37.3	421.2	134.3	122.5	11.89	11.302	
3,500.0	3,484.2	3,494.3	3,462.7	8.1	9.8	-8.53	-38.7	436.6	139.1	126.9	12.24	11.367	
3,600.0	3,583.6	3,594.2	3,561.4	8.4	10.1	-8.52	-40.1	452.1	143.9	131.3	12.59	11.429	
3,700.0	3,683.0	3,694.1	3,660.0	8.6	10.4	-8.52	-41.5	467.6	148.7	135.8	12.95	11.487	
3,800.0	3,782.5	3,794.0	3,758.7	8.9	10.7	-8.51	-42.9	483.0	153.5	140.2	13.30	11.542	
3,900.0	3,881.9	3,893.8	3,857.4	9.1	11.1	-8.50	-44.3	498.5	158.3	144.7	13.66	11.594	
4,000.0	3,981.3	3,993.7	3,956.1	9.4	11.4	-8.50	-45.7	514.0	163.1	149.1	14.01	11.644	
4,100.0	4,080.7	4,093.6	4,054.7	9.7	11.7	-8.49	-47.1	529.4	167.9	153.6	14.36	11.691	
4,200.0	4,180.1	4,193.5	4,153.4	9.9	12.0	-8.49	-48.6	544.9	172.7	158.0	14.72	11.736	
4,300.0	4,279.5	4,293.4	4,252.1	10.2	12.4	-8.49	-50.0	560.4	177.5	162.5	15.07	11.779	
4,400.0	4,378.9	4,393.3	4,350.7	10.4	12.7	-8.48	-51.4	575.8	182.3	166.9	15.43	11.820	
4,500.0	4,478.3	4,493.1	4,449.4	10.7	13.0	-8.48	-52.8	591.3	187.1	171.3	15.78	11.859	
4,600.0	4,577.8	4,593.0	4,548.1	10.9	13.3	-8.47	-54.2	606.7	191.9	175.8	16.13	11.896	
4,700.0	4,677.2	4,692.9	4,646.8	11.2	13.7	-8.47	-55.6	622.2	196.7	180.2	16.49	11.932	
4,800.0	4,776.6	4,792.8	4,745.4	11.5	14.0	-8.47	-57.0	637.7	201.5	184.7	16.84	11.966	
4,900.0	4,876.0	4,892.7	4,844.1	11.7	14.3	-8.46	-58.4	653.1	206.3	189.1	17.19	11.999	
5,000.0	4,975.4	4,992.6	4,942.8	12.0	14.6	-8.46	-59.8	668.6	211.1	193.6	17.55	12.030	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**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 Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,074.8	5,092.5	5,041.4	12.2	15.0	-8.46	-61.2	684.1	215.9	198.0	17.90	12.061	
5,200.0	5,174.2	5,192.3	5,140.1	12.5	15.3	-8.46	-62.6	699.5	220.7	202.4	18.26	12.090	
5,300.0	5,273.6	5,292.2	5,238.8	12.7	15.6	-8.45	-64.0	715.0	225.5	206.9	18.61	12.118	
5,400.0	5,373.1	5,392.1	5,337.4	13.0	15.9	-8.45	-65.4	730.5	230.3	211.3	18.96	12.145	
5,500.0	5,472.5	5,492.0	5,436.1	13.3	16.3	-8.45	-66.8	745.9	235.1	215.8	19.32	12.171	
5,600.0	5,571.9	5,591.9	5,534.8	13.5	16.6	-8.45	-68.3	761.4	239.9	220.2	19.67	12.196	
5,700.0	5,671.3	5,691.8	5,633.5	13.8	16.9	-8.44	-69.7	776.9	244.7	224.7	20.02	12.220	
5,800.0	5,770.7	5,791.6	5,732.1	14.0	17.2	-8.44	-71.1	792.3	249.5	229.1	20.38	12.243	
5,900.0	5,870.1	5,891.5	5,830.8	14.3	17.6	-8.44	-72.5	807.8	254.3	233.6	20.73	12.265	
6,000.0	5,969.5	5,991.4	5,929.5	14.5	17.9	-8.44	-73.9	823.2	259.1	238.0	21.09	12.287	
6,100.0	6,068.9	6,091.3	6,028.1	14.8	18.2	-8.43	-75.3	838.7	263.9	242.4	21.44	12.308	
6,200.0	6,168.4	6,191.2	6,126.8	15.1	18.5	-8.43	-76.7	854.2	268.7	246.9	21.79	12.328	
6,300.0	6,267.8	6,291.1	6,225.5	15.3	18.8	-8.43	-78.1	869.6	273.5	251.3	22.15	12.348	
6,400.0	6,367.2	6,391.0	6,324.1	15.6	19.2	-8.43	-79.5	885.1	278.3	255.8	22.50	12.367	
6,500.0	6,466.6	6,490.8	6,422.8	15.8	19.5	-8.43	-80.9	900.6	283.1	260.2	22.86	12.386	
6,600.0	6,566.0	6,590.7	6,521.5	16.1	19.8	-8.43	-82.3	916.0	287.9	264.7	23.21	12.403	
6,636.3	6,602.1	6,627.0	6,557.3	16.2	19.9	-8.43	-82.8	921.6	289.6	266.3	23.34	12.410	
6,650.0	6,615.7	6,640.7	6,570.8	16.2	20.0	4.20	-83.0	923.8	290.3	266.9	23.39	12.411	
6,700.0	6,665.3	6,690.5	6,620.0	16.3	20.1	41.45	-83.7	931.5	292.6	269.1	23.52	12.441	
6,750.0	6,714.5	6,739.8	6,668.8	16.5	20.3	60.33	-84.4	939.1	295.1	271.5	23.61	12.499	
6,800.0	6,763.0	6,788.3	6,716.7	16.6	20.5	70.86	-85.1	946.6	298.0	274.3	23.70	12.575	
6,850.0	6,810.2	6,835.5	6,763.3	16.7	20.6	78.21	-85.8	953.9	301.7	277.9	23.83	12.662	
6,900.0	6,855.9	6,881.2	6,808.4	16.8	20.8	84.15	-86.4	961.0	306.9	282.8	24.04	12.767	
6,950.0	6,899.8	6,929.1	6,855.8	16.9	20.9	89.55	-86.3	968.4	314.0	289.7	24.35	12.897	
7,000.0	6,941.5	6,981.4	6,907.3	17.0	21.1	94.46	-81.9	976.5	322.7	297.9	24.74	13.043	
7,050.0	6,980.6	7,036.7	6,960.9	17.2	21.2	98.85	-72.1	984.9	332.6	307.4	25.16	13.217	
7,100.0	7,016.9	7,095.2	7,016.5	17.3	21.4	102.83	-56.1	993.6	343.5	317.9	25.58	13.429	
7,150.0	7,050.2	7,157.4	7,073.5	17.5	21.6	106.46	-32.9	1,002.5	355.0	329.0	25.96	13.675	
7,200.0	7,080.0	7,223.9	7,131.3	17.7	21.8	109.75	-1.3	1,011.6	366.7	340.5	26.21	13.993	
7,250.0	7,106.3	7,295.0	7,188.6	18.0	22.0	112.71	39.7	1,020.6	378.2	351.8	26.49	14.280	
7,300.0	7,128.9	7,371.1	7,243.9	18.2	22.2	115.33	91.2	1,029.3	389.1	362.5	26.67	14.591	
7,350.0	7,147.5	7,452.3	7,294.9	18.6	22.6	117.58	153.7	1,037.2	398.9	372.1	26.81	14.877	
7,400.0	7,162.0	7,538.4	7,338.9	18.9	23.0	119.39	227.3	1,044.1	407.1	380.1	26.96	15.098	
7,450.0	7,172.3	7,628.7	7,372.8	19.3	23.4	120.72	310.8	1,049.5	413.2	386.0	27.16	15.214	
7,500.0	7,178.3	7,722.2	7,393.8	19.7	24.0	121.53	401.7	1,052.7	416.9	389.4	27.44	15.189	
7,544.6	7,180.0	7,807.0	7,400.0	20.1	24.6	121.76	486.2	1,053.7	417.9	390.1	27.81	15.028	
7,600.0	7,180.0	7,862.4	7,400.0	20.6	25.0	121.77	541.6	1,053.7	417.9	388.9	28.93	14.446	
7,700.0	7,180.0	7,962.4	7,400.0	21.6	25.8	121.77	641.6	1,053.7	417.8	386.8	31.05	13.456	
7,800.0	7,180.0	8,062.4	7,400.0	22.7	26.7	121.78	741.6	1,053.7	417.7	384.4	33.30	12.543	
7,900.0	7,180.0	8,162.4	7,400.0	23.8	27.7	121.79	841.6	1,053.7	417.7	382.0	35.66	11.711	
8,000.0	7,180.0	8,262.4	7,400.0	25.1	28.8	121.79	941.6	1,053.7	417.6	379.5	38.11	10.956	
8,100.0	7,180.0	8,362.4	7,400.0	26.4	29.9	121.80	1,041.6	1,053.7	417.5	376.9	40.64	10.274	
8,200.0	7,180.0	8,462.4	7,400.0	27.7	31.1	121.81	1,141.6	1,053.7	417.4	374.2	43.22	9.659	
8,300.0	7,180.0	8,562.4	7,400.0	29.1	32.4	121.81	1,241.6	1,053.7	417.4	371.5	45.85	9.104	
8,400.0	7,180.0	8,662.4	7,400.0	30.5	33.7	121.82	1,341.6	1,053.7	417.3	368.8	48.52	8.601	
8,500.0	7,180.0	8,762.4	7,400.0	32.0	35.0	121.82	1,441.6	1,053.7	417.2	366.0	51.22	8.145	
8,600.0	7,180.0	8,862.4	7,400.0	33.5	36.4	121.83	1,541.6	1,053.7	417.1	363.2	53.95	7.731	
8,700.0	7,180.0	8,962.4	7,400.0	35.0	37.8	121.84	1,641.6	1,053.7	417.1	360.3	56.71	7.354	
8,800.0	7,180.0	9,062.4	7,400.0	36.5	39.2	121.84	1,741.6	1,053.7	417.0	357.5	59.49	7.009	
8,900.0	7,180.0	9,162.4	7,400.0	38.1	40.6	121.85	1,841.6	1,053.7	416.9	354.6	62.29	6.693	
9,000.0	7,180.0	9,262.4	7,400.0	39.7	42.1	121.86	1,941.6	1,053.7	416.8	351.7	65.11	6.402	
9,100.0	7,180.0	9,362.4	7,400.0	41.2	43.6	121.86	2,041.6	1,053.7	416.8	348.8	67.94	6.135	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**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 Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,200.0	7,180.0	9,462.4	7,400.0	42.8	45.1	121.87	2,141.6	1,053.7	416.7	345.9	70.78	5.887	
9,300.0	7,180.0	9,562.4	7,400.0	44.5	46.7	121.87	2,241.6	1,053.7	416.6	343.0	73.63	5.658	
9,400.0	7,180.0	9,662.4	7,400.0	46.1	48.2	121.88	2,341.6	1,053.7	416.5	340.0	76.49	5.446	
9,500.0	7,180.0	9,762.4	7,400.0	47.7	49.8	121.89	2,441.6	1,053.7	416.5	337.1	79.36	5.248	
9,600.0	7,180.0	9,862.4	7,400.0	49.3	51.3	121.89	2,541.6	1,053.7	416.4	334.2	82.24	5.063	
9,700.0	7,180.0	9,962.4	7,400.0	51.0	52.9	121.90	2,641.6	1,053.7	416.3	331.2	85.12	4.891	
9,800.0	7,180.0	10,062.4	7,400.0	52.7	54.5	121.91	2,741.6	1,053.7	416.2	328.2	88.01	4.729	
9,900.0	7,180.0	10,162.4	7,400.0	54.3	56.1	121.91	2,841.6	1,053.7	416.2	325.3	90.91	4.578	
10,000.0	7,180.0	10,262.4	7,400.0	56.0	57.7	121.92	2,941.6	1,053.7	416.1	322.3	93.81	4.436	
10,100.0	7,180.0	10,362.4	7,400.0	57.6	59.4	121.93	3,041.6	1,053.7	416.0	319.3	96.72	4.302	
10,200.0	7,180.0	10,462.4	7,400.0	59.3	61.0	121.93	3,141.6	1,053.7	415.9	316.3	99.62	4.175	
10,300.0	7,180.0	10,562.4	7,400.0	61.0	62.6	121.94	3,241.6	1,053.7	415.9	313.3	102.54	4.056	
10,400.0	7,180.0	10,662.4	7,400.0	62.7	64.3	121.94	3,341.6	1,053.7	415.8	310.3	105.45	3.943	
10,500.0	7,180.0	10,762.4	7,400.0	64.4	65.9	121.95	3,441.6	1,053.7	415.7	307.4	108.37	3.836	
10,600.0	7,180.0	10,862.4	7,400.0	66.1	67.6	121.96	3,541.6	1,053.7	415.7	304.4	111.29	3.735	
10,700.0	7,180.0	10,962.4	7,400.0	67.8	69.2	121.96	3,641.6	1,053.7	415.6	301.4	114.22	3.639	
10,800.0	7,180.0	11,062.4	7,400.0	69.5	70.9	121.97	3,741.6	1,053.7	415.5	298.4	117.14	3.547	
10,900.0	7,180.0	11,162.4	7,400.0	71.2	72.6	121.98	3,841.6	1,053.7	415.4	295.4	120.07	3.460	
11,000.0	7,180.0	11,262.4	7,400.0	72.9	74.2	121.98	3,941.6	1,053.7	415.4	292.4	123.00	3.377	
11,100.0	7,180.0	11,362.4	7,400.0	74.6	75.9	121.99	4,041.6	1,053.7	415.3	289.3	125.93	3.298	
11,200.0	7,180.0	11,462.4	7,400.0	76.3	77.6	122.00	4,141.6	1,053.7	415.2	286.3	128.86	3.222	
11,300.0	7,180.0	11,562.4	7,400.0	78.0	79.3	122.00	4,241.6	1,053.7	415.1	283.3	131.80	3.150	
11,400.0	7,180.0	11,662.4	7,400.0	79.7	81.0	122.01	4,341.6	1,053.7	415.1	280.3	134.74	3.081	
11,500.0	7,180.0	11,762.4	7,400.0	81.4	82.6	122.01	4,441.6	1,053.7	415.0	277.3	137.67	3.014	
11,600.0	7,180.0	11,862.4	7,400.0	83.1	84.3	122.02	4,541.6	1,053.7	414.9	274.3	140.61	2.951	
11,700.0	7,180.0	11,962.4	7,400.0	84.8	86.0	122.03	4,641.6	1,053.7	414.8	271.3	143.55	2.890	
11,800.0	7,180.0	12,062.4	7,400.0	86.6	87.7	122.03	4,741.6	1,053.7	414.8	268.3	146.49	2.831	
11,900.0	7,180.0	12,162.4	7,400.0	88.3	89.4	122.04	4,841.6	1,053.7	414.7	265.3	149.43	2.775	
12,000.0	7,180.0	12,262.4	7,400.0	90.0	91.1	122.05	4,941.6	1,053.7	414.6	262.2	152.37	2.721	
12,100.0	7,180.0	12,362.4	7,400.0	91.7	92.8	122.05	5,041.6	1,053.7	414.5	259.2	155.32	2.669	
12,200.0	7,180.0	12,462.4	7,400.0	93.4	94.5	122.06	5,141.6	1,053.7	414.5	256.2	158.26	2.619	
12,300.0	7,180.0	12,562.4	7,400.0	95.2	96.2	122.07	5,241.6	1,053.7	414.4	253.2	161.20	2.571	
12,400.0	7,180.0	12,662.4	7,400.0	96.9	97.9	122.07	5,341.6	1,053.7	414.3	250.2	164.15	2.524	
12,500.0	7,180.0	12,762.4	7,400.0	98.6	99.7	122.08	5,441.6	1,053.7	414.2	247.2	167.09	2.479	
12,600.0	7,180.0	12,862.4	7,400.0	100.3	101.4	122.09	5,541.6	1,053.7	414.2	244.1	170.04	2.436	
12,700.0	7,180.0	12,962.4	7,400.0	102.1	103.1	122.09	5,641.6	1,053.7	414.1	241.1	172.98	2.394	
12,800.0	7,180.0	13,062.4	7,400.0	103.8	104.8	122.10	5,741.6	1,053.7	414.0	238.1	175.93	2.353	
12,900.0	7,180.0	13,162.4	7,400.0	105.5	106.5	122.10	5,841.6	1,053.7	413.9	235.1	178.87	2.314	
13,000.0	7,180.0	13,262.4	7,400.0	107.3	108.2	122.11	5,941.6	1,053.7	413.9	232.1	181.82	2.276	
13,100.0	7,180.0	13,362.4	7,400.0	109.0	109.9	122.12	6,041.6	1,053.7	413.8	229.0	184.77	2.240	
13,200.0	7,180.0	13,462.4	7,400.0	110.7	111.7	122.12	6,141.6	1,053.7	413.7	226.0	187.71	2.204	
13,300.0	7,180.0	13,562.4	7,400.0	112.5	113.4	122.13	6,241.6	1,053.7	413.7	223.0	190.66	2.170	
13,400.0	7,180.0	13,662.4	7,400.0	114.2	115.1	122.14	6,341.6	1,053.7	413.6	220.0	193.61	2.136	
13,500.0	7,180.0	13,762.4	7,400.0	115.9	116.8	122.14	6,441.6	1,053.7	413.5	217.0	196.56	2.104	
13,600.0	7,180.0	13,862.4	7,400.0	117.7	118.5	122.15	6,541.6	1,053.7	413.4	213.9	199.50	2.072	
13,700.0	7,180.0	13,962.4	7,400.0	119.4	120.3	122.16	6,641.6	1,053.7	413.4	210.9	202.45	2.042	
13,800.0	7,180.0	14,062.4	7,400.0	121.1	122.0	122.16	6,741.6	1,053.7	413.3	207.9	205.40	2.012	
13,900.0	7,180.0	14,162.4	7,400.0	122.9	123.7	122.17	6,841.6	1,053.7	413.2	204.9	208.35	1.983	
14,000.0	7,180.0	14,262.4	7,400.0	124.6	125.4	122.18	6,941.6	1,053.7	413.1	201.8	211.29	1.955	
14,100.0	7,180.0	14,362.4	7,400.0	126.3	127.2	122.18	7,041.6	1,053.7	413.1	198.8	214.24	1.928	
14,200.0	7,180.0	14,462.4	7,400.0	128.1	128.9	122.19	7,141.6	1,053.7	413.0	195.8	217.19	1.902	
14,300.0	7,180.0	14,562.4	7,400.0	129.8	130.6	122.19	7,241.6	1,053.7	412.9	192.8	220.14	1.876	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**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 Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
14,358.6	7,180.0	14,621.0	7,400.0	130.8	131.6	122.20	7,300.2	1,053.7	412.9	191.0	221.86	1.861 SF	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**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 Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance 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	22.4	22.4				
100.0	100.0	100.0	100.0	0.1	0.1	90.00	0.0	22.4	22.4	22.1	0.26	85.434	
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	22.4	22.4	21.8	0.61	36.615	CC, ES
300.0	300.0	299.6	299.6	0.5	0.5	90.15	-0.1	23.2	23.2	22.3	0.96	24.198	
400.0	400.0	399.1	399.1	0.7	0.7	90.53	-0.2	25.8	25.8	24.5	1.31	19.668	
500.0	500.0	498.6	498.5	0.8	0.8	-6.93	-0.5	30.1	29.3	27.6	1.66	17.700	
600.0	600.0	598.0	597.7	1.0	1.0	-6.89	-1.0	36.2	32.8	30.8	2.00	16.358	
700.0	699.9	697.4	696.7	1.2	1.3	-7.04	-1.5	43.9	36.2	33.9	2.35	15.414	
800.0	799.7	796.6	795.6	1.4	1.5	-7.32	-2.2	53.3	39.7	37.0	2.70	14.713	
900.0	899.4	895.9	894.1	1.6	1.7	-7.71	-2.9	64.5	43.2	40.1	3.05	14.171	
1,000.0	998.9	995.0	992.5	1.8	2.0	-8.19	-3.8	77.3	46.6	43.3	3.40	13.737	
1,021.4	1,020.2	1,016.2	1,013.5	1.9	2.1	-8.29	-4.0	80.3	47.4	43.9	3.47	13.655	
1,100.0	1,098.3	1,094.1	1,090.5	2.1	2.3	-8.63	-4.9	91.8	50.7	46.9	3.75	13.517	SF
1,200.0	1,197.7	1,193.0	1,188.1	2.3	2.6	-8.86	-6.0	108.0	56.3	52.2	4.10	13.743	
1,300.0	1,297.1	1,291.7	1,285.1	2.5	3.0	-8.90	-7.2	125.8	63.7	59.3	4.45	14.319	
1,400.0	1,396.6	1,390.1	1,381.6	2.8	3.4	-8.82	-8.6	145.2	72.8	68.0	4.80	15.168	
1,500.0	1,496.0	1,489.2	1,478.5	3.0	3.7	-8.67	-10.0	166.0	83.2	78.1	5.15	16.147	
1,600.0	1,595.4	1,588.7	1,575.7	3.3	4.1	-8.56	-11.5	187.0	93.7	88.2	5.51	17.012	
1,700.0	1,694.8	1,688.1	1,672.9	3.5	4.5	-8.46	-13.0	207.9	104.1	98.3	5.86	17.774	
1,800.0	1,794.2	1,787.6	1,770.1	3.8	4.9	-8.38	-14.4	228.9	114.6	108.4	6.21	18.449	
1,900.0	1,893.6	1,887.0	1,867.3	4.0	5.3	-8.32	-15.9	249.8	125.1	118.5	6.56	19.051	
2,000.0	1,993.0	1,986.5	1,964.5	4.3	5.7	-8.27	-17.3	270.8	135.5	128.6	6.92	19.592	
2,100.0	2,092.4	2,085.9	2,061.7	4.5	6.1	-8.22	-18.8	291.7	146.0	138.7	7.27	20.081	
2,200.0	2,191.9	2,185.4	2,158.9	4.8	6.5	-8.18	-20.3	312.7	156.4	148.8	7.62	20.525	
2,300.0	2,291.3	2,284.8	2,256.1	5.0	6.9	-8.15	-21.7	333.6	166.9	158.9	7.97	20.929	
2,400.0	2,390.7	2,384.3	2,353.3	5.3	7.4	-8.11	-23.2	354.6	177.3	169.0	8.33	21.299	
2,500.0	2,490.1	2,483.7	2,450.6	5.6	7.8	-8.09	-24.7	375.5	187.8	179.1	8.68	21.640	
2,600.0	2,589.5	2,583.2	2,547.8	5.8	8.2	-8.06	-26.1	396.5	198.3	189.2	9.03	21.953	
2,700.0	2,688.9	2,682.6	2,645.0	6.1	8.6	-8.04	-27.6	417.4	208.7	199.3	9.38	22.243	
2,800.0	2,788.3	2,782.1	2,742.2	6.3	9.0	-8.02	-29.1	438.4	219.2	209.4	9.74	22.513	
2,900.0	2,887.7	2,881.5	2,839.4	6.6	9.4	-8.00	-30.5	459.3	229.6	219.5	10.09	22.763	
3,000.0	2,987.2	2,981.0	2,936.6	6.8	9.8	-7.99	-32.0	480.3	240.1	229.7	10.44	22.996	
3,100.0	3,086.6	3,080.4	3,033.8	7.1	10.2	-7.97	-33.4	501.2	250.5	239.8	10.79	23.215	
3,200.0	3,186.0	3,179.9	3,131.0	7.3	10.6	-7.96	-34.9	522.2	261.0	249.9	11.15	23.419	
3,300.0	3,285.4	3,279.4	3,228.2	7.6	11.0	-7.94	-36.4	543.1	271.5	260.0	11.50	23.611	
3,400.0	3,384.8	3,378.8	3,325.4	7.9	11.4	-7.93	-37.8	564.1	281.9	270.1	11.85	23.791	
3,500.0	3,484.2	3,478.3	3,422.6	8.1	11.9	-7.92	-39.3	585.0	292.4	280.2	12.20	23.961	
3,600.0	3,583.6	3,577.7	3,519.9	8.4	12.3	-7.91	-40.8	606.0	302.8	290.3	12.55	24.122	
3,700.0	3,683.0	3,677.2	3,617.1	8.6	12.7	-7.90	-42.2	626.9	313.3	300.4	12.91	24.274	
3,800.0	3,782.5	3,776.6	3,714.3	8.9	13.1	-7.89	-43.7	647.8	323.8	310.5	13.26	24.417	
3,900.0	3,881.9	3,876.1	3,811.5	9.1	13.5	-7.88	-45.1	668.8	334.2	320.6	13.61	24.554	
4,000.0	3,981.3	3,975.5	3,908.7	9.4	13.9	-7.87	-46.6	689.7	344.7	330.7	13.96	24.683	
4,100.0	4,080.7	4,075.0	4,005.9	9.7	14.3	-7.87	-48.1	710.7	355.1	340.8	14.32	24.806	
4,200.0	4,180.1	4,174.4	4,103.1	9.9	14.7	-7.86	-49.5	731.6	365.6	350.9	14.67	24.923	
4,300.0	4,279.5	4,273.9	4,200.3	10.2	15.1	-7.85	-51.0	752.6	376.1	361.0	15.02	25.035	
4,400.0	4,378.9	4,373.3	4,297.5	10.4	15.6	-7.85	-52.5	773.5	386.5	371.1	15.37	25.141	
4,500.0	4,478.3	4,472.8	4,394.7	10.7	16.0	-7.84	-53.9	794.5	397.0	381.2	15.73	25.243	
4,600.0	4,577.8	4,572.2	4,491.9	10.9	16.4	-7.84	-55.4	815.4	407.4	391.3	16.08	25.341	
4,700.0	4,677.2	4,671.7	4,589.2	11.2	16.8	-7.83	-56.9	836.4	417.9	401.5	16.43	25.434	
4,800.0	4,776.6	4,771.1	4,686.4	11.5	17.2	-7.83	-58.3	857.3	428.3	411.6	16.78	25.523	
4,900.0	4,876.0	4,870.6	4,783.6	11.7	17.6	-7.82	-59.8	878.3	438.8	421.7	17.14	25.608	
5,000.0	4,975.4	4,970.0	4,880.8	12.0	18.0	-7.82	-61.2	899.2	449.3	431.8	17.49	25.690	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**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 Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,074.8	5,069.5	4,978.0	12.2	18.4	-7.81	-62.7	920.2	459.7	441.9	17.84	25.769	
5,200.0	5,174.2	5,168.9	5,075.2	12.5	18.9	-7.81	-64.2	941.1	470.2	452.0	18.19	25.845	
5,300.0	5,273.6	5,268.4	5,172.4	12.7	19.3	-7.80	-65.6	962.1	480.6	462.1	18.54	25.918	
5,400.0	5,373.1	5,367.8	5,269.6	13.0	19.7	-7.80	-67.1	983.0	491.1	472.2	18.90	25.988	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - HURT 1 (EXISTING) - ENCANA WELL - NO SURVEY

Offset Site Error: 0.0 ft

Survey Program: 8026-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,200.0	7,180.0	7,170.0	7,170.0	59.3	12.5	-90.00	3,547.4	523.0	443.0	372.4	70.55	6.278	
10,300.0	7,180.0	7,170.0	7,170.0	61.0	12.5	-90.00	3,547.4	523.0	353.7	281.4	72.27	4.894	
10,400.0	7,180.0	7,170.0	7,170.0	62.7	12.5	-90.00	3,547.4	523.0	272.0	198.0	73.99	3.676	
10,500.0	7,180.0	7,170.0	7,170.0	64.4	12.5	-90.00	3,547.4	523.0	207.0	131.3	75.71	2.734	
10,600.0	7,180.0	7,170.0	7,170.0	66.1	12.5	-90.00	3,547.4	523.0	178.1	100.7	77.43	2.301	
10,605.6	7,180.0	7,170.0	7,170.0	66.2	12.5	-90.00	3,547.4	523.0	178.0	100.5	77.53	2.297	CC, ES, SF
10,700.0	7,180.0	7,170.0	7,170.0	67.8	12.5	-90.00	3,547.4	523.0	201.5	122.4	79.15	2.546	
10,800.0	7,180.0	7,170.0	7,170.0	69.5	12.5	-90.00	3,547.4	523.0	263.6	182.7	80.88	3.259	
10,900.0	7,180.0	7,170.0	7,170.0	71.2	12.5	-90.00	3,547.4	523.0	344.0	261.4	82.61	4.165	
11,000.0	7,180.0	7,170.0	7,170.0	72.9	12.5	-90.00	3,547.4	523.0	432.7	348.4	84.33	5.131	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - HURT 43-11 (EXISTING) - ENCANA WELL - SURVEY

Offset Site Error: 0.0 ft

Survey Program: 70-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
11,000.0	7,180.0	7,480.0	7,128.1	72.9	37.4	69.14	4,373.4	747.8	434.7	340.5	94.20	4.614	
11,100.0	7,180.0	7,482.2	7,130.3	74.6	37.4	71.64	4,373.5	747.8	335.5	238.3	97.17	3.453	
11,200.0	7,180.0	7,486.5	7,134.5	76.3	37.4	76.49	4,373.7	747.9	236.9	135.9	101.00	2.346	
11,300.0	7,180.0	7,490.8	7,138.8	78.0	37.4	81.67	4,373.9	748.0	140.3	36.0	104.31	1.345	Level 3
11,400.0	7,180.0	7,495.2	7,143.3	79.7	37.4	87.13	4,374.1	748.1	56.6	-50.3	106.88	0.530	Level 1
11,432.6	7,180.0	7,496.7	7,144.8	80.3	37.4	88.96	4,374.2	748.1	46.3	-61.2	107.53	0.431	Level 1, CC, ES, SF
11,500.0	7,180.0	7,499.8	7,147.9	81.4	37.4	92.79	4,374.3	748.2	81.7	-26.8	108.54	0.753	Level 1
11,600.0	7,180.0	7,504.5	7,152.6	83.1	37.5	98.54	4,374.5	748.2	173.5	64.3	109.16	1.589	
11,700.0	7,180.0	7,509.4	7,157.4	84.8	37.5	104.26	4,374.8	748.3	271.1	162.4	108.71	2.494	
11,800.0	7,180.0	7,514.4	7,162.4	86.6	37.5	109.86	4,375.0	748.4	369.9	262.7	107.25	3.449	
11,900.0	7,180.0	7,519.6	7,167.6	88.3	37.5	115.23	4,375.3	748.5	469.2	364.3	104.91	4.472	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - HURT 7-8-11 (EXISTING) - ENCANA WELL - SURVE

Offset Site Error: 0.0 ft

Survey Program: 70-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,200.0	7,180.0	7,414.3	7,143.8	42.8	31.6	88.60	2,559.2	907.6	466.5	410.6	55.90	8.345	
9,300.0	7,180.0	7,415.5	7,145.1	44.5	31.6	88.94	2,559.3	907.6	379.5	321.9	57.57	6.592	
9,400.0	7,180.0	7,416.8	7,146.3	46.1	31.6	89.29	2,559.3	907.6	300.8	241.5	59.25	5.076	
9,500.0	7,180.0	7,418.0	7,147.6	47.7	31.6	89.63	2,559.3	907.6	238.5	177.6	60.93	3.914	
9,600.0	7,180.0	7,419.3	7,148.8	49.3	31.6	89.97	2,559.3	907.6	208.1	145.5	62.62	3.324	
9,617.9	7,180.0	7,419.5	7,149.0	49.6	31.6	90.04	2,559.3	907.6	207.4	144.5	62.92	3.296	CC, ES, SF
9,700.0	7,180.0	7,420.5	7,150.1	51.0	31.6	90.32	2,559.3	907.6	223.0	158.7	64.31	3.468	
9,800.0	7,180.0	7,421.8	7,151.3	52.7	31.6	90.66	2,559.3	907.6	276.0	210.0	66.00	4.182	
9,900.0	7,180.0	7,423.0	7,152.6	54.3	31.6	91.01	2,559.4	907.6	350.1	282.4	67.69	5.172	
10,000.0	7,180.0	7,424.3	7,153.8	56.0	31.6	91.36	2,559.4	907.6	434.7	365.4	69.38	6.266	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt) - STANLEY OLSON 2 (EXISTING) - WHITEWING WE

Offset Site Error: 0.0 ft

Survey Program: 655-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
7,250.0	7,106.3	7,187.3	7,085.6	18.0	19.5	31.65	665.1	861.5	491.5	467.8	23.75	20.692	
7,300.0	7,128.9	7,210.5	7,108.8	18.2	19.5	40.08	665.3	861.3	449.2	425.5	23.67	18.972	
7,350.0	7,147.5	7,229.7	7,127.9	18.6	19.5	50.54	665.4	861.1	405.7	381.2	24.59	16.504	
7,400.0	7,162.0	7,244.6	7,142.9	18.9	19.5	62.40	665.5	861.0	362.0	335.8	26.16	13.835	
7,450.0	7,172.3	7,255.2	7,153.5	19.3	19.5	74.15	665.5	860.9	318.6	290.9	27.65	11.522	
7,500.0	7,178.3	7,261.5	7,159.8	19.7	19.5	83.99	665.5	860.9	276.7	248.2	28.57	9.686	
7,544.6	7,180.0	7,263.4	7,161.7	20.1	19.5	90.24	665.6	860.8	242.0	213.0	29.00	8.343	
7,600.0	7,180.0	7,263.6	7,161.9	20.6	19.5	90.32	665.6	860.8	204.3	174.6	29.64	6.892	
7,700.0	7,180.0	7,264.0	7,162.3	21.6	19.5	90.45	665.6	860.8	164.1	133.2	30.87	5.315	
7,724.1	7,180.0	7,264.1	7,162.4	21.8	19.5	90.49	665.6	860.8	162.3	131.1	31.19	5.204	CC, ES, SF
7,800.0	7,180.0	7,264.4	7,162.7	22.7	19.5	90.59	665.6	860.8	179.2	147.0	32.18	5.567	
7,900.0	7,180.0	7,264.8	7,163.0	23.8	19.5	90.72	665.6	860.8	239.3	205.8	33.56	7.132	
8,000.0	7,180.0	7,265.1	7,163.4	25.1	19.5	90.85	665.6	860.8	320.1	285.1	34.99	9.148	
8,100.0	7,180.0	7,265.5	7,163.8	26.4	19.5	90.98	665.6	860.8	409.5	373.0	36.47	11.228	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant-Hurt 1F-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 1F-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 #2	**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 1F-14H-G268
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.34°