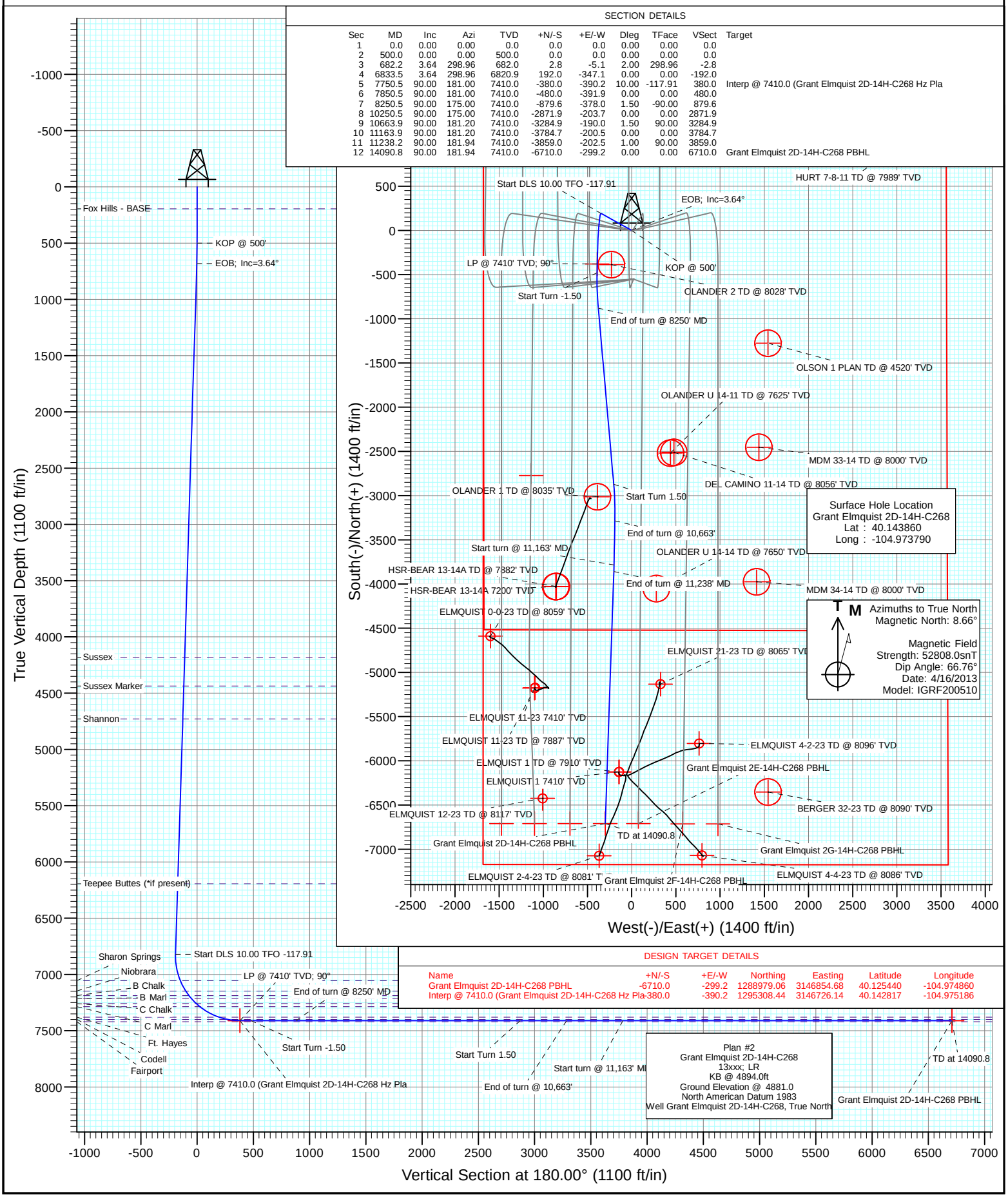
Project: DJ Wattenberg
Site: S14-T2N-R68W (Grant Elmquist/Salisbury)
Well: Grant Elmquist 2D-14H-C268
Wellbore: Hz
Design: Plan #2

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	500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0	
3	682.2	3.64	298.96	682.0	2.8	-5.1	2.00	298.96	-2.8	
4	6833.5	3.64	298.96	6820.9	192.0	-347.1	0.00	0.00	-192.0	
5	7750.5	90.00	181.00	7410.0	-380.0	-390.2	10.00	-117.91	380.0	Interp @ 7410.0 (Grant Elmquist 2D-14H-C268 Hz Pla
6	7850.5	90.00	181.00	7410.0	-480.0	-391.9	0.00	0.00	480.0	
7	8250.5	90.00	175.00	7410.0	-879.6	-378.0	1.50	-90.00	879.6	
8	10250.5	90.00	175.00	7410.0	-2871.9	-203.7	0.00	0.00	2871.9	
9	10663.9	90.00	181.20	7410.0	-3284.9	-190.0	1.50	90.00	3284.9	
10	11163.9	90.00	181.20	7410.0	-3784.7	-200.5	0.00	0.00	3784.7	
11	11238.2	90.00	181.94	7410.0	-3859.0	-202.5	1.00	90.00	3859.0	
12	14090.8	90.00	181.94	7410.0	-6710.0	-299.2	0.00	0.00	6710.0	Grant Elmquist 2D-14H-C268 PBHL



DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Grant Elmquist 2D-14H-C268 PBHL	-6710.0	-299.2	1288979.06	3146854.68	40.125440	-104.974860
Interp @ 7410.0 (Grant Elmquist 2D-14H-C268 Hz Pla	-380.0	-390.2	1295308.44	3146726.14	40.142817	-104.975186

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	KB @ 4894.0ft
Project:	DJ Wattenberg	**MD Reference:**	KB @ 4894.0ft
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**North Reference:**	True
Well:	Grant Elmquist 2D-14H-C268	**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)

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 Elmquist 2D-14H-C268

Well Position	**+N/-S**	0.0 ft	**Northing:**	1,295,690.75 ft	**Latitude:**	40.143860
	+E/-W	0.0 ft	**Easting:**	3,147,114.07 ft	**Longitude:**	-104.973790
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,881.0 ft

Wellbore Hz

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	4/16/2013	8.66	66.76	52,808

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	180.00

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	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
682.2	3.64	298.96	682.0	2.8	-5.1	2.00	2.00	0.00	298.96	
6,833.5	3.64	298.96	6,820.9	192.0	-347.1	0.00	0.00	0.00	0.00	
7,750.5	90.00	181.00	7,410.0	-380.0	-390.2	10.00	9.42	-12.86	-117.91	Interp @ 7410.0 (Grai
7,850.5	90.00	181.00	7,410.0	-480.0	-391.9	0.00	0.00	0.00	0.00	
8,250.5	90.00	175.00	7,410.0	-879.6	-378.0	1.50	0.00	-1.50	-90.00	
10,250.5	90.00	175.00	7,410.0	-2,871.9	-203.7	0.00	0.00	0.00	0.00	
10,663.9	90.00	181.20	7,410.0	-3,284.9	-190.0	1.50	0.00	1.50	90.00	
11,163.9	90.00	181.20	7,410.0	-3,784.7	-200.5	0.00	0.00	0.00	0.00	
11,238.2	90.00	181.94	7,410.0	-3,859.0	-202.5	1.00	0.00	1.00	90.00	
14,090.8	90.00	181.94	7,410.0	-6,710.0	-299.2	0.00	0.00	0.00	0.00	Grant Elmquist 2D-14

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	KB @ 4894.0ft
Project:	DJ Wattenberg	**MD Reference:**	KB @ 4894.0ft
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**North Reference:**	True
Well:	Grant Elmquist 2D-14H-C268	**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	
194.0	0.00	0.00	194.0	0.0	0.0	0.0	0.00	0.00	Fox Hills - BASE
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	KOP @ 500'
600.0	2.00	298.96	600.0	0.8	-1.5	-0.8	2.00	2.00	
682.2	3.64	298.96	682.0	2.8	-5.1	-2.8	2.00	2.00	EOB; Inc=3.64°
700.0	3.64	298.96	699.8	3.4	-6.1	-3.4	0.00	0.00	
800.0	3.64	298.96	799.6	6.4	-11.6	-6.4	0.00	0.00	
900.0	3.64	298.96	899.4	9.5	-17.2	-9.5	0.00	0.00	
1,000.0	3.64	298.96	999.2	12.6	-22.7	-12.6	0.00	0.00	
1,100.0	3.64	298.96	1,099.0	15.7	-28.3	-15.7	0.00	0.00	
1,200.0	3.64	298.96	1,198.8	18.7	-33.9	-18.7	0.00	0.00	
1,300.0	3.64	298.96	1,298.6	21.8	-39.4	-21.8	0.00	0.00	
1,400.0	3.64	298.96	1,398.4	24.9	-45.0	-24.9	0.00	0.00	
1,500.0	3.64	298.96	1,498.2	28.0	-50.5	-28.0	0.00	0.00	
1,600.0	3.64	298.96	1,598.0	31.0	-56.1	-31.0	0.00	0.00	
1,700.0	3.64	298.96	1,697.8	34.1	-61.7	-34.1	0.00	0.00	
1,800.0	3.64	298.96	1,797.6	37.2	-67.2	-37.2	0.00	0.00	
1,900.0	3.64	298.96	1,897.4	40.3	-72.8	-40.3	0.00	0.00	
2,000.0	3.64	298.96	1,997.2	43.3	-78.3	-43.3	0.00	0.00	
2,100.0	3.64	298.96	2,097.0	46.4	-83.9	-46.4	0.00	0.00	
2,200.0	3.64	298.96	2,196.8	49.5	-89.5	-49.5	0.00	0.00	
2,300.0	3.64	298.96	2,296.6	52.6	-95.0	-52.6	0.00	0.00	
2,400.0	3.64	298.96	2,396.4	55.6	-100.6	-55.6	0.00	0.00	
2,500.0	3.64	298.96	2,496.2	58.7	-106.1	-58.7	0.00	0.00	
2,600.0	3.64	298.96	2,596.0	61.8	-111.7	-61.8	0.00	0.00	
2,700.0	3.64	298.96	2,695.8	64.9	-117.3	-64.9	0.00	0.00	
2,800.0	3.64	298.96	2,795.6	68.0	-122.8	-68.0	0.00	0.00	
2,900.0	3.64	298.96	2,895.4	71.0	-128.4	-71.0	0.00	0.00	
3,000.0	3.64	298.96	2,995.2	74.1	-133.9	-74.1	0.00	0.00	
3,100.0	3.64	298.96	3,095.0	77.2	-139.5	-77.2	0.00	0.00	
3,200.0	3.64	298.96	3,194.8	80.3	-145.1	-80.3	0.00	0.00	
3,300.0	3.64	298.96	3,294.6	83.3	-150.6	-83.3	0.00	0.00	
3,400.0	3.64	298.96	3,394.4	86.4	-156.2	-86.4	0.00	0.00	
3,500.0	3.64	298.96	3,494.2	89.5	-161.7	-89.5	0.00	0.00	
3,600.0	3.64	298.96	3,594.0	92.6	-167.3	-92.6	0.00	0.00	
3,700.0	3.64	298.96	3,693.8	95.6	-172.9	-95.6	0.00	0.00	
3,800.0	3.64	298.96	3,793.6	98.7	-178.4	-98.7	0.00	0.00	
3,900.0	3.64	298.96	3,893.4	101.8	-184.0	-101.8	0.00	0.00	
4,000.0	3.64	298.96	3,993.2	104.9	-189.5	-104.9	0.00	0.00	
4,100.0	3.64	298.96	4,093.0	107.9	-195.1	-107.9	0.00	0.00	
4,189.2	3.64	298.96	4,182.0	110.7	-200.1	-110.7	0.00	0.00	Sussex
4,200.0	3.64	298.96	4,192.8	111.0	-200.7	-111.0	0.00	0.00	
4,300.0	3.64	298.96	4,292.6	114.1	-206.2	-114.1	0.00	0.00	
4,400.0	3.64	298.96	4,392.4	117.2	-211.8	-117.2	0.00	0.00	
4,443.7	3.64	298.96	4,436.0	118.5	-214.2	-118.5	0.00	0.00	Sussex Marker
4,500.0	3.64	298.96	4,492.2	120.3	-217.3	-120.3	0.00	0.00	
4,600.0	3.64	298.96	4,592.0	123.3	-222.9	-123.3	0.00	0.00	
4,700.0	3.64	298.96	4,691.8	126.4	-228.5	-126.4	0.00	0.00	

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Project:	DJ Wattenberg	**MD Reference:**	KB @ 4894.0ft
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**North Reference:**	True
Well:	Grant Elmquist 2D-14H-C268	**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
4,737.3	3.64	298.96	4,729.0	127.6	-230.5	-127.6	0.00	0.00	Shannon
4,800.0	3.64	298.96	4,791.6	129.5	-234.0	-129.5	0.00	0.00	
4,900.0	3.64	298.96	4,891.4	132.6	-239.6	-132.6	0.00	0.00	
5,000.0	3.64	298.96	4,991.2	135.6	-245.1	-135.6	0.00	0.00	
5,100.0	3.64	298.96	5,090.9	138.7	-250.7	-138.7	0.00	0.00	
5,200.0	3.64	298.96	5,190.7	141.8	-256.3	-141.8	0.00	0.00	
5,300.0	3.64	298.96	5,290.5	144.9	-261.8	-144.9	0.00	0.00	
5,400.0	3.64	298.96	5,390.3	147.9	-267.4	-147.9	0.00	0.00	
5,500.0	3.64	298.96	5,490.1	151.0	-272.9	-151.0	0.00	0.00	
5,600.0	3.64	298.96	5,589.9	154.1	-278.5	-154.1	0.00	0.00	
5,700.0	3.64	298.96	5,689.7	157.2	-284.1	-157.2	0.00	0.00	
5,800.0	3.64	298.96	5,789.5	160.2	-289.6	-160.2	0.00	0.00	
5,900.0	3.64	298.96	5,889.3	163.3	-295.2	-163.3	0.00	0.00	
6,000.0	3.64	298.96	5,989.1	166.4	-300.7	-166.4	0.00	0.00	
6,100.0	3.64	298.96	6,088.9	169.5	-306.3	-169.5	0.00	0.00	
6,200.0	3.64	298.96	6,188.7	172.6	-311.9	-172.6	0.00	0.00	
6,205.3	3.64	298.96	6,194.0	172.7	-312.2	-172.7	0.00	0.00	Teepee Buttes (*if present)
6,300.0	3.64	298.96	6,288.5	175.6	-317.4	-175.6	0.00	0.00	
6,400.0	3.64	298.96	6,388.3	178.7	-323.0	-178.7	0.00	0.00	
6,500.0	3.64	298.96	6,488.1	181.8	-328.5	-181.8	0.00	0.00	
6,600.0	3.64	298.96	6,587.9	184.9	-334.1	-184.9	0.00	0.00	
6,700.0	3.64	298.96	6,687.7	187.9	-339.7	-187.9	0.00	0.00	
6,800.0	3.64	298.96	6,787.5	191.0	-345.2	-191.0	0.00	0.00	
6,833.5	3.64	298.96	6,820.9	192.0	-347.1	-192.0	0.00	0.00	Start DLS 10.00 TFO -117.91
6,900.0	5.90	213.97	6,887.3	190.2	-350.8	-190.2	10.00	3.39	
7,000.0	15.28	192.88	6,985.5	173.1	-356.7	-173.1	10.00	9.38	
7,073.5	22.52	188.80	7,055.0	149.7	-361.0	-149.7	10.00	9.84	Sharon Springs
7,100.0	25.14	187.88	7,079.2	139.1	-362.5	-139.1	10.00	9.90	
7,178.7	32.96	185.98	7,148.0	101.2	-367.1	-101.2	10.00	9.93	Niobrara
7,200.0	35.08	185.59	7,165.6	89.3	-368.3	-89.3	10.00	9.95	
7,227.8	37.85	185.15	7,188.0	72.9	-369.8	-72.9	10.00	9.96	B Chalk
7,258.9	40.94	184.72	7,212.0	53.2	-371.5	-53.2	10.00	9.96	B Marl
7,300.0	45.04	184.22	7,242.1	25.3	-373.7	-25.3	10.00	9.97	
7,324.5	47.48	183.96	7,259.0	7.7	-374.9	-7.7	10.00	9.97	C Chalk
7,366.1	51.63	183.55	7,286.0	-24.0	-377.0	24.0	10.00	9.97	C Marl
7,400.0	55.01	183.26	7,306.2	-51.1	-378.6	51.1	10.00	9.98	
7,500.0	64.99	182.50	7,356.2	-137.5	-382.9	137.5	10.00	9.98	
7,564.2	71.39	182.08	7,380.0	-196.9	-385.3	196.9	10.00	9.98	Ft. Hayes
7,600.0	74.97	181.87	7,390.4	-231.2	-386.5	231.2	10.00	9.98	
7,643.2	79.29	181.61	7,400.0	-273.4	-387.8	273.4	10.00	9.98	Codell
7,700.0	84.96	181.28	7,407.8	-329.5	-389.2	329.5	10.00	9.98	
7,750.5	90.00	181.00	7,410.0	-380.0	-390.2	380.0	10.00	9.98	LP @ 7410' TVD; 90° - Interp @ 7410.0 (Grant
7,800.0	90.00	181.00	7,410.0	-429.5	-391.1	429.5	0.00	0.00	
7,850.5	90.00	181.00	7,410.0	-480.0	-391.9	480.0	0.00	0.00	Start Turn -1.50
7,900.0	90.00	180.26	7,410.0	-529.5	-392.5	529.5	1.50	0.00	
8,000.0	90.00	178.76	7,410.0	-629.4	-391.6	629.4	1.50	0.00	
8,100.0	90.00	177.26	7,410.0	-729.4	-388.2	729.4	1.50	0.00	
8,200.0	90.00	175.76	7,410.0	-829.2	-382.1	829.2	1.50	0.00	
8,250.5	90.00	175.00	7,410.0	-879.6	-378.0	879.6	1.50	0.00	End of turn @ 8250' MD
8,300.0	90.00	175.00	7,410.0	-928.8	-373.7	928.8	0.00	0.00	
8,400.0	90.00	175.00	7,410.0	-1,028.5	-365.0	1,028.5	0.00	0.00	
8,500.0	90.00	175.00	7,410.0	-1,128.1	-356.2	1,128.1	0.00	0.00	

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Project:	DJ Wattenberg	**MD Reference:**	KB @ 4894.0ft
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**North Reference:**	True
Well:	Grant Elmquist 2D-14H-C268	**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
8,600.0	90.00	175.00	7,410.0	-1,227.7	-347.5	1,227.7	0.00	0.00	
8,700.0	90.00	175.00	7,410.0	-1,327.3	-338.8	1,327.3	0.00	0.00	
8,800.0	90.00	175.00	7,410.0	-1,426.9	-330.1	1,426.9	0.00	0.00	
8,900.0	90.00	175.00	7,410.0	-1,526.6	-321.4	1,526.6	0.00	0.00	
9,000.0	90.00	175.00	7,410.0	-1,626.2	-312.7	1,626.2	0.00	0.00	
9,100.0	90.00	175.00	7,410.0	-1,725.8	-304.0	1,725.8	0.00	0.00	
9,200.0	90.00	175.00	7,410.0	-1,825.4	-295.2	1,825.4	0.00	0.00	
9,300.0	90.00	175.00	7,410.0	-1,925.0	-286.5	1,925.0	0.00	0.00	
9,400.0	90.00	175.00	7,410.0	-2,024.7	-277.8	2,024.7	0.00	0.00	
9,500.0	90.00	175.00	7,410.0	-2,124.3	-269.1	2,124.3	0.00	0.00	
9,600.0	90.00	175.00	7,410.0	-2,223.9	-260.4	2,223.9	0.00	0.00	
9,700.0	90.00	175.00	7,410.0	-2,323.5	-251.7	2,323.5	0.00	0.00	
9,800.0	90.00	175.00	7,410.0	-2,423.1	-242.9	2,423.1	0.00	0.00	
9,900.0	90.00	175.00	7,410.0	-2,522.8	-234.2	2,522.8	0.00	0.00	
10,000.0	90.00	175.00	7,410.0	-2,622.4	-225.5	2,622.4	0.00	0.00	
10,100.0	90.00	175.00	7,410.0	-2,722.0	-216.8	2,722.0	0.00	0.00	
10,200.0	90.00	175.00	7,410.0	-2,821.6	-208.1	2,821.6	0.00	0.00	
10,250.5	90.00	175.00	7,410.0	-2,871.9	-203.7	2,871.9	0.00	0.00	Start Turn 1.50
10,300.0	90.00	175.74	7,410.0	-2,921.3	-199.7	2,921.3	1.50	0.00	
10,400.0	90.00	177.24	7,410.0	-3,021.1	-193.6	3,021.1	1.50	0.00	
10,500.0	90.00	178.74	7,410.0	-3,121.0	-190.1	3,121.0	1.50	0.00	
10,600.0	90.00	180.24	7,410.0	-3,221.0	-189.2	3,221.0	1.50	0.00	
10,663.9	90.00	181.20	7,410.0	-3,284.9	-190.0	3,284.9	1.50	0.00	End of turn @ 10,663'
10,700.0	90.00	181.20	7,410.0	-3,321.0	-190.7	3,321.0	0.00	0.00	
10,800.0	90.00	181.20	7,410.0	-3,421.0	-192.8	3,421.0	0.00	0.00	
10,900.0	90.00	181.20	7,410.0	-3,520.9	-194.9	3,520.9	0.00	0.00	
11,000.0	90.00	181.20	7,410.0	-3,620.9	-197.0	3,620.9	0.00	0.00	
11,100.0	90.00	181.20	7,410.0	-3,720.9	-199.1	3,720.9	0.00	0.00	
11,163.9	90.00	181.20	7,410.0	-3,784.8	-200.5	3,784.8	0.00	0.00	Start turn @ 11,163' MD
11,200.0	90.00	181.56	7,410.0	-3,820.9	-201.3	3,820.9	1.00	0.00	
11,238.2	90.00	181.94	7,410.0	-3,859.0	-202.5	3,859.0	1.00	0.00	End of turn @ 11,238' MD
11,300.0	90.00	181.94	7,410.0	-3,920.8	-204.6	3,920.8	0.00	0.00	
11,400.0	90.00	181.94	7,410.0	-4,020.8	-208.0	4,020.8	0.00	0.00	
11,500.0	90.00	181.94	7,410.0	-4,120.7	-211.4	4,120.7	0.00	0.00	
11,600.0	90.00	181.94	7,410.0	-4,220.6	-214.8	4,220.6	0.00	0.00	
11,700.0	90.00	181.94	7,410.0	-4,320.6	-218.2	4,320.6	0.00	0.00	
11,800.0	90.00	181.94	7,410.0	-4,420.5	-221.5	4,420.5	0.00	0.00	
11,900.0	90.00	181.94	7,410.0	-4,520.5	-224.9	4,520.5	0.00	0.00	
12,000.0	90.00	181.94	7,410.0	-4,620.4	-228.3	4,620.4	0.00	0.00	
12,100.0	90.00	181.94	7,410.0	-4,720.4	-231.7	4,720.4	0.00	0.00	
12,200.0	90.00	181.94	7,410.0	-4,820.3	-235.1	4,820.3	0.00	0.00	
12,300.0	90.00	181.94	7,410.0	-4,920.2	-238.5	4,920.2	0.00	0.00	
12,400.0	90.00	181.94	7,410.0	-5,020.2	-241.9	5,020.2	0.00	0.00	
12,500.0	90.00	181.94	7,410.0	-5,120.1	-245.3	5,120.1	0.00	0.00	
12,600.0	90.00	181.94	7,410.0	-5,220.1	-248.7	5,220.1	0.00	0.00	
12,700.0	90.00	181.94	7,410.0	-5,320.0	-252.1	5,320.0	0.00	0.00	
12,800.0	90.00	181.94	7,410.0	-5,420.0	-255.4	5,420.0	0.00	0.00	
12,900.0	90.00	181.94	7,410.0	-5,519.9	-258.8	5,519.9	0.00	0.00	
13,000.0	90.00	181.94	7,410.0	-5,619.8	-262.2	5,619.8	0.00	0.00	
13,100.0	90.00	181.94	7,410.0	-5,719.8	-265.6	5,719.8	0.00	0.00	
13,200.0	90.00	181.94	7,410.0	-5,819.7	-269.0	5,819.7	0.00	0.00	
13,300.0	90.00	181.94	7,410.0	-5,919.7	-272.4	5,919.7	0.00	0.00	

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	KB @ 4894.0ft
Project:	DJ Wattenberg	**MD Reference:**	KB @ 4894.0ft
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**North Reference:**	True
Well:	Grant Elmquist 2D-14H-C268	**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
13,400.0	90.00	181.94	7,410.0	-6,019.6	-275.8	6,019.6	0.00	0.00	
13,500.0	90.00	181.94	7,410.0	-6,119.6	-279.2	6,119.6	0.00	0.00	
13,600.0	90.00	181.94	7,410.0	-6,219.5	-282.6	6,219.5	0.00	0.00	
13,700.0	90.00	181.94	7,410.0	-6,319.4	-286.0	6,319.4	0.00	0.00	
13,800.0	90.00	181.94	7,410.0	-6,419.4	-289.4	6,419.4	0.00	0.00	
13,900.0	90.00	181.94	7,410.0	-6,519.3	-292.7	6,519.3	0.00	0.00	
14,000.0	90.00	181.94	7,410.0	-6,619.3	-296.1	6,619.3	0.00	0.00	
14,090.8	90.00	181.94	7,410.0	-6,710.0	-299.2	6,710.0	0.00	0.00	TD at 14090.8 - Grant Elmquist 2D-14H-C268 F

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 Elmquist 2D-14H- - plan hits target center - Point	0.00	0.00	7,410.0	-6,710.0	-299.2	1,288,979.06	3,146,854.68	40.125440	-104.974860
Interp @ 7410.0 (Grant I - plan hits target center - Point	0.00	0.00	7,410.0	-380.0	-390.2	1,295,308.44	3,146,726.14	40.142817	-104.975186

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
194.0	194.0	Fox Hills - BASE			
4,189.2	4,182.0	Sussex			
4,443.7	4,436.0	Sussex Marker			
4,737.3	4,729.0	Shannon			
6,205.3	6,194.0	Teepee Buttes (*if present)			
7,073.5	7,055.0	Sharon Springs			
7,178.7	7,148.0	Niobrara			
7,227.8	7,188.0	B Chalk			
7,258.9	7,212.0	B Marl			
7,324.5	7,259.0	C Chalk			
7,366.1	7,286.0	C Marl			
7,564.2	7,380.0	Ft. Hayes			
7,643.2	7,400.0	Codell			

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	KB @ 4894.0ft
Project:	DJ Wattenberg	**MD Reference:**	KB @ 4894.0ft
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**North Reference:**	True
Well:	Grant Elmquist 2D-14H-C268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
500.0	500.0	0.0	0.0	KOP @ 500'
682.2	682.0	2.8	-5.1	EOB; Inc=3.64°
6,833.5	6,820.9	192.0	-347.1	Start DLS 10.00 TFO -117.91
7,750.5	7,410.0	-380.0	-390.2	LP @ 7410' TVD; 90°
7,850.5	7,410.0	-480.0	-391.9	Start Turn -1.50
8,250.5	7,410.0	-879.6	-378.0	End of turn @ 8250' MD
10,250.5	7,410.0	-2,871.9	-203.7	Start Turn 1.50
10,663.9	7,410.0	-3,284.9	-190.0	End of turn @ 10,663'
11,163.9	7,410.0	-3,784.8	-200.5	Start turn @ 11,163' MD
11,238.2	7,410.0	-3,859.0	-202.5	End of turn @ 11,238' MD
14,090.8	7,410.0	-6,710.0	-299.2	TD at 14090.8

EnCana Oil & Gas (USA) Inc

DJ Wattenberg
S14-T2N-R68W (Grant Elmquist/Salisbury)
Grant Elmquist 2D-14H-C268
Hz
Plan #2

Anticollision Report

15 May, 2013

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Reference	Plan #2

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	**Error Model:**	Systematic Ellipse
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,279.0ft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**		

Survey Tool Program **Date** 5/15/2013

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	14,090.8	Plan #2 (Hz)	MWD	Geolink MWD

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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)						
BERGER 32-23 (EXISTING) - EXISTING - NO SURVEY						Out of range
DEL CAMINO 11-14 (EXISTING) - EXISTING - NO SURV	9,950.2	7,406.0	709.0	647.9	11.611	CC, ES
DEL CAMINO 11-14 (EXISTING) - EXISTING - NO SURV	10,100.0	7,406.0	724.6	661.0	11.392	SF
ELMQUIST 0-0-23 (EXISTING) - EXISTING - SURVEYS						Out of range
ELMQUIST 1 (EXISTING) - EXISTING - GYRO	13,502.3	7,434.0	133.7	17.2	1.147	Level 2, CC, ES, SF
ELMQUIST 11-23 (EXISTING) - EXISTING - GYRO	12,586.4	7,454.9	851.0	750.4	8.460	CC
ELMQUIST 11-23 (EXISTING) - EXISTING - GYRO	12,600.0	7,454.8	851.1	750.3	8.441	ES
ELMQUIST 11-23 (EXISTING) - EXISTING - GYRO	12,700.0	7,453.6	858.6	756.0	8.370	SF
ELMQUIST 12-23 (EXISTING) - EXISTING - NO SURVE	13,830.1	7,461.0	717.8	589.1	5.574	CC, ES
ELMQUIST 12-23 (EXISTING) - EXISTING - NO SURVE	13,900.0	7,461.0	721.2	591.2	5.548	SF
ELMQUIST 21-23 (EXISTING) - EXISTING - SURVEYS	12,493.7	7,595.8	568.2	453.2	4.941	CC
ELMQUIST 21-23 (EXISTING) - EXISTING - SURVEYS	12,500.0	7,595.9	568.3	453.2	4.937	ES, SF
ELMQUIST 2-4-23 (EXISTING) - EXISTING - SURVEYS	14,090.8	7,558.5	370.6	229.6	2.629	CC, ES, SF
ELMQUIST 4-2-23 (EXISTING) - EXISTING - SURVEYS	13,153.1	7,541.2	1,033.9	915.2	8.709	CC, ES
ELMQUIST 4-2-23 (EXISTING) - EXISTING - SURVEYS	13,300.0	7,540.2	1,044.3	923.0	8.610	SF
ELMQUIST 4-4-23 (EXISTING) - EXISTING - SURVEYS	14,090.8	7,633.4	1,154.1	1,013.4	8.199	CC, ES, SF
GRANT 23-11 (EXISTING) - EXISTING - SURVEYS						Out of range
GRANT 2-8-11 (EXISTING) - EXISTING - SURVEYS	6,800.0	7,045.2	702.9	659.7	16.255	CC
GRANT 2-8-11 (EXISTING) - EXISTING - SURVEYS	6,833.2	7,078.5	703.0	659.7	16.221	ES, SF
GRANT 3-6-11 (EXISTING) - EXISTING - SURVEYS						Out of range
Grant Elmquist 2A-14H-C268 - Hz - Plan #2	200.0	200.0	28.0	27.3	42.828	CC, ES
Grant Elmquist 2A-14H-C268 - Hz - Plan #2	14,090.8	14,012.0	1,193.1	955.6	5.023	SF
Grant Elmquist 2B-14H-C268 - Hz - Plan #2	300.0	300.0	19.6	18.6	19.534	CC, ES
Grant Elmquist 2B-14H-C268 - Hz - Plan #2	14,090.8	14,157.7	799.8	558.8	3.319	SF
Grant Elmquist 2C-14H-C268 - Hz - Plan #2	400.0	400.0	8.4	7.0	6.208	CC, ES
Grant Elmquist 2C-14H-C268 - Hz - Plan #2	14,090.8	13,889.9	451.7	237.6	2.110	SF
Grant Elmquist 2E-14H-C268 - Hz - Plan #2	500.0	500.0	11.2	9.5	6.578	CC, ES
Grant Elmquist 2E-14H-C268 - Hz - Plan #2	14,090.8	13,861.3	429.5	218.9	2.039	SF
Grant Elmquist 2F-14H-C268 - Hz - Plan #2	500.0	500.0	19.6	17.9	11.512	CC, ES
Grant Elmquist 2F-14H-C268 - Hz - Plan #2	14,090.8	14,111.4	875.3	635.2	3.646	SF
Grant Elmquist 2G-14H-C268 - Hz - Plan #2	362.5	373.5	30.8	29.5	25.203	CC
Grant Elmquist 2G-14H-C268 - Hz - Plan #2	400.0	410.9	30.8	29.4	22.780	ES
Grant Elmquist 2G-14H-C268 - Hz - Plan #2	13,600.0	13,442.8	1,277.8	1,058.4	5.825	SF
Grant Salisbury 2A-14H-C268 - Hz - Plan #1	200.0	200.0	554.1	553.4	848.793	CC
Grant Salisbury 2A-14H-C268 - Hz - Plan #1	300.0	298.2	554.2	553.2	554.665	ES
Grant Salisbury 2A-14H-C268 - Hz - Plan #1	8,200.0	7,240.5	1,265.7	1,233.3	39.067	SF
Grant Salisbury 2B-14H-C268 - Hz - Plan #1	300.0	300.0	553.8	552.8	552.814	CC
Grant Salisbury 2B-14H-C268 - Hz - Plan #1	400.0	398.0	554.0	552.7	411.030	ES
Grant Salisbury 2B-14H-C268 - Hz - Plan #1	7,300.0	7,767.1	859.0	829.5	29.150	SF
Grant Salisbury 2C-14H-C268 - Hz - Plan #1	7,400.0	7,665.7	456.4	427.2	15.653	SF
Grant Salisbury 2C-14H-C268 - Hz - Plan #1	7,410.5	7,657.0	456.3	427.2	15.663	CC, ES
Grant Salisbury 2D-14H-C268 - Hz - Plan #1	7,610.4	7,586.2	96.3	67.8	3.379	CC, ES, SF
Grant Salisbury 2E-14H-C268 - Hz - Plan #1	7,200.0	7,700.3	336.8	306.5	11.098	SF
Grant Salisbury 2E-14H-C268 - Hz - Plan #1	7,217.4	7,690.1	336.5	306.3	11.130	CC, ES
Grant Salisbury 2F-14H-C268 - Hz - Plan #1	500.0	500.0	554.4	552.7	326.134	CC, ES
Grant Salisbury 2F-14H-C268 - Hz - Plan #1	7,200.0	7,769.7	691.9	661.6	22.847	SF
HSR-BEAR 13-14A (EXISTING) - EXISTING - SURVEYS	11,430.0	7,698.5	648.8	552.7	6.748	CC, ES
HSR-BEAR 13-14A (EXISTING) - EXISTING - SURVEYS	11,500.0	7,698.3	652.6	555.2	6.702	SF
HURT 33-11 (EXISTING) - EXISTING - NO SURVEY						Out of range
HURT 34-11 (EXISTING) - EXISTING - SURVEYS						Out of range
HURT 43-11 (EXISTING) - EXISTING - SURVEYS						Out of range
HURT 7-8-11 (EXISTING) - EXISTING - SURVEYS						Out of range
MDM 33-14 (EXISTING) - EXISTING - NO SURVEYS						Out of range

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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)						
MDM 34-14 (EXISTING) - EXISTING - NO SURVEYS						Out of range
NELSON 1 (EXISTING) - EXISTING - NO SURVEYS						Out of range
NELSON 23-23C (EXISTING) - EXISTING - NO SURVEY	14,090.8	7,426.0	1,211.9	1,078.6	9.093	CC, ES, SF
OLANDER 1 (EXISTING) - EXISTING - NO SURVEYS	10,382.0	7,417.0	193.6	124.9	2.819	CC, ES
OLANDER 1 (EXISTING) - EXISTING - NO SURVEYS	10,400.0	7,417.0	194.4	125.4	2.817	SF
OLANDER 2 (EXISTING) - EXISTING - NO SURVEYS	7,754.7	7,404.3	160.0	131.7	5.660	CC, ES, SF
OLANDER U 14-11 (EXISTING) - EXISTING - NO SURV	9,955.2	7,406.0	670.4	609.2	10.963	CC, ES
OLANDER U 14-11 (EXISTING) - EXISTING - NO SURV	10,100.0	7,406.0	685.8	622.2	10.782	SF
OLANDER U 14-14 (EXISTING) - EXISTING - NO SURV	11,414.6	7,411.0	487.5	400.8	5.622	CC, ES
OLANDER U 14-14 (EXISTING) - EXISTING - NO SURV	11,500.0	7,411.0	494.9	406.8	5.612	SF
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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - DEL CAMINO 11-14 (EXISTING) - EXISTING - NO SURVE

Offset Site Error: 0.0 ft

Survey Program: 8056-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
8,900.0	7,410.0	7,406.0	7,406.0	31.7	12.9	-90.00	-2,511.0	476.4	1,267.1	1,223.5	43.63	29.040	
9,000.0	7,410.0	7,406.0	7,406.0	33.3	12.9	-90.00	-2,511.0	476.4	1,185.6	1,140.3	45.24	26.205	
9,100.0	7,410.0	7,406.0	7,406.0	34.9	12.9	-90.00	-2,511.0	476.4	1,107.0	1,060.2	46.87	23.621	
9,200.0	7,410.0	7,406.0	7,406.0	36.4	12.9	-90.00	-2,511.0	476.4	1,032.2	983.7	48.50	21.282	
9,300.0	7,410.0	7,406.0	7,406.0	38.1	12.9	-90.00	-2,511.0	476.4	962.0	911.8	50.15	19.182	
9,400.0	7,410.0	7,406.0	7,406.0	39.7	12.9	-90.00	-2,511.0	476.4	897.4	845.6	51.81	17.322	
9,500.0	7,410.0	7,406.0	7,406.0	41.3	12.9	-90.00	-2,511.0	476.4	839.8	786.4	53.47	15.706	
9,600.0	7,410.0	7,406.0	7,406.0	43.0	12.9	-90.00	-2,511.0	476.4	790.8	735.6	55.15	14.339	
9,700.0	7,410.0	7,406.0	7,406.0	44.6	12.9	-90.00	-2,511.0	476.4	751.8	695.0	56.83	13.230	
9,800.0	7,410.0	7,406.0	7,406.0	46.3	12.9	-90.00	-2,511.0	476.4	724.7	666.2	58.52	12.385	
9,900.0	7,410.0	7,406.0	7,406.0	47.9	12.9	-90.00	-2,511.0	476.4	710.8	650.5	60.21	11.805	
9,950.2	7,410.0	7,406.0	7,406.0	48.8	12.9	-90.00	-2,511.0	476.4	709.0	647.9	61.06	11.611	CC, ES
10,000.0	7,410.0	7,406.0	7,406.0	49.6	12.9	-90.00	-2,511.0	476.4	710.7	648.8	61.90	11.481	
10,100.0	7,410.0	7,406.0	7,406.0	51.3	12.9	-90.00	-2,511.0	476.4	724.6	661.0	63.61	11.392	SF
10,200.0	7,410.0	7,406.0	7,406.0	53.0	12.9	-90.00	-2,511.0	476.4	751.7	686.4	65.31	11.509	
10,300.0	7,410.0	7,406.0	7,406.0	54.7	12.9	-90.00	-2,511.0	476.4	790.9	723.7	67.11	11.784	
10,400.0	7,410.0	7,406.0	7,406.0	56.4	12.9	-90.00	-2,511.0	476.4	842.1	773.1	68.98	12.207	
10,500.0	7,410.0	7,406.0	7,406.0	58.1	12.9	-90.00	-2,511.0	476.4	903.5	832.7	70.82	12.757	
10,600.0	7,410.0	7,406.0	7,406.0	59.8	12.9	-90.00	-2,511.0	476.4	973.2	900.6	72.63	13.400	
10,700.0	7,410.0	7,406.0	7,406.0	61.5	12.9	-90.00	-2,511.0	476.4	1,049.4	975.0	74.38	14.108	
10,800.0	7,410.0	7,406.0	7,406.0	63.2	12.9	-90.00	-2,511.0	476.4	1,129.6	1,053.5	76.10	14.844	
10,900.0	7,410.0	7,406.0	7,406.0	64.9	12.9	-90.00	-2,511.0	476.4	1,212.7	1,134.9	77.82	15.585	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - ELMQUIST 1 (EXISTING) - EXISTING - GYRO

Offset Site Error: 0.0 ft

Survey Program: 100-Gyro

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
12,300.0	7,410.0	7,433.9	7,432.9	89.1	6.5	-89.53	-6,126.4	-145.6	1,209.7	1,114.1	95.61	12.652	
12,400.0	7,410.0	7,433.9	7,432.9	90.9	6.5	-89.54	-6,126.4	-145.6	1,110.4	1,013.1	97.35	11.406	
12,500.0	7,410.0	7,433.9	7,432.9	92.6	6.5	-89.54	-6,126.4	-145.6	1,011.2	912.1	99.09	10.205	
12,600.0	7,410.0	7,433.9	7,433.0	94.3	6.5	-89.55	-6,126.4	-145.6	912.2	811.4	100.83	9.047	
12,700.0	7,410.0	7,433.9	7,433.0	96.1	6.5	-89.56	-6,126.4	-145.6	813.4	710.8	102.57	7.930	
12,800.0	7,410.0	7,433.9	7,433.0	97.8	6.5	-89.56	-6,126.4	-145.6	714.9	610.6	104.31	6.854	
12,900.0	7,410.0	7,434.0	7,433.0	99.6	6.5	-89.57	-6,126.4	-145.6	617.0	510.9	106.05	5.818	
13,000.0	7,410.0	7,434.0	7,433.0	101.3	6.5	-89.57	-6,126.4	-145.6	519.8	412.0	107.79	4.823	
13,100.0	7,410.0	7,434.0	7,433.0	103.0	6.5	-89.58	-6,126.4	-145.6	424.0	314.4	109.53	3.871	
13,200.0	7,410.0	7,434.0	7,433.0	104.8	6.5	-89.58	-6,126.4	-145.6	330.6	219.3	111.27	2.971	
13,300.0	7,410.0	7,434.0	7,433.0	106.5	6.5	-89.59	-6,126.4	-145.6	242.5	129.5	113.01	2.146	
13,400.0	7,410.0	7,434.0	7,433.1	108.3	6.5	-89.59	-6,126.4	-145.6	168.4	53.6	114.75	1.467	Level 3
13,500.0	7,410.0	7,434.0	7,433.1	110.0	6.5	-89.60	-6,126.4	-145.6	133.7	17.2	116.50	1.148	Level 2
13,502.3	7,410.0	7,434.0	7,433.1	110.1	6.5	-89.60	-6,126.4	-145.6	133.7	17.2	116.54	1.147	Level 2, CC, ES, SF
13,600.0	7,410.0	7,434.1	7,433.1	111.8	6.5	-89.61	-6,126.4	-145.6	165.6	47.4	118.24	1.400	Level 3
13,700.0	7,410.0	7,434.1	7,433.1	113.5	6.5	-89.61	-6,126.4	-145.6	238.7	118.7	119.98	1.989	
13,800.0	7,410.0	7,434.1	7,433.1	115.2	6.5	-89.62	-6,126.4	-145.6	326.3	204.6	121.73	2.681	
13,900.0	7,410.0	7,434.1	7,433.1	117.0	6.5	-89.62	-6,126.4	-145.6	419.6	296.1	123.47	3.398	
14,000.0	7,410.0	7,434.1	7,433.1	118.7	6.5	-89.63	-6,126.4	-145.6	515.3	390.1	125.22	4.115	
14,090.8	7,410.0	7,434.1	7,433.1	120.3	6.5	-89.63	-6,126.4	-145.6	603.5	476.7	126.80	4.759	

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - ELMQUIST 11-23 (EXISTING) - EXISTING - GYRO

Offset Site Error: 0.0 ft

Survey Program: 100-Gyro

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
11,700.0	7,410.0	7,466.4	7,463.6	78.7	6.7	91.73	-5,177.5	-1,098.4	1,228.7	1,143.5	85.20	14.421	
11,800.0	7,410.0	7,465.0	7,462.2	80.5	6.7	91.63	-5,177.5	-1,098.4	1,158.7	1,071.7	86.94	13.328	
11,900.0	7,410.0	7,463.7	7,460.9	82.2	6.7	91.54	-5,177.5	-1,098.5	1,093.3	1,004.6	88.67	12.330	
12,000.0	7,410.0	7,462.3	7,459.6	83.9	6.7	91.45	-5,177.5	-1,098.5	1,033.5	943.0	90.41	11.431	
12,100.0	7,410.0	7,461.0	7,458.2	85.7	6.7	91.36	-5,177.6	-1,098.5	980.2	888.0	92.14	10.638	
12,200.0	7,410.0	7,459.7	7,456.9	87.4	6.7	91.28	-5,177.6	-1,098.5	934.6	840.7	93.88	9.955	
12,300.0	7,410.0	7,458.5	7,455.7	89.1	6.7	91.19	-5,177.6	-1,098.5	897.9	802.3	95.62	9.391	
12,400.0	7,410.0	7,457.2	7,454.4	90.9	6.7	91.11	-5,177.6	-1,098.6	871.2	773.8	97.35	8.949	
12,500.0	7,410.0	7,456.0	7,453.2	92.6	6.7	91.02	-5,177.6	-1,098.6	855.4	756.3	99.09	8.632	
12,586.4	7,410.0	7,454.9	7,452.1	94.1	6.6	90.95	-5,177.6	-1,098.6	851.0	750.4	100.60	8.460	CC
12,600.0	7,410.0	7,454.8	7,452.0	94.3	6.6	90.94	-5,177.6	-1,098.6	851.1	750.3	100.83	8.441	ES
12,700.0	7,410.0	7,453.6	7,450.8	96.1	6.6	90.86	-5,177.6	-1,098.6	858.6	756.0	102.57	8.370	SF
12,800.0	7,410.0	7,452.4	7,449.6	97.8	6.6	90.78	-5,177.7	-1,098.6	877.4	773.1	104.31	8.411	
12,900.0	7,410.0	7,451.2	7,448.5	99.6	6.6	90.70	-5,177.7	-1,098.7	906.9	800.9	106.05	8.552	
13,000.0	7,410.0	7,450.1	7,447.3	101.3	6.6	90.63	-5,177.7	-1,098.7	946.2	838.4	107.79	8.778	
13,100.0	7,410.0	7,449.0	7,446.2	103.0	6.6	90.55	-5,177.7	-1,098.7	994.0	884.4	109.53	9.074	
13,200.0	7,410.0	7,447.9	7,445.1	104.8	6.6	90.48	-5,177.7	-1,098.7	1,049.1	937.9	111.28	9.428	
13,300.0	7,410.0	7,446.8	7,444.0	106.5	6.6	90.40	-5,177.7	-1,098.7	1,110.6	997.6	113.02	9.826	
13,400.0	7,410.0	7,445.7	7,442.9	108.3	6.6	90.33	-5,177.7	-1,098.8	1,177.3	1,062.6	114.76	10.259	
13,500.0	7,410.0	7,444.7	7,441.9	110.0	6.6	90.26	-5,177.7	-1,098.8	1,248.5	1,132.0	116.50	10.717	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - ELMQUIST 12-23 (EXISTING) - EXISTING - NO SURVEY

Offset Site Error: 0.0 ft

Survey Program: 8117-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
12,800.0	7,410.0	7,461.0	7,461.0	97.8	13.0	90.00	-6,425.2	-1,007.8	1,255.6	1,144.7	110.84	11.328	
12,900.0	7,410.0	7,461.0	7,461.0	99.6	13.0	90.00	-6,425.2	-1,007.8	1,174.9	1,062.4	112.58	10.437	
13,000.0	7,410.0	7,461.0	7,461.0	101.3	13.0	90.00	-6,425.2	-1,007.8	1,097.5	983.1	114.32	9.600	
13,100.0	7,410.0	7,461.0	7,461.0	103.0	13.0	90.00	-6,425.2	-1,007.8	1,023.9	907.9	116.06	8.822	
13,200.0	7,410.0	7,461.0	7,461.0	104.8	13.0	90.00	-6,425.2	-1,007.8	955.2	837.4	117.80	8.109	
13,300.0	7,410.0	7,461.0	7,461.0	106.5	13.0	90.00	-6,425.2	-1,007.8	892.4	772.8	119.54	7.465	
13,400.0	7,410.0	7,461.0	7,461.0	108.3	13.0	90.00	-6,425.2	-1,007.8	836.8	715.6	121.28	6.900	
13,500.0	7,410.0	7,461.0	7,461.0	110.0	13.0	90.00	-6,425.2	-1,007.8	790.1	667.1	123.03	6.422	
13,600.0	7,410.0	7,461.0	7,461.0	111.8	13.0	90.00	-6,425.2	-1,007.8	753.8	629.1	124.77	6.042	
13,700.0	7,410.0	7,461.0	7,461.0	113.5	13.0	90.00	-6,425.2	-1,007.8	729.5	603.0	126.51	5.767	
13,800.0	7,410.0	7,461.0	7,461.0	115.2	13.0	90.00	-6,425.2	-1,007.8	718.5	590.2	128.26	5.602	
13,830.1	7,410.0	7,461.0	7,461.0	115.8	13.0	90.00	-6,425.2	-1,007.8	717.8	589.1	128.78	5.574	CC, ES
13,900.0	7,410.0	7,461.0	7,461.0	117.0	13.0	90.00	-6,425.2	-1,007.8	721.2	591.2	130.00	5.548	SF
14,000.0	7,410.0	7,461.0	7,461.0	118.7	13.0	90.00	-6,425.2	-1,007.8	737.7	605.9	131.75	5.599	
14,090.8	7,410.0	7,461.0	7,461.0	120.3	13.0	90.00	-6,425.2	-1,007.8	763.7	630.4	133.33	5.728	

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - ELMQUIST 21-23 (EXISTING) - EXISTING - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 102-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
11,400.0	7,410.0	7,586.7	7,429.5	73.5	23.3	-88.23	-5,133.0	322.7	1,232.4	1,136.4	96.00	12.838	
11,500.0	7,410.0	7,587.5	7,430.4	75.3	23.3	-88.31	-5,133.0	322.7	1,144.6	1,046.9	97.73	11.712	
11,600.0	7,410.0	7,588.4	7,431.2	77.0	23.3	-88.40	-5,133.0	322.7	1,059.0	959.5	99.47	10.647	
11,700.0	7,410.0	7,589.2	7,432.1	78.7	23.3	-88.48	-5,133.0	322.7	976.1	874.9	101.20	9.645	
11,800.0	7,410.0	7,590.1	7,432.9	80.5	23.3	-88.57	-5,133.0	322.7	896.7	793.7	102.94	8.711	
11,900.0	7,410.0	7,590.9	7,433.8	82.2	23.3	-88.65	-5,133.0	322.7	821.8	717.1	104.67	7.851	
12,000.0	7,410.0	7,591.8	7,434.6	83.9	23.3	-88.74	-5,133.0	322.7	752.7	646.3	106.41	7.074	
12,100.0	7,410.0	7,592.6	7,435.4	85.7	23.3	-88.82	-5,133.0	322.7	691.3	583.1	108.15	6.392	
12,200.0	7,410.0	7,593.4	7,436.2	87.4	23.3	-88.91	-5,133.0	322.8	639.6	529.7	109.89	5.821	
12,300.0	7,410.0	7,594.2	7,437.1	89.1	23.3	-88.99	-5,133.0	322.8	600.3	488.7	111.63	5.378	
12,400.0	7,410.0	7,595.1	7,437.9	90.9	23.3	-89.07	-5,133.0	322.8	575.9	462.5	113.37	5.080	
12,493.7	7,410.0	7,595.8	7,438.6	92.5	23.3	-89.15	-5,133.1	322.8	568.2	453.2	115.00	4.941	CC
12,500.0	7,410.0	7,595.9	7,438.7	92.6	23.3	-89.15	-5,133.1	322.8	568.3	453.2	115.11	4.937	ES, SF
12,600.0	7,410.0	7,596.7	7,439.5	94.3	23.3	-89.23	-5,133.1	322.8	578.1	461.3	116.85	4.948	
12,700.0	7,410.0	7,597.5	7,440.3	96.1	23.3	-89.32	-5,133.1	322.8	604.5	486.0	118.59	5.098	
12,800.0	7,410.0	7,598.3	7,441.1	97.8	23.3	-89.40	-5,133.1	322.8	645.6	525.2	120.33	5.365	
12,900.0	7,410.0	7,599.1	7,441.9	99.6	23.3	-89.48	-5,133.1	322.8	698.6	576.5	122.07	5.723	
13,000.0	7,410.0	7,599.9	7,442.7	101.3	23.3	-89.56	-5,133.1	322.8	761.1	637.3	123.81	6.147	
13,100.0	7,410.0	7,600.7	7,443.5	103.0	23.3	-89.64	-5,133.1	322.9	831.0	705.4	125.56	6.618	
13,200.0	7,410.0	7,601.5	7,444.3	104.8	23.3	-89.72	-5,133.1	322.9	906.5	779.2	127.30	7.121	
13,300.0	7,410.0	7,602.2	7,445.1	106.5	23.3	-89.79	-5,133.1	322.9	986.4	857.4	129.04	7.644	
13,400.0	7,410.0	7,603.0	7,445.8	108.3	23.3	-89.87	-5,133.1	322.9	1,069.7	938.9	130.79	8.179	
13,500.0	7,410.0	7,603.8	7,446.6	110.0	23.3	-89.95	-5,133.1	322.9	1,155.7	1,023.1	132.53	8.720	
13,600.0	7,410.0	7,604.6	7,447.4	111.8	23.3	-90.03	-5,133.1	322.9	1,243.7	1,109.4	134.27	9.263	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - ELMQUIST 2-4-23 (EXISTING) - EXISTING - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 72-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
13,200.0	7,410.0	7,558.5	7,447.1	104.8	21.2	90.00	-7,074.0	-368.6	1,258.3	1,132.8	125.43	10.032	
13,300.0	7,410.0	7,558.5	7,447.1	106.5	21.2	90.00	-7,074.0	-368.6	1,158.4	1,031.2	127.17	9.109	
13,400.0	7,410.0	7,558.5	7,447.1	108.3	21.2	90.00	-7,074.0	-368.6	1,058.5	929.6	128.91	8.211	
13,500.0	7,410.0	7,558.5	7,447.1	110.0	21.2	90.00	-7,074.0	-368.6	958.7	828.0	130.65	7.338	
13,600.0	7,410.0	7,558.5	7,447.1	111.8	21.2	90.00	-7,074.0	-368.6	858.9	726.5	132.40	6.487	
13,700.0	7,410.0	7,558.5	7,447.1	113.5	21.2	90.00	-7,074.0	-368.6	759.1	625.0	134.14	5.659	
13,800.0	7,410.0	7,558.5	7,447.1	115.2	21.2	90.00	-7,074.0	-368.6	659.5	523.6	135.89	4.853	
13,900.0	7,410.0	7,558.5	7,447.1	117.0	21.2	90.00	-7,074.0	-368.6	559.9	422.3	137.63	4.068	
14,000.0	7,410.0	7,558.5	7,447.1	118.7	21.2	90.00	-7,074.0	-368.6	460.5	321.2	139.37	3.304	
14,090.8	7,410.0	7,558.5	7,447.1	120.3	21.2	90.00	-7,074.0	-368.6	370.6	229.6	140.96	2.629	CC, ES, SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - ELMQUIST 4-2-23 (EXISTING) - EXISTING - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 72-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
12,500.0	7,410.0	7,545.9	7,453.9	92.6	20.4	-90.38	-5,807.9	765.9	1,222.9	1,115.5	107.36	11.390	
12,600.0	7,410.0	7,545.1	7,453.2	94.3	20.4	-90.34	-5,807.9	765.9	1,172.6	1,063.5	109.10	10.747	
12,700.0	7,410.0	7,544.4	7,452.5	96.1	20.4	-90.30	-5,807.9	765.9	1,128.8	1,018.0	110.84	10.184	
12,800.0	7,410.0	7,543.7	7,451.8	97.8	20.4	-90.26	-5,807.9	765.9	1,092.5	980.0	112.58	9.705	
12,900.0	7,410.0	7,543.0	7,451.1	99.6	20.4	-90.22	-5,807.9	765.9	1,064.4	950.1	114.32	9.311	
13,000.0	7,410.0	7,542.3	7,450.4	101.3	20.4	-90.18	-5,807.9	765.9	1,045.2	929.1	116.06	9.006	
13,100.0	7,410.0	7,541.6	7,449.6	103.0	20.4	-90.14	-5,807.9	765.9	1,035.3	917.5	117.80	8.788	
13,153.1	7,410.0	7,541.2	7,449.3	104.0	20.4	-90.12	-5,807.9	765.9	1,033.9	915.2	118.72	8.709	CC, ES
13,200.0	7,410.0	7,540.9	7,448.9	104.8	20.4	-90.10	-5,807.9	765.9	1,035.0	915.4	119.54	8.658	
13,300.0	7,410.0	7,540.2	7,448.2	106.5	20.4	-90.06	-5,807.9	765.9	1,044.3	923.0	121.28	8.610	SF
13,400.0	7,410.0	7,539.4	7,447.5	108.3	20.4	-90.02	-5,807.9	765.9	1,063.0	940.0	123.02	8.640	
13,500.0	7,410.0	7,538.7	7,446.8	110.0	20.4	-89.98	-5,807.9	765.9	1,090.5	965.8	124.77	8.741	
13,600.0	7,410.0	7,538.0	7,446.1	111.8	20.4	-89.94	-5,807.9	765.9	1,126.4	999.8	126.51	8.903	
13,700.0	7,410.0	7,537.3	7,445.4	113.5	20.4	-89.90	-5,807.9	765.9	1,169.6	1,041.4	128.25	9.120	
13,800.0	7,410.0	7,536.6	7,444.7	115.2	20.4	-89.86	-5,808.0	765.9	1,219.6	1,089.6	129.99	9.382	
13,900.0	7,410.0	7,535.9	7,443.9	117.0	20.4	-89.83	-5,808.0	765.9	1,275.5	1,143.7	131.74	9.682	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - ELMQUIST 4-4-23 (EXISTING) - EXISTING - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 102-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
13,800.0	7,410.0	7,634.3	7,450.3	115.2	25.7	-90.16	-7,070.5	797.2	1,266.7	1,131.0	135.69	9.335	
13,900.0	7,410.0	7,634.0	7,450.0	117.0	25.7	-90.15	-7,070.5	797.2	1,221.4	1,083.9	137.44	8.887	
14,000.0	7,410.0	7,633.7	7,449.6	118.7	25.7	-90.13	-7,070.5	797.2	1,182.8	1,043.6	139.18	8.498	
14,090.8	7,410.0	7,633.4	7,449.4	120.3	25.7	-90.12	-7,070.5	797.2	1,154.1	1,013.4	140.77	8.199	CC, ES, SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - GRANT 2-8-11 (EXISTING) - EXISTING - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 62-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
2,500.0	2,496.2	2,997.8	2,846.6	4.9	16.7	96.84	1,060.6	588.3	1,271.8	1,255.6	16.21	78.479	
2,600.0	2,596.0	3,092.2	2,934.5	5.1	17.3	96.07	1,051.8	555.3	1,244.1	1,227.1	16.99	73.234	
2,700.0	2,695.8	3,179.5	3,016.0	5.3	17.9	95.36	1,043.3	525.3	1,216.9	1,199.1	17.72	68.653	
2,800.0	2,795.6	3,263.4	3,094.9	5.5	18.4	94.70	1,035.2	497.7	1,190.6	1,172.2	18.42	64.652	
2,900.0	2,895.4	3,342.9	3,170.1	5.7	18.9	94.12	1,027.4	473.0	1,165.6	1,146.5	19.07	61.126	
3,000.0	2,995.2	3,424.8	3,247.8	5.9	19.4	93.51	1,020.3	448.4	1,142.1	1,122.4	19.74	57.852	
3,100.0	3,095.0	3,516.0	3,334.7	6.1	19.9	92.82	1,012.9	421.5	1,119.7	1,099.2	20.47	54.705	
3,200.0	3,194.8	3,605.0	3,419.7	6.3	20.4	92.17	1,005.5	396.2	1,097.8	1,076.6	21.16	51.868	
3,300.0	3,294.6	3,698.0	3,508.8	6.5	20.9	91.50	998.0	370.5	1,076.8	1,054.9	21.90	49.173	
3,400.0	3,394.4	3,789.5	3,596.2	6.7	21.4	90.75	991.4	344.5	1,056.1	1,033.5	22.66	46.606	
3,500.0	3,494.2	3,877.9	3,680.8	6.9	21.9	89.99	985.7	319.4	1,036.4	1,013.0	23.42	44.259	
3,600.0	3,594.0	3,988.0	3,786.2	7.1	22.5	89.02	978.4	288.5	1,016.9	992.6	24.32	41.821	
3,700.0	3,693.8	4,095.8	3,888.6	7.3	23.2	87.91	970.7	255.6	996.1	970.8	25.31	39.362	
3,800.0	3,793.6	4,186.3	3,974.3	7.5	23.7	86.91	964.4	227.5	975.4	949.2	26.18	37.257	
3,900.0	3,893.4	4,271.2	4,055.1	7.7	24.2	85.94	959.1	201.6	956.0	929.0	27.02	35.380	
4,000.0	3,993.2	4,362.4	4,142.3	7.9	24.7	84.96	953.8	175.6	938.1	910.3	27.86	33.676	
4,100.0	4,093.0	4,473.4	4,248.7	8.2	25.3	83.84	945.4	145.2	919.4	890.6	28.81	31.915	
4,200.0	4,192.8	4,579.7	4,350.3	8.4	26.0	82.67	936.9	115.0	900.3	870.5	29.79	30.223	
4,300.0	4,292.6	4,685.0	4,450.3	8.6	26.6	81.37	927.7	83.5	880.2	849.4	30.80	28.576	
4,400.0	4,392.4	4,777.0	4,537.8	8.8	27.1	80.23	919.3	56.5	860.3	828.6	31.70	27.141	
4,500.0	4,492.2	4,878.4	4,634.5	9.0	27.7	78.98	909.4	27.6	840.6	808.0	32.66	25.737	
4,600.0	4,592.0	4,968.6	4,720.6	9.2	28.2	77.79	901.2	1.7	821.7	788.2	33.57	24.479	
4,700.0	4,691.8	5,065.8	4,813.1	9.4	28.8	76.42	892.3	-26.8	803.2	768.6	34.57	23.234	
4,800.0	4,791.6	5,152.7	4,895.6	9.6	29.3	75.04	885.5	-53.4	786.0	750.4	35.52	22.125	
4,900.0	4,891.4	5,241.1	4,980.1	9.8	29.8	73.74	878.9	-78.2	770.2	733.8	36.40	21.158	
5,000.0	4,991.2	5,323.6	5,060.0	10.0	30.1	72.71	873.2	-98.3	756.4	719.2	37.16	20.355	
5,100.0	5,090.9	5,402.5	5,136.8	10.2	30.5	71.79	869.4	-116.0	745.2	707.4	37.86	19.685	
5,200.0	5,190.7	5,484.2	5,216.6	10.4	30.8	70.93	867.0	-132.6	736.7	698.2	38.52	19.126	
5,300.0	5,290.5	5,562.4	5,293.7	10.6	31.0	70.28	866.4	-145.8	731.0	691.9	39.08	18.707	
5,400.0	5,390.3	5,659.0	5,389.5	10.8	31.2	69.75	866.7	-158.5	727.0	687.4	39.61	18.355	
5,500.0	5,490.1	5,754.8	5,484.8	11.0	31.4	69.44	866.9	-168.2	723.5	683.4	40.06	18.059	
5,600.0	5,589.9	5,846.9	5,576.6	11.3	31.6	69.29	867.6	-175.6	720.9	680.4	40.45	17.823	
5,700.0	5,689.7	5,939.1	5,668.7	11.5	31.7	69.34	868.9	-180.3	719.3	678.6	40.76	17.647	
5,800.0	5,789.5	6,036.1	5,765.5	11.7	31.8	69.47	871.1	-184.0	718.7	677.7	41.06	17.503	
5,900.0	5,889.3	6,143.4	5,872.7	11.9	31.9	69.67	873.0	-187.7	717.8	676.4	41.36	17.356	
6,000.0	5,989.1	6,251.6	5,980.9	12.1	32.0	69.93	873.5	-190.9	715.6	674.0	41.63	17.189	
6,100.0	6,088.9	6,343.0	6,072.3	12.3	32.0	70.25	873.7	-192.4	713.4	671.5	41.84	17.049	
6,200.0	6,188.7	6,442.0	6,171.4	12.5	32.1	70.69	874.4	-192.7	711.9	669.9	42.04	16.935	
6,300.0	6,288.5	6,543.0	6,272.3	12.7	32.2	71.14	875.2	-193.1	710.5	668.3	42.24	16.820	
6,400.0	6,388.3	6,642.5	6,371.8	12.9	32.2	71.56	875.9	-193.7	709.1	666.6	42.45	16.705	
6,500.0	6,488.1	6,742.6	6,471.9	13.1	32.3	72.00	876.6	-194.2	707.7	665.1	42.65	16.595	
6,600.0	6,587.9	6,844.0	6,573.3	13.3	32.4	72.45	877.2	-194.7	706.2	663.4	42.85	16.483	
6,700.0	6,687.7	6,944.9	6,674.2	13.5	32.5	72.89	877.6	-195.3	704.6	661.6	43.05	16.368	
6,800.0	6,787.5	7,045.2	6,774.5	13.7	32.5	73.34	877.9	-195.8	702.9	659.7	43.24	16.255	CC
6,833.2	6,820.6	7,078.5	6,807.8	13.8	32.5	110.20	878.0	-196.0	703.0	659.7	43.34	16.221	ES, SF
6,900.0	6,887.3	7,145.6	6,874.9	13.9	32.6	158.59	878.1	-196.2	705.0	661.7	43.35	16.264	
7,000.0	6,985.5	7,245.8	6,975.1	14.0	32.7	179.91	878.0	-196.6	722.9	680.5	42.40	17.050	
7,100.0	7,079.2	7,340.8	7,070.1	14.1	32.7	-174.77	877.8	-197.0	757.0	716.7	40.30	18.787	
7,200.0	7,165.6	7,427.2	7,156.5	14.2	32.8	-171.98	877.7	-198.0	806.5	769.4	37.13	21.720	
7,300.0	7,242.1	7,504.3	7,233.6	14.3	32.9	-169.71	877.7	-199.3	870.1	837.0	33.06	26.315	
7,400.0	7,306.2	7,570.5	7,299.8	14.6	32.9	-166.97	877.5	-200.1	945.6	917.2	28.38	33.325	
7,500.0	7,356.2	7,622.7	7,351.9	15.0	33.0	-162.55	877.2	-200.5	1,031.0	1,007.3	23.73	43.449	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - GRANT 2-8-11 (EXISTING) - EXISTING - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 62-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
7,600.0	7,390.4	7,658.4	7,387.7	15.5	33.0	-153.30	876.9	-200.5	1,123.7	1,102.6	21.13	53.182	
7,700.0	7,407.8	7,675.9	7,405.1	16.3	33.0	-125.64	876.8	-200.5	1,221.0	1,194.3	26.75	45.648	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Elmquist 2A-14H-C268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-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	-28.0	28.0				
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-28.0	28.0	27.7	0.30	92.056	
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-28.0	28.0	27.3	0.65	42.828	CC, ES
300.0	300.0	299.0	299.0	0.5	0.5	-89.52	0.2	-29.6	29.7	28.7	1.00	29.595	
400.0	400.0	397.8	397.6	0.7	0.7	-88.37	1.0	-34.7	34.8	33.4	1.36	25.537	
500.0	500.0	496.1	495.5	0.8	0.9	-87.07	2.2	-43.1	43.4	41.6	1.74	24.868	
600.0	600.0	593.9	592.6	1.0	1.2	-25.56	3.9	-54.7	53.8	51.7	2.04	26.358	
700.0	699.8	691.3	688.9	1.2	1.5	-26.28	6.1	-69.5	64.5	62.1	2.39	26.995	
800.0	799.6	788.1	783.9	1.4	1.8	-26.96	8.7	-87.5	77.5	74.8	2.74	28.284	
900.0	899.4	886.1	879.7	1.6	2.2	-27.27	11.7	-108.0	93.0	89.9	3.09	30.048	
1,000.0	999.2	984.9	976.2	1.8	2.6	-27.48	14.7	-128.9	108.6	105.2	3.45	31.466	
1,100.0	1,099.0	1,083.6	1,072.7	2.0	3.0	-27.64	17.8	-149.7	124.3	120.5	3.81	32.610	
1,200.0	1,198.8	1,182.4	1,169.2	2.2	3.4	-27.77	20.8	-170.6	139.9	135.7	4.17	33.553	
1,300.0	1,298.6	1,281.2	1,265.7	2.4	3.8	-27.87	23.8	-191.4	155.6	151.0	4.53	34.342	
1,400.0	1,398.4	1,379.9	1,362.2	2.6	4.2	-27.95	26.9	-212.3	171.2	166.3	4.89	35.012	
1,500.0	1,498.2	1,478.7	1,458.7	2.8	4.6	-28.02	29.9	-233.1	186.8	181.6	5.25	35.588	
1,600.0	1,598.0	1,577.5	1,555.2	3.0	5.0	-28.07	33.0	-254.0	202.5	196.9	5.61	36.088	
1,700.0	1,697.8	1,676.2	1,651.7	3.2	5.5	-28.12	36.0	-274.8	218.1	212.1	5.97	36.527	
1,800.0	1,797.6	1,775.0	1,748.2	3.4	5.9	-28.16	39.1	-295.7	233.8	227.4	6.33	36.914	
1,900.0	1,897.4	1,873.8	1,844.7	3.6	6.3	-28.20	42.1	-316.5	249.4	242.7	6.69	37.259	
2,000.0	1,997.2	1,972.5	1,941.2	3.8	6.7	-28.23	45.1	-337.4	265.0	258.0	7.06	37.568	
2,100.0	2,097.0	2,071.3	2,037.7	4.0	7.1	-28.26	48.2	-358.2	280.7	273.3	7.42	37.846	
2,200.0	2,196.8	2,170.1	2,134.2	4.2	7.5	-28.29	51.2	-379.1	296.3	288.6	7.78	38.098	
2,300.0	2,296.6	2,268.9	2,230.7	4.4	7.9	-28.31	54.3	-399.9	312.0	303.8	8.14	38.327	
2,400.0	2,396.4	2,367.6	2,327.2	4.6	8.3	-28.33	57.3	-420.8	327.6	319.1	8.50	38.536	
2,500.0	2,496.2	2,466.4	2,423.7	4.9	8.7	-28.35	60.3	-441.6	343.3	334.4	8.86	38.728	
2,600.0	2,596.0	2,565.2	2,520.2	5.1	9.2	-28.37	63.4	-462.5	358.9	349.7	9.23	38.904	
2,700.0	2,695.8	2,663.9	2,616.6	5.3	9.6	-28.39	66.4	-483.3	374.5	365.0	9.59	39.067	
2,800.0	2,795.6	2,762.7	2,713.1	5.5	10.0	-28.40	69.5	-504.2	390.2	380.2	9.95	39.218	
2,900.0	2,895.4	2,861.5	2,809.6	5.7	10.4	-28.42	72.5	-525.0	405.8	395.5	10.31	39.359	
3,000.0	2,995.2	2,960.2	2,906.1	5.9	10.8	-28.43	75.6	-545.9	421.5	410.8	10.67	39.489	
3,100.0	3,095.0	3,059.0	3,002.6	6.1	11.2	-28.44	78.6	-566.7	437.1	426.1	11.04	39.611	
3,200.0	3,194.8	3,157.8	3,099.1	6.3	11.6	-28.45	81.6	-587.6	452.8	441.4	11.40	39.725	
3,300.0	3,294.6	3,256.5	3,195.6	6.5	12.0	-28.46	84.7	-608.4	468.4	456.6	11.76	39.832	
3,400.0	3,394.4	3,355.3	3,292.1	6.7	12.5	-28.47	87.7	-629.3	484.0	471.9	12.12	39.933	
3,500.0	3,494.2	3,454.1	3,388.6	6.9	12.9	-28.48	90.8	-650.1	499.7	487.2	12.48	40.027	
3,600.0	3,594.0	3,552.8	3,485.1	7.1	13.3	-28.49	93.8	-671.0	515.3	502.5	12.85	40.116	
3,700.0	3,693.8	3,651.6	3,581.6	7.3	13.7	-28.50	96.8	-691.8	531.0	517.8	13.21	40.201	
3,800.0	3,793.6	3,750.4	3,678.1	7.5	14.1	-28.50	99.9	-712.7	546.6	533.0	13.57	40.280	
3,900.0	3,893.4	3,849.2	3,774.6	7.7	14.5	-28.51	102.9	-733.5	562.3	548.3	13.93	40.356	
4,000.0	3,993.2	3,947.9	3,871.1	7.9	14.9	-28.52	106.0	-754.4	577.9	563.6	14.29	40.427	
4,100.0	4,093.0	4,046.7	3,967.6	8.2	15.4	-28.52	109.0	-775.2	593.5	578.9	14.66	40.495	
4,200.0	4,192.8	4,145.5	4,064.1	8.4	15.8	-28.53	112.1	-796.1	609.2	594.2	15.02	40.560	
4,300.0	4,292.6	4,244.2	4,160.6	8.6	16.2	-28.54	115.1	-816.9	624.8	609.4	15.38	40.622	
4,400.0	4,392.4	4,343.0	4,257.1	8.8	16.6	-28.54	118.1	-837.8	640.5	624.7	15.74	40.681	
4,500.0	4,492.2	4,441.8	4,353.6	9.0	17.0	-28.55	121.2	-858.6	656.1	640.0	16.11	40.737	
4,600.0	4,592.0	4,540.5	4,450.1	9.2	17.4	-28.55	124.2	-879.5	671.8	655.3	16.47	40.790	
4,700.0	4,691.8	4,639.3	4,546.6	9.4	17.8	-28.56	127.3	-900.3	687.4	670.6	16.83	40.842	
4,800.0	4,791.6	4,738.1	4,643.0	9.6	18.2	-28.56	130.3	-921.2	703.0	685.8	17.19	40.891	
4,900.0	4,891.4	4,836.8	4,739.5	9.8	18.7	-28.56	133.3	-942.0	718.7	701.1	17.56	40.938	
5,000.0	4,991.2	4,935.6	4,836.0	10.0	19.1	-28.57	136.4	-962.9	734.3	716.4	17.92	40.983	
5,100.0	5,090.9	5,034.4	4,932.5	10.2	19.5	-28.57	139.4	-983.7	750.0	731.7	18.28	41.026	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Elmquist 2A-14H-C268 - Hz - Plan #2

Survey Program: 0-MWD

Offset Site Error: 0.0 ft

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
5,200.0	5,190.7	5,133.1	5,029.0	10.4	19.9	-28.58	142.5	-1,004.6	765.6	747.0	18.64	41.068	
5,300.0	5,290.5	5,231.9	5,125.5	10.6	20.3	-28.58	145.5	-1,025.4	781.3	762.2	19.01	41.108	
5,400.0	5,390.3	5,330.7	5,222.0	10.8	20.7	-28.58	148.5	-1,046.3	796.9	777.5	19.37	41.146	
5,500.0	5,490.1	5,429.5	5,318.5	11.0	21.1	-28.59	151.6	-1,067.1	812.5	792.8	19.73	41.183	
5,600.0	5,589.9	5,528.2	5,415.0	11.3	21.5	-28.59	154.6	-1,088.0	828.2	808.1	20.09	41.219	
5,700.0	5,689.7	5,627.0	5,511.5	11.5	22.0	-28.59	157.7	-1,108.8	843.8	823.4	20.45	41.254	
5,800.0	5,789.5	5,725.8	5,608.0	11.7	22.4	-28.60	160.7	-1,129.7	859.5	838.7	20.82	41.287	
5,900.0	5,889.3	5,824.5	5,704.5	11.9	22.8	-28.60	163.8	-1,150.5	875.1	853.9	21.18	41.319	
6,000.0	5,989.1	5,923.3	5,801.0	12.1	23.2	-28.60	166.8	-1,171.4	890.8	869.2	21.54	41.350	
6,100.0	6,088.9	6,022.1	5,897.5	12.3	23.6	-28.60	169.8	-1,192.2	906.4	884.5	21.90	41.380	
6,200.0	6,188.7	6,120.8	5,994.0	12.5	24.0	-28.61	172.9	-1,213.1	922.0	899.8	22.27	41.409	
6,300.0	6,288.5	6,219.6	6,090.5	12.7	24.4	-28.61	175.9	-1,233.9	937.7	915.1	22.63	41.437	
6,400.0	6,388.3	6,318.4	6,187.0	12.9	24.9	-28.61	179.0	-1,254.8	953.3	930.3	22.99	41.464	
6,500.0	6,488.1	6,417.1	6,283.5	13.1	25.3	-28.61	182.0	-1,275.6	969.0	945.6	23.35	41.491	
6,600.0	6,587.9	6,515.9	6,380.0	13.3	25.7	-28.62	185.0	-1,296.5	984.6	960.9	23.72	41.516	
6,700.0	6,687.7	6,614.7	6,476.5	13.5	26.1	-28.62	188.1	-1,317.3	1,000.3	976.2	24.08	41.541	
6,800.0	6,787.5	6,713.5	6,573.0	13.7	26.5	-28.62	191.1	-1,338.2	1,015.9	991.5	24.44	41.565	
6,900.0	6,887.3	6,812.3	6,669.5	13.9	26.9	55.23	192.2	-1,359.1	1,031.5	1,006.6	24.90	41.433	
7,000.0	6,985.5	6,911.7	6,765.7	14.0	27.3	74.71	178.4	-1,379.8	1,046.5	1,021.3	25.24	41.467	
7,100.0	7,079.2	7,011.9	6,858.7	14.1	27.6	78.20	147.5	-1,399.9	1,060.6	1,035.2	25.40	41.762	
7,200.0	7,165.6	7,113.0	6,945.8	14.2	27.9	79.10	100.0	-1,418.8	1,073.3	1,047.9	25.43	42.212	
7,300.0	7,242.1	7,214.9	7,024.0	14.3	28.2	79.25	37.1	-1,435.7	1,084.2	1,058.8	25.44	42.616	
7,400.0	7,306.2	7,317.7	7,090.5	14.6	28.5	79.15	-39.7	-1,450.0	1,093.0	1,067.3	25.70	42.532	
7,500.0	7,356.2	7,421.1	7,142.9	15.0	28.9	79.02	-128.0	-1,461.4	1,099.3	1,073.0	26.34	41.735	
7,600.0	7,390.4	7,525.1	7,179.1	15.5	29.2	78.94	-225.0	-1,469.2	1,103.1	1,075.6	27.56	40.032	
7,700.0	7,407.8	7,629.4	7,197.6	16.3	29.7	78.97	-327.4	-1,473.2	1,104.2	1,074.8	29.37	37.589	
7,800.0	7,410.0	7,731.5	7,200.0	17.2	30.2	79.02	-429.5	-1,473.7	1,102.8	1,071.3	31.49	35.024	
7,900.0	7,410.0	7,831.5	7,200.0	18.2	30.7	79.01	-529.5	-1,473.7	1,101.4	1,068.0	33.41	32.962	
7,917.2	7,410.0	7,848.7	7,200.0	18.4	30.8	79.01	-546.6	-1,473.7	1,101.4	1,067.6	33.73	32.653	
8,000.0	7,410.0	7,931.5	7,200.0	19.3	31.4	79.01	-629.4	-1,473.7	1,102.2	1,067.0	35.24	31.279	
8,100.0	7,410.0	8,031.4	7,200.0	20.4	32.1	79.04	-729.4	-1,473.7	1,105.7	1,068.5	37.15	29.759	
8,200.0	7,410.0	8,131.2	7,200.0	21.7	32.9	79.08	-829.2	-1,473.7	1,111.6	1,072.5	39.14	28.403	
8,300.0	7,410.0	8,230.9	7,200.0	23.0	33.8	79.15	-928.8	-1,473.7	1,119.9	1,078.4	41.49	26.994	
8,400.0	7,410.0	8,330.5	7,200.0	24.3	34.8	79.23	-1,028.5	-1,473.7	1,128.4	1,084.2	44.24	25.505	
8,500.0	7,410.0	8,430.1	7,200.0	25.7	35.8	79.32	-1,128.1	-1,473.7	1,137.0	1,089.9	47.09	24.143	
8,600.0	7,410.0	8,529.8	7,200.0	27.2	36.8	79.40	-1,227.7	-1,473.7	1,145.6	1,095.5	50.02	22.901	
8,700.0	7,410.0	8,629.4	7,200.0	28.7	37.9	79.48	-1,327.3	-1,473.7	1,154.1	1,101.1	53.01	21.770	
8,800.0	7,410.0	8,729.0	7,200.0	30.2	39.1	79.56	-1,426.9	-1,473.7	1,162.7	1,106.6	56.06	20.740	
8,900.0	7,410.0	8,828.6	7,200.0	31.7	40.3	79.63	-1,526.6	-1,473.7	1,171.3	1,112.1	59.15	19.801	
9,000.0	7,410.0	8,928.2	7,200.0	33.3	41.6	79.71	-1,626.2	-1,473.7	1,179.9	1,117.6	62.29	18.943	
9,100.0	7,410.0	9,027.8	7,200.0	34.9	42.8	79.78	-1,725.8	-1,473.7	1,188.4	1,123.0	65.45	18.158	
9,200.0	7,410.0	9,127.5	7,200.0	36.4	44.1	79.86	-1,825.4	-1,473.7	1,197.0	1,128.4	68.65	17.437	
9,300.0	7,410.0	9,227.1	7,200.0	38.1	45.5	79.93	-1,925.0	-1,473.7	1,205.6	1,133.7	71.87	16.775	
9,400.0	7,410.0	9,326.7	7,200.0	39.7	46.8	80.00	-2,024.7	-1,473.7	1,214.2	1,139.1	75.11	16.165	
9,500.0	7,410.0	9,426.3	7,200.0	41.3	48.2	80.07	-2,124.3	-1,473.7	1,222.8	1,144.4	78.38	15.601	
9,600.0	7,410.0	9,525.9	7,200.0	43.0	49.7	80.14	-2,223.9	-1,473.7	1,231.4	1,149.7	81.66	15.080	
9,700.0	7,410.0	9,625.6	7,200.0	44.6	51.1	80.21	-2,323.5	-1,473.7	1,239.9	1,155.0	84.95	14.595	
9,800.0	7,410.0	9,725.2	7,200.0	46.3	52.6	80.28	-2,423.1	-1,473.7	1,248.5	1,160.3	88.26	14.145	
9,900.0	7,410.0	9,824.8	7,200.0	47.9	54.0	80.35	-2,522.8	-1,473.7	1,257.1	1,165.5	91.59	13.726	
10,000.0	7,410.0	9,924.4	7,200.0	49.6	55.5	80.41	-2,622.4	-1,473.7	1,265.7	1,170.8	94.92	13.334	
10,100.0	7,410.0	10,024.0	7,200.0	51.3	57.0	80.48	-2,722.0	-1,473.7	1,274.3	1,176.0	98.27	12.968	
11,600.0	7,410.0	11,522.7	7,200.0	77.0	80.9	80.52	-4,220.6	-1,473.7	1,276.3	1,123.8	152.57	8.365	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Elmquist 2A-14H-C268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-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
11,700.0	7,410.0	11,622.6	7,200.0	78.7	82.5	80.50	-4,320.6	-1,473.7	1,273.0	1,117.0	155.97	8.162	
11,800.0	7,410.0	11,722.6	7,200.0	80.5	84.1	80.47	-4,420.5	-1,473.7	1,269.6	1,110.3	159.38	7.966	
11,900.0	7,410.0	11,822.5	7,200.0	82.2	85.8	80.45	-4,520.5	-1,473.7	1,266.3	1,103.5	162.78	7.779	
12,000.0	7,410.0	11,922.5	7,200.0	83.9	87.4	80.42	-4,620.4	-1,473.7	1,263.0	1,096.8	166.19	7.600	
12,100.0	7,410.0	12,022.4	7,200.0	85.7	89.1	80.40	-4,720.4	-1,473.7	1,259.6	1,090.0	169.60	7.427	
12,200.0	7,410.0	12,122.4	7,200.0	87.4	90.8	80.37	-4,820.3	-1,473.7	1,256.3	1,083.3	173.00	7.262	
12,300.0	7,410.0	12,222.3	7,200.0	89.1	92.4	80.35	-4,920.2	-1,473.7	1,252.9	1,076.5	176.41	7.102	
12,400.0	7,410.0	12,322.2	7,200.0	90.9	94.1	80.32	-5,020.2	-1,473.7	1,249.6	1,069.8	179.82	6.949	
12,500.0	7,410.0	12,422.2	7,200.0	92.6	95.8	80.29	-5,120.1	-1,473.7	1,246.2	1,063.0	183.23	6.801	
12,600.0	7,410.0	12,522.1	7,200.0	94.3	97.5	80.27	-5,220.1	-1,473.7	1,242.9	1,056.3	186.64	6.659	
12,700.0	7,410.0	12,622.1	7,200.0	96.1	99.1	80.24	-5,320.0	-1,473.7	1,239.6	1,049.5	190.05	6.522	
12,800.0	7,410.0	12,722.0	7,200.0	97.8	100.8	80.21	-5,420.0	-1,473.7	1,236.2	1,042.7	193.47	6.390	
12,900.0	7,410.0	12,821.9	7,200.0	99.6	102.5	80.19	-5,519.9	-1,473.7	1,232.9	1,036.0	196.88	6.262	
13,000.0	7,410.0	12,921.9	7,200.0	101.3	104.2	80.16	-5,619.8	-1,473.7	1,229.5	1,029.2	200.29	6.139	
13,100.0	7,410.0	13,021.8	7,200.0	103.0	105.9	80.13	-5,719.8	-1,473.7	1,226.2	1,022.5	203.70	6.019	
13,200.0	7,410.0	13,121.8	7,200.0	104.8	107.6	80.11	-5,819.7	-1,473.7	1,222.9	1,015.7	207.12	5.904	
13,300.0	7,410.0	13,221.7	7,200.0	106.5	109.3	80.08	-5,919.7	-1,473.7	1,219.5	1,009.0	210.53	5.793	
13,400.0	7,410.0	13,321.7	7,200.0	108.3	110.9	80.05	-6,019.6	-1,473.7	1,216.2	1,002.2	213.94	5.685	
13,500.0	7,410.0	13,421.6	7,200.0	110.0	112.6	80.02	-6,119.5	-1,473.7	1,212.8	995.5	217.36	5.580	
13,600.0	7,410.0	13,521.5	7,200.0	111.8	114.3	80.00	-6,219.5	-1,473.7	1,209.5	988.7	220.77	5.479	
13,700.0	7,410.0	13,621.5	7,200.0	113.5	116.0	79.97	-6,319.4	-1,473.7	1,206.2	982.0	224.18	5.380	
13,800.0	7,410.0	13,721.4	7,200.0	115.2	117.7	79.94	-6,419.4	-1,473.7	1,202.8	975.2	227.60	5.285	
13,900.0	7,410.0	13,821.4	7,200.0	117.0	119.4	79.91	-6,519.3	-1,473.7	1,199.5	968.5	231.01	5.192	
14,000.0	7,410.0	13,921.3	7,200.0	118.7	121.1	79.88	-6,619.3	-1,473.7	1,196.1	961.7	234.42	5.102	
14,090.8	7,410.0	14,012.0	7,200.0	120.3	122.7	79.86	-6,710.0	-1,473.7	1,193.1	955.6	237.52	5.023	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Elmquist 2B-14H-C268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-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	-19.6	19.6				
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-19.6	19.6	19.3	0.30	64.439	
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-19.6	19.6	18.9	0.65	29.980	
300.0	300.0	300.0	300.0	0.5	0.5	-90.00	0.0	-19.6	19.6	18.6	1.00	19.534	CC, ES
400.0	400.0	399.3	399.3	0.7	0.7	-89.12	0.3	-21.3	21.3	19.9	1.35	15.743	
500.0	500.0	498.4	498.2	0.8	0.9	-87.15	1.3	-26.3	26.4	24.7	1.71	15.446	
600.0	600.0	597.1	596.6	1.0	1.1	-25.27	2.9	-34.7	33.4	31.3	2.05	16.328	
700.0	699.8	695.6	694.3	1.2	1.3	-26.15	5.2	-46.3	40.7	38.3	2.40	16.992	
800.0	799.6	794.2	791.8	1.4	1.6	-26.84	8.1	-61.1	50.1	47.4	2.75	18.225	
900.0	899.4	893.7	890.0	1.6	1.9	-27.21	11.1	-76.6	60.2	57.1	3.11	19.375	
1,000.0	999.2	993.2	988.2	1.8	2.2	-27.48	14.1	-92.1	70.3	66.8	3.47	20.279	
1,100.0	1,099.0	1,092.6	1,086.4	2.0	2.5	-27.68	17.1	-107.7	80.4	76.6	3.83	21.009	
1,200.0	1,198.8	1,192.1	1,184.7	2.2	2.9	-27.83	20.1	-123.2	90.5	86.3	4.19	21.610	
1,300.0	1,298.6	1,291.6	1,282.9	2.4	3.2	-27.95	23.2	-138.7	100.6	96.0	4.55	22.113	
1,400.0	1,398.4	1,391.1	1,381.1	2.6	3.5	-28.05	26.2	-154.3	110.7	105.8	4.91	22.540	
1,500.0	1,498.2	1,490.6	1,479.3	2.8	3.8	-28.14	29.2	-169.8	120.8	115.5	5.27	22.906	
1,600.0	1,598.0	1,590.1	1,577.5	3.0	4.2	-28.21	32.2	-185.3	130.9	125.2	5.63	23.225	
1,700.0	1,697.8	1,689.6	1,675.8	3.2	4.5	-28.27	35.2	-200.9	141.0	135.0	6.00	23.504	
1,800.0	1,797.6	1,789.1	1,774.0	3.4	4.8	-28.32	38.3	-216.4	151.1	144.7	6.36	23.750	
1,900.0	1,897.4	1,888.6	1,872.2	3.6	5.1	-28.37	41.3	-231.9	161.2	154.4	6.72	23.969	
2,000.0	1,997.2	1,988.0	1,970.4	3.8	5.5	-28.41	44.3	-247.5	171.3	164.2	7.09	24.165	
2,100.0	2,097.0	2,087.5	2,068.7	4.0	5.8	-28.44	47.3	-263.0	181.3	173.9	7.45	24.342	
2,200.0	2,196.8	2,187.0	2,166.9	4.2	6.1	-28.48	50.3	-278.5	191.4	183.6	7.81	24.502	
2,300.0	2,296.6	2,286.5	2,265.1	4.4	6.4	-28.50	53.4	-294.1	201.5	193.4	8.18	24.648	
2,400.0	2,396.4	2,386.0	2,363.3	4.6	6.8	-28.53	56.4	-309.6	211.6	203.1	8.54	24.780	
2,500.0	2,496.2	2,485.5	2,461.5	4.9	7.1	-28.55	59.4	-325.1	221.7	212.8	8.90	24.902	
2,600.0	2,596.0	2,585.0	2,559.8	5.1	7.4	-28.58	62.4	-340.7	231.8	222.6	9.27	25.014	
2,700.0	2,695.8	2,684.5	2,658.0	5.3	7.7	-28.60	65.4	-356.2	241.9	232.3	9.63	25.118	
2,800.0	2,795.6	2,784.0	2,756.2	5.5	8.1	-28.61	68.4	-371.7	252.0	242.0	10.00	25.214	
2,900.0	2,895.4	2,883.4	2,854.4	5.7	8.4	-28.63	71.5	-387.3	262.1	251.8	10.36	25.302	
3,000.0	2,995.2	2,982.9	2,952.7	5.9	8.7	-28.65	74.5	-402.8	272.2	261.5	10.72	25.385	
3,100.0	3,095.0	3,082.4	3,050.9	6.1	9.1	-28.66	77.5	-418.3	282.3	271.2	11.09	25.463	
3,200.0	3,194.8	3,181.9	3,149.1	6.3	9.4	-28.68	80.5	-433.9	292.4	281.0	11.45	25.535	
3,300.0	3,294.6	3,281.4	3,247.3	6.5	9.7	-28.69	83.5	-449.4	302.5	290.7	11.82	25.603	
3,400.0	3,394.4	3,380.9	3,345.6	6.7	10.0	-28.70	86.6	-464.9	312.6	300.4	12.18	25.666	
3,500.0	3,494.2	3,480.4	3,443.8	6.9	10.4	-28.71	89.6	-480.5	322.7	310.2	12.54	25.726	
3,600.0	3,594.0	3,579.9	3,542.0	7.1	10.7	-28.72	92.6	-496.0	332.8	319.9	12.91	25.783	
3,700.0	3,693.8	3,679.4	3,640.2	7.3	11.0	-28.73	95.6	-511.5	342.9	329.6	13.27	25.836	
3,800.0	3,793.6	3,778.8	3,738.4	7.5	11.4	-28.74	98.6	-527.1	353.0	339.4	13.64	25.887	
3,900.0	3,893.4	3,878.3	3,836.7	7.7	11.7	-28.75	101.7	-542.6	363.1	349.1	14.00	25.935	
4,000.0	3,993.2	3,977.8	3,934.9	7.9	12.0	-28.76	104.7	-558.1	373.2	358.8	14.36	25.980	
4,100.0	4,093.0	4,077.3	4,033.1	8.2	12.3	-28.77	107.7	-573.7	383.3	368.6	14.73	26.023	
4,200.0	4,192.8	4,176.8	4,131.3	8.4	12.7	-28.77	110.7	-589.2	393.4	378.3	15.09	26.064	
4,300.0	4,292.6	4,276.3	4,229.6	8.6	13.0	-28.78	113.7	-604.7	403.5	388.0	15.46	26.103	
4,400.0	4,392.4	4,375.8	4,327.8	8.8	13.3	-28.79	116.8	-620.3	413.6	397.8	15.82	26.140	
4,500.0	4,492.2	4,475.3	4,426.0	9.0	13.7	-28.79	119.8	-635.8	423.7	407.5	16.19	26.176	
4,600.0	4,592.0	4,574.8	4,524.2	9.2	14.0	-28.80	122.8	-651.3	433.8	417.2	16.55	26.210	
4,700.0	4,691.8	4,674.2	4,622.4	9.4	14.3	-28.80	125.8	-666.9	443.9	427.0	16.91	26.242	
4,800.0	4,791.6	4,773.7	4,720.7	9.6	14.6	-28.81	128.8	-682.4	454.0	436.7	17.28	26.273	
4,900.0	4,891.4	4,873.2	4,818.9	9.8	15.0	-28.82	131.8	-697.9	464.1	446.4	17.64	26.303	
5,000.0	4,991.2	4,972.7	4,917.1	10.0	15.3	-28.82	134.9	-713.5	474.2	456.2	18.01	26.332	
5,100.0	5,090.9	5,072.2	5,015.3	10.2	15.6	-28.83	137.9	-729.0	484.3	465.9	18.37	26.359	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Elmquist 2B-14H-C268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-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
5,200.0	5,190.7	5,171.7	5,113.6	10.4	16.0	-28.83	140.9	-744.5	494.4	475.6	18.74	26.386	
5,300.0	5,290.5	5,271.2	5,211.8	10.6	16.3	-28.83	143.9	-760.1	504.4	485.3	19.10	26.411	
5,400.0	5,390.3	5,370.7	5,310.0	10.8	16.6	-28.84	146.9	-775.6	514.5	495.1	19.46	26.435	
5,500.0	5,490.1	5,470.2	5,408.2	11.0	16.9	-28.84	150.0	-791.1	524.6	504.8	19.83	26.459	
5,600.0	5,589.9	5,569.6	5,506.4	11.3	17.3	-28.85	153.0	-806.7	534.7	514.5	20.19	26.481	
5,700.0	5,689.7	5,669.1	5,604.7	11.5	17.6	-28.85	156.0	-822.2	544.8	524.3	20.56	26.503	
5,800.0	5,789.5	5,768.6	5,702.9	11.7	17.9	-28.85	159.0	-837.7	554.9	534.0	20.92	26.524	
5,900.0	5,889.3	5,868.1	5,801.1	11.9	18.3	-28.86	162.0	-853.3	565.0	543.7	21.29	26.545	
6,000.0	5,989.1	5,967.6	5,899.3	12.1	18.6	-28.86	165.1	-868.8	575.1	553.5	21.65	26.564	
6,100.0	6,088.9	6,067.1	5,997.6	12.3	18.9	-28.87	168.1	-884.3	585.2	563.2	22.01	26.583	
6,200.0	6,188.7	6,166.6	6,095.8	12.5	19.2	-28.87	171.1	-899.9	595.3	572.9	22.38	26.602	
6,300.0	6,288.5	6,266.1	6,194.0	12.7	19.6	-28.87	174.1	-915.4	605.4	582.7	22.74	26.619	
6,400.0	6,388.3	6,365.6	6,292.2	12.9	19.9	-28.87	177.1	-930.9	615.5	592.4	23.11	26.637	
6,500.0	6,488.1	6,465.0	6,390.4	13.1	20.2	-28.88	180.2	-946.5	625.6	602.1	23.47	26.653	
6,600.0	6,587.9	6,564.5	6,488.7	13.3	20.6	-28.88	183.2	-962.0	635.7	611.9	23.84	26.669	
6,700.0	6,687.7	6,664.0	6,586.9	13.5	20.9	-28.88	186.2	-977.5	645.8	621.6	24.20	26.685	
6,800.0	6,787.5	6,763.5	6,685.1	13.7	21.2	-28.89	189.2	-993.1	655.9	631.3	24.57	26.700	
6,900.0	6,887.3	6,862.9	6,783.2	13.9	21.5	55.57	192.2	-1,008.6	665.9	641.0	24.94	26.702	
7,000.0	6,985.5	6,961.5	6,880.5	14.0	21.9	76.88	192.7	-1,024.0	675.8	650.7	25.11	26.910	
7,100.0	7,079.2	7,063.1	6,979.6	14.1	22.1	82.25	177.4	-1,039.9	685.7	660.5	25.17	27.238	
7,200.0	7,165.6	7,168.6	7,078.0	14.2	22.4	84.90	143.0	-1,055.8	695.2	670.0	25.23	27.552	
7,300.0	7,242.1	7,278.3	7,171.7	14.3	22.6	86.62	88.6	-1,071.2	704.0	678.5	25.41	27.699	
7,400.0	7,306.2	7,392.1	7,256.4	14.6	22.9	87.85	14.1	-1,085.4	711.6	685.7	25.86	27.520	
7,500.0	7,356.2	7,509.9	7,326.8	15.0	23.2	88.78	-79.2	-1,097.6	717.6	690.9	26.68	26.897	
7,600.0	7,390.4	7,631.1	7,378.0	15.5	23.7	89.45	-188.4	-1,106.8	721.7	693.8	27.95	25.821	
7,700.0	7,407.8	7,754.5	7,405.8	16.3	24.3	89.88	-308.3	-1,112.5	723.6	694.0	29.65	24.403	
7,800.0	7,410.0	7,868.3	7,410.0	17.2	25.0	90.00	-421.9	-1,114.3	723.3	691.7	31.67	22.837	
7,879.0	7,410.0	7,947.3	7,410.0	18.0	25.5	90.00	-500.9	-1,115.2	723.2	689.9	33.26	21.746	
7,900.0	7,410.0	7,968.3	7,410.0	18.2	25.7	90.00	-521.9	-1,115.4	722.9	689.3	33.68	21.466	
8,000.0	7,410.0	8,068.3	7,410.0	19.3	26.5	90.00	-621.9	-1,116.4	724.9	689.2	35.63	20.344	
8,100.0	7,410.0	8,168.2	7,410.0	20.4	27.4	90.00	-721.7	-1,117.5	729.4	691.7	37.68	19.356	
8,200.0	7,410.0	8,267.9	7,410.0	21.7	28.3	90.00	-821.5	-1,118.5	736.5	696.7	39.81	18.501	
8,300.0	7,410.0	8,367.5	7,410.0	23.0	29.4	90.00	-921.0	-1,119.6	745.9	703.7	42.26	17.650	
8,400.0	7,410.0	8,467.0	7,410.0	24.3	30.5	90.00	-1,020.5	-1,120.6	755.7	710.6	45.08	16.763	
8,500.0	7,410.0	8,566.5	7,410.0	25.7	31.6	90.00	-1,120.1	-1,121.7	765.5	717.5	47.99	15.950	
8,600.0	7,410.0	8,666.0	7,410.0	27.2	32.8	90.00	-1,219.6	-1,122.7	775.2	724.2	50.97	15.208	
8,700.0	7,410.0	8,765.6	7,410.0	28.7	34.1	90.00	-1,319.1	-1,123.7	785.0	731.0	54.02	14.532	
8,800.0	7,410.0	8,865.1	7,410.0	30.2	35.4	90.00	-1,418.6	-1,124.8	794.7	737.6	57.11	13.915	
8,900.0	7,410.0	8,964.6	7,410.0	31.7	36.7	90.00	-1,518.1	-1,125.8	804.5	744.2	60.26	13.351	
9,000.0	7,410.0	9,064.1	7,410.0	33.3	38.1	90.00	-1,617.6	-1,126.9	814.2	750.8	63.43	12.836	
9,100.0	7,410.0	9,163.7	7,410.0	34.9	39.5	90.00	-1,717.2	-1,127.9	824.0	757.4	66.64	12.364	
9,200.0	7,410.0	9,263.2	7,410.0	36.4	40.9	90.00	-1,816.7	-1,129.0	833.8	763.9	69.88	11.931	
9,300.0	7,410.0	9,362.7	7,410.0	38.1	42.4	90.00	-1,916.2	-1,130.0	843.5	770.4	73.14	11.532	
9,400.0	7,410.0	9,462.2	7,410.0	39.7	43.8	90.00	-2,015.7	-1,131.0	853.3	776.9	76.43	11.165	
9,500.0	7,410.0	9,561.8	7,410.0	41.3	45.3	90.00	-2,115.2	-1,132.1	863.0	783.3	79.73	10.825	
9,600.0	7,410.0	9,661.3	7,410.0	43.0	46.8	90.00	-2,214.8	-1,133.1	872.8	789.7	83.05	10.510	
9,700.0	7,410.0	9,760.8	7,410.0	44.6	48.4	90.00	-2,314.3	-1,134.2	882.6	796.2	86.38	10.217	
9,800.0	7,410.0	9,860.3	7,410.0	46.3	49.9	90.00	-2,413.8	-1,135.2	892.3	802.6	89.72	9.945	
9,900.0	7,410.0	9,959.8	7,410.0	47.9	51.5	90.00	-2,513.3	-1,136.3	902.1	809.0	93.08	9.692	
10,000.0	7,410.0	10,059.4	7,410.0	49.6	53.0	90.00	-2,612.8	-1,137.3	911.8	815.4	96.44	9.455	
10,100.0	7,410.0	10,158.9	7,410.0	51.3	54.6	90.00	-2,712.3	-1,138.3	921.6	821.8	99.82	9.233	
10,200.0	7,410.0	10,258.4	7,410.0	53.0	56.2	90.00	-2,811.9	-1,139.4	931.3	828.1	103.20	9.025	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Elmquist 2B-14H-C268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-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
10,300.0	7,410.0	10,358.0	7,410.0	54.7	57.8	90.00	-2,911.4	-1,140.4	940.8	833.8	106.97	8.794	
10,400.0	7,410.0	10,457.7	7,410.0	56.4	59.4	90.00	-3,011.1	-1,141.5	947.9	836.8	111.11	8.532	
10,500.0	7,410.0	10,557.6	7,410.0	58.1	61.0	90.00	-3,111.0	-1,142.5	952.5	837.3	115.19	8.269	
10,600.0	7,410.0	10,657.6	7,410.0	59.8	62.6	90.00	-3,211.0	-1,143.6	954.4	835.2	119.21	8.007	
10,700.0	7,410.0	10,757.6	7,410.0	61.5	64.3	90.00	-3,311.0	-1,144.6	953.9	830.9	122.98	7.757	
10,800.0	7,410.0	10,857.6	7,410.0	63.2	65.9	90.00	-3,411.0	-1,145.7	952.9	826.5	126.41	7.538	
10,900.0	7,410.0	10,957.6	7,410.0	64.9	67.6	90.00	-3,511.0	-1,146.7	951.8	822.0	129.85	7.330	
11,000.0	7,410.0	11,057.6	7,410.0	66.6	69.2	90.00	-3,611.0	-1,147.7	950.8	817.5	133.29	7.133	
11,100.0	7,410.0	11,157.6	7,410.0	68.4	70.9	90.00	-3,710.9	-1,148.8	949.7	813.0	136.73	6.946	
11,200.0	7,410.0	11,257.5	7,410.0	70.1	72.5	90.00	-3,810.9	-1,149.8	948.6	808.3	140.30	6.761	
11,300.0	7,410.0	11,357.5	7,410.0	71.8	74.2	90.00	-3,910.9	-1,150.9	946.4	802.5	143.88	6.577	
11,400.0	7,410.0	11,457.5	7,410.0	73.5	75.9	90.00	-4,010.9	-1,151.9	944.0	796.7	147.33	6.407	
11,500.0	7,410.0	11,557.5	7,410.0	75.3	77.5	90.00	-4,110.8	-1,153.0	941.7	790.9	150.79	6.245	
11,600.0	7,410.0	11,657.4	7,410.0	77.0	79.2	90.00	-4,210.8	-1,154.0	939.3	785.1	154.25	6.090	
11,700.0	7,410.0	11,757.4	7,410.0	78.7	80.9	90.00	-4,310.8	-1,155.1	937.0	779.3	157.71	5.941	
11,800.0	7,410.0	11,857.4	7,410.0	80.5	82.6	90.00	-4,410.7	-1,156.1	934.6	773.5	161.17	5.799	
11,900.0	7,410.0	11,957.4	7,410.0	82.2	84.3	90.00	-4,510.7	-1,157.2	932.3	767.7	164.63	5.663	
12,000.0	7,410.0	12,057.3	7,410.0	83.9	85.9	90.00	-4,610.7	-1,158.2	929.9	761.8	168.10	5.532	
12,100.0	7,410.0	12,157.3	7,410.0	85.7	87.6	90.00	-4,710.6	-1,159.3	927.6	756.0	171.57	5.407	
12,200.0	7,410.0	12,264.5	7,410.0	87.4	89.4	90.00	-4,817.9	-1,160.2	925.1	749.9	175.16	5.281	
12,300.0	7,410.0	12,383.6	7,410.0	89.1	91.5	90.00	-4,937.0	-1,159.3	920.9	742.0	178.96	5.146	
12,400.0	7,410.0	12,498.4	7,410.0	90.9	93.4	90.00	-5,051.7	-1,156.1	914.8	732.1	182.69	5.007	
12,500.0	7,410.0	12,598.2	7,410.0	92.6	95.1	90.00	-5,151.4	-1,152.7	907.9	721.8	186.16	4.877	
12,600.0	7,410.0	12,697.9	7,410.0	94.3	96.7	90.00	-5,251.1	-1,149.2	901.1	711.5	189.63	4.752	
12,700.0	7,410.0	12,797.7	7,410.0	96.1	98.4	90.00	-5,350.8	-1,145.8	894.3	701.2	193.10	4.631	
12,800.0	7,410.0	12,897.5	7,410.0	97.8	100.1	90.00	-5,450.5	-1,142.4	887.4	690.9	196.57	4.515	
12,900.0	7,410.0	12,997.2	7,410.0	99.6	101.8	90.00	-5,550.2	-1,138.9	880.6	680.6	200.04	4.402	
13,000.0	7,410.0	13,097.0	7,410.0	101.3	103.5	90.00	-5,649.9	-1,135.5	873.8	670.3	203.52	4.293	
13,100.0	7,410.0	13,196.8	7,410.0	103.0	105.2	90.00	-5,749.6	-1,132.1	867.0	660.0	206.99	4.188	
13,200.0	7,410.0	13,296.5	7,410.0	104.8	106.9	90.00	-5,849.3	-1,128.6	860.1	649.7	210.47	4.087	
13,300.0	7,410.0	13,396.3	7,410.0	106.5	108.6	90.00	-5,949.0	-1,125.2	853.3	639.4	213.94	3.988	
13,400.0	7,410.0	13,496.0	7,410.0	108.3	110.3	90.00	-6,048.7	-1,121.8	846.5	629.0	217.42	3.893	
13,500.0	7,410.0	13,595.8	7,410.0	110.0	112.0	90.00	-6,148.5	-1,118.3	839.6	618.7	220.90	3.801	
13,600.0	7,410.0	13,695.6	7,410.0	111.8	113.7	90.00	-6,248.2	-1,114.9	832.8	608.4	224.37	3.712	
13,700.0	7,410.0	13,795.3	7,410.0	113.5	115.4	90.00	-6,347.9	-1,111.5	826.0	598.1	227.85	3.625	
13,800.0	7,410.0	13,895.1	7,410.0	115.2	117.1	90.00	-6,447.6	-1,108.0	819.2	587.8	231.33	3.541	
13,900.0	7,410.0	13,994.9	7,410.0	117.0	118.8	90.00	-6,547.3	-1,104.6	812.3	577.5	234.81	3.459	
14,000.0	7,410.0	14,094.6	7,410.0	118.7	120.5	90.00	-6,647.0	-1,101.2	805.5	567.2	238.30	3.380	
14,090.8	7,410.0	14,157.7	7,410.0	120.3	121.6	90.00	-6,710.0	-1,099.0	799.8	558.8	240.98	3.319	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Elmquist 2C-14H-C268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-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	0.2	0.2	-90.00	0.0	-8.4	8.4	8.1	0.30	27.617	
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-8.4	8.4	7.7	0.65	12.848	
300.0	300.0	300.0	300.0	0.5	0.5	-90.00	0.0	-8.4	8.4	7.4	1.00	8.372	
400.0	400.0	400.0	400.0	0.7	0.7	-90.00	0.0	-8.4	8.4	7.0	1.35	6.208	CC, ES
500.0	500.0	499.7	499.7	0.8	0.9	-86.97	0.5	-10.0	10.1	8.4	1.70	5.914	
600.0	600.0	599.2	599.1	1.0	1.0	-23.48	2.1	-15.0	13.5	11.5	2.05	6.612	
700.0	699.8	698.7	698.1	1.2	1.2	-24.12	4.8	-23.2	17.3	14.9	2.40	7.201	
800.0	799.6	798.6	797.5	1.4	1.5	-24.85	7.9	-33.0	21.5	18.8	2.75	7.807	
900.0	899.4	898.5	896.9	1.6	1.7	-25.34	11.1	-42.7	25.7	22.6	3.11	8.270	
1,000.0	999.2	998.4	996.3	1.8	1.9	-25.69	14.2	-52.5	30.0	26.5	3.47	8.636	
1,100.0	1,099.0	1,098.3	1,095.6	2.0	2.2	-25.95	17.4	-62.3	34.2	30.4	3.83	8.930	
1,200.0	1,198.8	1,198.2	1,195.0	2.2	2.4	-26.16	20.5	-72.1	38.4	34.3	4.19	9.173	
1,300.0	1,298.6	1,298.1	1,294.4	2.4	2.7	-26.33	23.7	-81.9	42.7	38.1	4.55	9.376	
1,400.0	1,398.4	1,398.0	1,393.8	2.6	2.9	-26.46	26.8	-91.6	46.9	42.0	4.91	9.549	
1,500.0	1,498.2	1,497.9	1,493.2	2.8	3.2	-26.57	30.0	-101.4	51.2	45.9	5.28	9.697	
1,600.0	1,598.0	1,597.8	1,592.5	3.0	3.4	-26.67	33.1	-111.2	55.4	49.8	5.64	9.826	
1,700.0	1,697.8	1,697.8	1,691.9	3.2	3.6	-26.75	36.3	-121.0	59.6	53.6	6.00	9.939	
1,800.0	1,797.6	1,797.7	1,791.3	3.4	3.9	-26.82	39.4	-130.7	63.9	57.5	6.36	10.038	
1,900.0	1,897.4	1,897.6	1,890.7	3.6	4.1	-26.89	42.6	-140.5	68.1	61.4	6.73	10.127	
2,000.0	1,997.2	1,997.5	1,990.1	3.8	4.4	-26.94	45.7	-150.3	72.3	65.3	7.09	10.207	
2,100.0	2,097.0	2,097.4	2,089.4	4.0	4.6	-26.99	48.9	-160.1	76.6	69.1	7.45	10.278	
2,200.0	2,196.8	2,197.3	2,188.8	4.2	4.9	-27.03	52.0	-169.8	80.8	73.0	7.81	10.343	
2,300.0	2,296.6	2,297.2	2,288.2	4.4	5.1	-27.07	55.2	-179.6	85.1	76.9	8.18	10.402	
2,400.0	2,396.4	2,397.1	2,387.6	4.6	5.4	-27.11	58.3	-189.4	89.3	80.8	8.54	10.456	
2,500.0	2,496.2	2,497.0	2,487.0	4.9	5.6	-27.14	61.5	-199.2	93.5	84.6	8.90	10.505	
2,600.0	2,596.0	2,596.9	2,586.3	5.1	5.9	-27.17	64.6	-209.0	97.8	88.5	9.27	10.550	
2,700.0	2,695.8	2,696.9	2,685.7	5.3	6.1	-27.20	67.8	-218.7	102.0	92.4	9.63	10.592	
2,800.0	2,795.6	2,796.8	2,785.1	5.5	6.4	-27.22	70.9	-228.5	106.3	96.3	9.99	10.631	
2,900.0	2,895.4	2,896.7	2,884.5	5.7	6.6	-27.25	74.1	-238.3	110.5	100.1	10.36	10.667	
3,000.0	2,995.2	2,996.6	2,983.9	5.9	6.9	-27.27	77.2	-248.1	114.7	104.0	10.72	10.700	
3,100.0	3,095.0	3,096.5	3,083.2	6.1	7.1	-27.29	80.4	-257.8	119.0	107.9	11.09	10.732	
3,200.0	3,194.8	3,196.4	3,182.6	6.3	7.4	-27.31	83.5	-267.6	123.2	111.8	11.45	10.761	
3,300.0	3,294.6	3,296.3	3,282.0	6.5	7.6	-27.32	86.7	-277.4	127.4	115.6	11.81	10.788	
3,400.0	3,394.4	3,396.2	3,381.4	6.7	7.9	-27.34	89.8	-287.2	131.7	119.5	12.18	10.814	
3,500.0	3,494.2	3,496.1	3,480.8	6.9	8.1	-27.35	93.0	-297.0	135.9	123.4	12.54	10.839	
3,600.0	3,594.0	3,596.0	3,580.1	7.1	8.4	-27.37	96.1	-306.7	140.2	127.3	12.90	10.861	
3,700.0	3,693.8	3,696.0	3,679.5	7.3	8.6	-27.38	99.3	-316.5	144.4	131.1	13.27	10.883	
3,800.0	3,793.6	3,795.9	3,778.9	7.5	8.9	-27.39	102.4	-326.3	148.6	135.0	13.63	10.904	
3,900.0	3,893.4	3,895.8	3,878.3	7.7	9.1	-27.41	105.6	-336.1	152.9	138.9	14.00	10.923	
4,000.0	3,993.2	3,995.7	3,977.7	7.9	9.4	-27.42	108.7	-345.8	157.1	142.8	14.36	10.941	
4,100.0	4,093.0	4,095.6	4,077.1	8.2	9.6	-27.43	111.9	-355.6	161.4	146.6	14.72	10.959	
4,200.0	4,192.8	4,195.5	4,176.4	8.4	9.9	-27.44	115.0	-365.4	165.6	150.5	15.09	10.975	
4,300.0	4,292.6	4,295.4	4,275.8	8.6	10.1	-27.45	118.2	-375.2	169.8	154.4	15.45	10.991	
4,400.0	4,392.4	4,395.3	4,375.2	8.8	10.4	-27.46	121.3	-384.9	174.1	158.3	15.82	11.006	
4,500.0	4,492.2	4,495.2	4,474.6	9.0	10.6	-27.47	124.5	-394.7	178.3	162.1	16.18	11.021	
4,600.0	4,592.0	4,595.1	4,574.0	9.2	10.9	-27.47	127.6	-404.5	182.5	166.0	16.54	11.034	
4,700.0	4,691.8	4,695.1	4,673.3	9.4	11.1	-27.48	130.8	-414.3	186.8	169.9	16.91	11.048	
4,800.0	4,791.6	4,795.0	4,772.7	9.6	11.4	-27.49	133.9	-424.1	191.0	173.8	17.27	11.060	
4,900.0	4,891.4	4,894.9	4,872.1	9.8	11.6	-27.50	137.1	-433.8	195.3	177.6	17.64	11.072	
5,000.0	4,991.2	4,994.8	4,971.5	10.0	11.9	-27.50	140.2	-443.6	199.5	181.5	18.00	11.084	
5,100.0	5,090.9	5,094.7	5,070.9	10.2	12.1	-27.51	143.4	-453.4	203.7	185.4	18.36	11.095	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Elmquist 2C-14H-C268 - Hz - Plan #2

Survey Program: 0-MWD

Offset Site Error: 0.0 ft

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
5,200.0	5,190.7	5,194.6	5,170.2	10.4	12.4	-27.52	146.6	-463.2	208.0	189.2	18.73	11.106	
5,300.0	5,290.5	5,294.5	5,269.6	10.6	12.6	-27.52	149.7	-472.9	212.2	193.1	19.09	11.116	
5,400.0	5,390.3	5,394.4	5,369.0	10.8	12.9	-27.53	152.9	-482.7	216.5	197.0	19.46	11.126	
5,500.0	5,490.1	5,494.3	5,468.4	11.0	13.1	-27.54	156.0	-492.5	220.7	200.9	19.82	11.135	
5,600.0	5,589.9	5,594.2	5,567.8	11.3	13.4	-27.54	159.2	-502.3	224.9	204.7	20.18	11.144	
5,700.0	5,689.7	5,694.2	5,667.1	11.5	13.6	-27.55	162.3	-512.1	229.2	208.6	20.55	11.153	
5,800.0	5,789.5	5,794.1	5,766.5	11.7	13.9	-27.55	165.5	-521.8	233.4	212.5	20.91	11.162	
5,900.0	5,889.3	5,894.0	5,865.9	11.9	14.1	-27.56	168.6	-531.6	237.6	216.4	21.28	11.170	
6,000.0	5,989.1	5,993.9	5,965.3	12.1	14.4	-27.56	171.8	-541.4	241.9	220.2	21.64	11.178	
6,100.0	6,088.9	6,093.8	6,064.7	12.3	14.6	-27.57	174.9	-551.2	246.1	224.1	22.00	11.186	
6,200.0	6,188.7	6,193.7	6,164.0	12.5	14.9	-27.57	178.1	-560.9	250.4	228.0	22.37	11.193	
6,300.0	6,288.5	6,293.6	6,263.4	12.7	15.1	-27.57	181.2	-570.7	254.6	231.9	22.73	11.200	
6,400.0	6,388.3	6,393.5	6,362.8	12.9	15.4	-27.58	184.4	-580.5	258.8	235.7	23.10	11.207	
6,500.0	6,488.1	6,493.4	6,462.2	13.1	15.6	-27.58	187.5	-590.3	263.1	239.6	23.46	11.214	
6,600.0	6,587.9	6,593.3	6,561.6	13.3	15.9	-27.59	190.7	-600.0	267.3	243.5	23.82	11.220	
6,700.0	6,687.7	6,693.5	6,661.2	13.5	16.1	-28.04	191.7	-609.9	271.5	247.3	24.20	11.219	
6,800.0	6,787.5	6,791.0	6,757.2	13.7	16.3	-31.49	178.1	-619.4	276.1	251.4	24.74	11.161	
6,900.0	6,887.3	6,882.0	6,843.4	13.9	16.4	47.43	150.9	-628.0	283.4	258.0	25.39	11.160	
7,000.0	6,985.5	6,969.0	6,920.9	14.0	16.5	62.59	112.4	-635.9	292.9	267.1	25.80	11.355	
7,100.0	7,079.2	7,050.0	6,987.1	14.1	16.6	62.50	66.3	-642.6	303.7	277.9	25.82	11.762	
7,200.0	7,165.6	7,134.6	7,048.6	14.2	16.8	60.22	8.6	-649.0	314.7	289.2	25.51	12.337	
7,300.0	7,242.1	7,214.3	7,098.3	14.3	17.0	57.90	-53.5	-654.2	325.0	300.0	24.91	13.043	
7,400.0	7,306.2	7,292.6	7,138.2	14.6	17.3	55.88	-120.7	-658.5	333.8	309.4	24.35	13.711	
7,500.0	7,356.2	7,369.9	7,168.3	15.0	17.6	54.33	-191.6	-661.8	340.6	316.5	24.11	14.127	
7,600.0	7,390.4	7,450.0	7,189.2	15.5	18.1	53.25	-268.9	-664.3	345.1	320.6	24.52	14.072	
7,700.0	7,407.8	7,522.4	7,198.6	16.3	18.6	52.76	-340.6	-665.6	346.8	321.0	25.75	13.469	
7,800.0	7,410.0	7,609.9	7,200.0	17.2	19.3	52.65	-428.0	-666.2	346.1	318.7	27.47	12.601	
7,897.7	7,410.0	7,707.6	7,200.0	18.1	20.2	52.59	-525.7	-666.7	345.7	316.6	29.05	11.899	
7,900.0	7,410.0	7,709.9	7,200.0	18.2	20.2	52.56	-528.0	-666.7	345.4	316.3	29.08	11.878	
8,000.0	7,410.0	7,809.8	7,200.0	19.3	21.2	52.69	-628.0	-667.2	346.5	315.7	30.77	11.261	
8,100.0	7,410.0	7,909.8	7,200.0	20.4	22.3	53.05	-727.9	-667.8	349.7	317.1	32.62	10.719	
8,200.0	7,410.0	8,009.5	7,200.0	21.7	23.5	53.65	-827.7	-668.3	355.0	320.4	34.63	10.252	
8,300.0	7,410.0	8,109.1	7,200.0	23.0	24.7	54.45	-927.3	-668.8	362.2	325.3	36.92	9.811	
8,400.0	7,410.0	8,208.7	7,200.0	24.3	26.0	55.28	-1,026.9	-669.3	369.8	330.3	39.49	9.364	
8,500.0	7,410.0	8,308.3	7,200.0	25.7	27.3	56.08	-1,126.4	-669.9	377.4	335.3	42.16	8.952	
8,600.0	7,410.0	8,407.9	7,200.0	27.2	28.7	56.85	-1,226.0	-670.4	385.1	340.2	44.92	8.573	
8,700.0	7,410.0	8,507.4	7,200.0	28.7	30.2	57.58	-1,325.6	-670.9	392.9	345.2	47.77	8.226	
8,800.0	7,410.0	8,607.0	7,200.0	30.2	31.6	58.29	-1,425.2	-671.4	400.8	350.1	50.68	7.908	
8,900.0	7,410.0	8,706.6	7,200.0	31.7	33.1	58.97	-1,524.7	-671.9	408.6	355.0	53.65	7.617	
9,000.0	7,410.0	8,806.1	7,200.0	33.3	34.6	59.62	-1,624.3	-672.5	416.6	359.9	56.68	7.350	
9,100.0	7,410.0	8,905.7	7,200.0	34.9	36.2	60.25	-1,723.9	-673.0	424.6	364.8	59.76	7.105	
9,200.0	7,410.0	9,005.3	7,200.0	36.4	37.7	60.86	-1,823.4	-673.5	432.7	369.8	62.88	6.881	
9,300.0	7,410.0	9,104.9	7,200.0	38.1	39.3	61.44	-1,923.0	-674.0	440.8	374.7	66.04	6.674	
9,400.0	7,410.0	9,204.4	7,200.0	39.7	40.9	62.01	-2,022.6	-674.6	448.9	379.7	69.23	6.484	
9,500.0	7,410.0	9,304.0	7,200.0	41.3	42.5	62.55	-2,122.1	-675.1	457.1	384.6	72.45	6.309	
9,600.0	7,410.0	9,403.6	7,200.0	43.0	44.1	63.07	-2,221.7	-675.6	465.3	389.6	75.70	6.147	
9,700.0	7,410.0	9,503.2	7,200.0	44.6	45.7	63.58	-2,321.3	-676.1	473.6	394.6	78.98	5.996	
9,800.0	7,410.0	9,602.7	7,200.0	46.3	47.3	64.07	-2,420.9	-676.6	481.9	399.6	82.28	5.857	
9,900.0	7,410.0	9,702.3	7,200.0	47.9	48.9	64.54	-2,520.4	-677.2	490.2	404.6	85.59	5.727	
10,000.0	7,410.0	9,801.9	7,200.0	49.6	50.6	64.99	-2,620.0	-677.7	498.6	409.6	88.93	5.606	
10,100.0	7,410.0	9,901.4	7,200.0	51.3	52.2	65.44	-2,719.6	-678.2	506.9	414.7	92.28	5.493	
10,200.0	7,410.0	10,001.0	7,200.0	53.0	53.9	65.86	-2,819.1	-678.7	515.4	419.7	95.65	5.388	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Elmquist 2C-14H-C268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-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
10,300.0	7,410.0	10,100.6	7,200.0	54.7	55.6	66.28	-2,918.7	-679.2	523.5	424.2	99.29	5.273	
10,400.0	7,410.0	10,200.4	7,200.0	56.4	57.2	66.61	-3,018.5	-679.8	529.6	426.5	103.11	5.137	
10,500.0	7,410.0	10,300.3	7,200.0	58.1	58.9	66.80	-3,118.4	-680.3	533.3	426.5	106.80	4.994	
10,600.0	7,410.0	10,400.3	7,200.0	59.8	60.6	66.87	-3,218.4	-680.8	534.6	424.3	110.34	4.845	
10,700.0	7,410.0	10,500.3	7,200.0	61.5	62.3	66.82	-3,318.4	-681.3	533.7	420.0	113.65	4.696	
10,800.0	7,410.0	10,600.3	7,200.0	63.2	64.0	66.76	-3,418.4	-681.9	532.2	415.5	116.75	4.559	
10,900.0	7,410.0	10,700.3	7,200.0	64.9	65.6	66.69	-3,518.4	-682.4	530.8	410.9	119.85	4.429	
11,000.0	7,410.0	10,800.2	7,200.0	66.6	67.3	66.62	-3,618.4	-682.9	529.3	406.4	122.96	4.305	
11,100.0	7,410.0	10,900.2	7,200.0	68.4	69.0	66.56	-3,718.4	-683.4	527.9	401.8	126.06	4.188	
11,200.0	7,410.0	11,000.2	7,200.0	70.1	70.7	66.48	-3,818.3	-684.0	526.3	397.1	129.22	4.073	
11,300.0	7,410.0	11,100.2	7,200.0	71.8	72.4	66.36	-3,918.3	-684.5	523.8	391.5	132.33	3.959	
11,400.0	7,410.0	11,200.1	7,200.0	73.5	74.2	66.23	-4,018.3	-685.0	521.2	385.8	135.37	3.850	
11,500.0	7,410.0	11,300.1	7,200.0	75.3	75.9	66.10	-4,118.2	-685.5	518.6	380.2	138.41	3.747	
11,600.0	7,410.0	11,400.1	7,200.0	77.0	77.6	65.97	-4,218.2	-686.0	516.0	374.5	141.44	3.648	
11,700.0	7,410.0	11,500.0	7,200.0	78.7	79.3	65.84	-4,318.1	-686.6	513.3	368.9	144.46	3.554	
11,800.0	7,410.0	11,600.0	7,200.0	80.5	81.0	65.71	-4,418.1	-687.1	510.7	363.3	147.48	3.463	
11,900.0	7,410.0	11,699.9	7,200.0	82.2	82.7	65.58	-4,518.0	-687.6	508.1	357.6	150.49	3.376	
12,000.0	7,410.0	11,799.9	7,200.0	83.9	84.4	65.45	-4,618.0	-688.1	505.5	352.0	153.49	3.293	
12,100.0	7,410.0	11,899.9	7,200.0	85.7	86.2	65.31	-4,718.0	-688.7	502.9	346.4	156.49	3.214	
12,200.0	7,410.0	11,999.8	7,200.0	87.4	87.9	65.17	-4,817.9	-689.2	500.3	340.8	159.48	3.137	
12,300.0	7,410.0	12,099.8	7,200.0	89.1	89.6	65.03	-4,917.9	-689.7	497.7	335.2	162.46	3.064	
12,400.0	7,410.0	12,199.7	7,200.0	90.9	91.3	64.89	-5,017.8	-690.2	495.1	329.7	165.43	2.993	
12,500.0	7,410.0	12,299.7	7,200.0	92.6	93.0	64.75	-5,117.8	-690.8	492.5	324.1	168.39	2.925	
12,600.0	7,410.0	12,399.7	7,200.0	94.3	94.8	64.61	-5,217.8	-691.3	489.9	318.6	171.35	2.859	
12,700.0	7,410.0	12,499.6	7,200.0	96.1	96.5	64.46	-5,317.7	-691.8	487.3	313.0	174.29	2.796	
12,800.0	7,410.0	12,599.6	7,200.0	97.8	98.2	64.32	-5,417.7	-692.3	484.7	307.5	177.23	2.735	
12,900.0	7,410.0	12,699.5	7,200.0	99.6	99.9	64.17	-5,517.6	-692.9	482.2	302.0	180.15	2.676	
13,000.0	7,410.0	12,799.5	7,200.0	101.3	101.7	64.02	-5,617.6	-693.4	479.6	296.5	183.07	2.620	
13,100.0	7,410.0	12,899.4	7,200.0	103.0	103.4	63.87	-5,717.5	-693.9	477.0	291.0	185.97	2.565	
13,200.0	7,410.0	12,999.4	7,200.0	104.8	105.1	63.72	-5,817.5	-694.4	474.4	285.6	188.86	2.512	
13,300.0	7,410.0	13,099.4	7,200.0	106.5	106.9	63.56	-5,917.5	-694.9	471.9	280.1	191.75	2.461	
13,400.0	7,410.0	13,199.3	7,200.0	108.3	108.6	63.41	-6,017.4	-695.5	469.3	274.7	194.62	2.411	
13,500.0	7,410.0	13,299.3	7,200.0	110.0	110.3	63.25	-6,117.4	-696.0	466.7	269.3	197.48	2.363	
13,600.0	7,410.0	13,399.2	7,200.0	111.8	112.1	63.09	-6,217.3	-696.5	464.2	263.8	200.32	2.317	
13,700.0	7,410.0	13,499.2	7,200.0	113.5	113.8	62.93	-6,317.3	-697.0	461.6	258.5	203.16	2.272	
13,800.0	7,410.0	13,599.2	7,200.0	115.2	115.5	62.77	-6,417.2	-697.6	459.1	253.1	205.98	2.229	
13,900.0	7,410.0	13,699.1	7,200.0	117.0	117.3	62.60	-6,517.2	-698.1	456.5	247.7	208.79	2.187	
14,000.0	7,410.0	13,799.1	7,200.0	118.7	119.0	62.44	-6,617.2	-698.6	454.0	242.4	211.58	2.146	
14,090.8	7,410.0	13,889.9	7,200.0	120.3	120.6	62.28	-6,707.9	-699.1	451.7	237.6	214.11	2.110	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Elmquist 2E-14H-C268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-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	11.2	11.2				
100.0	100.0	100.0	100.0	0.2	0.2	90.00	0.0	11.2	11.2	10.9	0.30	36.822	
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	11.2	11.2	10.5	0.65	17.131	
300.0	300.0	300.0	300.0	0.5	0.5	90.00	0.0	11.2	11.2	10.2	1.00	11.162	
400.0	400.0	400.0	400.0	0.7	0.7	90.00	0.0	11.2	11.2	9.8	1.35	8.278	
500.0	500.0	500.0	500.0	0.8	0.8	90.00	0.0	11.2	11.2	9.5	1.70	6.578	CC, ES
600.0	600.0	600.0	600.0	1.0	1.0	154.83	0.0	11.2	12.7	10.7	2.05	6.218	
700.0	699.8	699.6	699.6	1.2	1.2	156.84	1.5	12.1	18.2	15.8	2.40	7.595	
800.0	799.6	799.3	799.2	1.4	1.4	154.83	4.7	14.0	25.6	22.9	2.75	9.309	
900.0	899.4	899.0	898.9	1.6	1.6	153.71	7.9	15.9	33.1	30.0	3.11	10.630	
1,000.0	999.2	998.7	998.5	1.8	1.7	153.00	11.1	17.8	40.5	37.1	3.47	11.675	
1,100.0	1,099.0	1,098.5	1,098.2	2.0	1.9	152.51	14.4	19.7	48.0	44.1	3.83	12.522	
1,200.0	1,198.8	1,198.2	1,197.8	2.2	2.1	152.15	17.6	21.5	55.4	51.2	4.19	13.220	
1,300.0	1,298.6	1,297.9	1,297.5	2.4	2.3	151.88	20.8	23.4	62.9	58.3	4.55	13.806	
1,400.0	1,398.4	1,397.6	1,397.1	2.6	2.5	151.66	24.0	25.3	70.3	65.4	4.92	14.305	
1,500.0	1,498.2	1,497.3	1,496.8	2.8	2.7	151.49	27.2	27.2	77.8	72.5	5.28	14.734	
1,600.0	1,598.0	1,597.1	1,596.4	3.0	2.8	151.35	30.5	29.1	85.3	79.6	5.64	15.107	
1,700.0	1,697.8	1,696.8	1,696.1	3.2	3.0	151.23	33.7	31.0	92.7	86.7	6.01	15.434	
1,800.0	1,797.6	1,796.5	1,795.7	3.4	3.2	151.12	36.9	32.9	100.2	93.8	6.37	15.723	
1,900.0	1,897.4	1,896.2	1,895.4	3.6	3.4	151.04	40.1	34.8	107.6	100.9	6.74	15.981	
2,000.0	1,997.2	1,996.0	1,995.0	3.8	3.6	150.96	43.4	36.7	115.1	108.0	7.10	16.212	
2,100.0	2,097.0	2,095.7	2,094.7	4.0	3.8	150.89	46.6	38.6	122.6	115.1	7.46	16.420	
2,200.0	2,196.8	2,195.4	2,194.3	4.2	3.9	150.83	49.8	40.5	130.0	122.2	7.83	16.608	
2,300.0	2,296.6	2,295.1	2,294.0	4.4	4.1	150.78	53.0	42.4	137.5	129.3	8.19	16.780	
2,400.0	2,396.4	2,394.8	2,393.6	4.6	4.3	150.73	56.2	44.3	144.9	136.4	8.56	16.937	
2,500.0	2,496.2	2,494.6	2,493.3	4.9	4.5	150.69	59.5	46.2	152.4	143.5	8.92	17.080	
2,600.0	2,596.0	2,594.3	2,592.9	5.1	4.7	150.65	62.7	48.1	159.9	150.6	9.29	17.213	
2,700.0	2,695.8	2,694.0	2,692.6	5.3	4.9	150.61	65.9	50.0	167.3	157.7	9.65	17.335	
2,800.0	2,795.6	2,793.7	2,792.2	5.5	5.1	150.58	69.1	51.9	174.8	164.8	10.02	17.448	
2,900.0	2,895.4	2,893.4	2,891.9	5.7	5.2	150.55	72.3	53.8	182.2	171.9	10.38	17.553	
3,000.0	2,995.2	2,993.2	2,991.5	5.9	5.4	150.52	75.6	55.7	189.7	179.0	10.75	17.651	
3,100.0	3,095.0	3,092.9	3,091.2	6.1	5.6	150.50	78.8	57.6	197.2	186.1	11.11	17.743	
3,200.0	3,194.8	3,192.6	3,190.8	6.3	5.8	150.47	82.0	59.5	204.6	193.1	11.48	17.829	
3,300.0	3,294.6	3,292.3	3,290.5	6.5	6.0	150.45	85.2	61.4	212.1	200.2	11.84	17.909	
3,400.0	3,394.4	3,392.0	3,390.1	6.7	6.2	150.43	88.4	63.3	219.5	207.3	12.21	17.984	
3,500.0	3,494.2	3,491.8	3,489.8	6.9	6.4	150.41	91.7	65.2	227.0	214.4	12.57	18.055	
3,600.0	3,594.0	3,591.5	3,589.4	7.1	6.5	150.39	94.9	67.1	234.5	221.5	12.94	18.122	
3,700.0	3,693.8	3,691.2	3,689.1	7.3	6.7	150.38	98.1	69.0	241.9	228.6	13.30	18.186	
3,800.0	3,793.6	3,790.9	3,788.7	7.5	6.9	150.36	101.3	70.9	249.4	235.7	13.67	18.245	
3,900.0	3,893.4	3,890.7	3,888.4	7.7	7.1	150.35	104.5	72.8	256.9	242.8	14.03	18.302	
4,000.0	3,993.2	3,990.4	3,988.0	7.9	7.3	150.33	107.8	74.7	264.3	249.9	14.40	18.356	
4,100.0	4,093.0	4,090.1	4,087.7	8.2	7.5	150.32	111.0	76.6	271.8	257.0	14.76	18.407	
4,200.0	4,192.8	4,189.8	4,187.3	8.4	7.7	150.31	114.2	78.5	279.2	264.1	15.13	18.456	
4,300.0	4,292.6	4,289.5	4,287.0	8.6	7.8	150.29	117.4	80.4	286.7	271.2	15.50	18.502	
4,400.0	4,392.4	4,389.3	4,386.6	8.8	8.0	150.28	120.6	82.3	294.2	278.3	15.86	18.546	
4,500.0	4,492.2	4,489.0	4,486.3	9.0	8.2	150.27	123.9	84.2	301.6	285.4	16.23	18.589	
4,600.0	4,592.0	4,588.7	4,586.0	9.2	8.4	150.26	127.1	86.1	309.1	292.5	16.59	18.629	
4,700.0	4,691.8	4,688.4	4,685.6	9.4	8.6	150.25	130.3	88.0	316.5	299.6	16.96	18.668	
4,800.0	4,791.6	4,788.1	4,785.3	9.6	8.8	150.24	133.5	89.9	324.0	306.7	17.32	18.704	
4,900.0	4,891.4	4,887.9	4,884.9	9.8	9.0	150.23	136.8	91.8	331.5	313.8	17.69	18.740	
5,000.0	4,991.2	4,987.6	4,984.6	10.0	9.1	150.23	140.0	93.7	338.9	320.9	18.05	18.774	
5,100.0	5,090.9	5,087.3	5,084.2	10.2	9.3	150.22	143.2	95.6	346.4	328.0	18.42	18.806	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Elmquist 2E-14H-C268 - Hz - Plan #2

Survey Program: 0-MWD

Offset Site Error: 0.0 ft

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
5,200.0	5,190.7	5,187.0	5,183.9	10.4	9.5	150.21	146.4	97.5	353.8	335.1	18.78	18.838	
5,300.0	5,290.5	5,286.8	5,283.5	10.6	9.7	150.20	149.6	99.4	361.3	342.2	19.15	18.868	
5,400.0	5,390.3	5,386.5	5,383.2	10.8	9.9	150.20	152.9	101.3	368.8	349.3	19.51	18.897	
5,500.0	5,490.1	5,486.2	5,482.8	11.0	10.1	150.19	156.1	103.2	376.2	356.3	19.88	18.925	
5,600.0	5,589.9	5,585.9	5,582.5	11.3	10.3	150.18	159.3	105.1	383.7	363.4	20.25	18.952	
5,700.0	5,689.7	5,685.6	5,682.1	11.5	10.4	150.18	162.5	107.0	391.2	370.5	20.61	18.978	
5,800.0	5,789.5	5,785.4	5,781.8	11.7	10.6	150.17	165.7	108.9	398.6	377.6	20.98	19.003	
5,900.0	5,889.3	5,885.1	5,881.4	11.9	10.8	150.16	169.0	110.8	406.1	384.7	21.34	19.027	
6,000.0	5,989.1	5,984.8	5,981.1	12.1	11.0	150.16	172.2	112.7	413.5	391.8	21.71	19.050	
6,100.0	6,088.9	6,084.5	6,080.7	12.3	11.2	150.15	175.4	114.6	421.0	398.9	22.07	19.073	
6,200.0	6,188.7	6,184.2	6,180.4	12.5	11.4	150.15	178.6	116.5	428.5	406.0	22.44	19.095	
6,300.0	6,288.5	6,284.0	6,280.0	12.7	11.6	150.14	181.8	118.4	435.9	413.1	22.80	19.116	
6,400.0	6,388.3	6,383.7	6,379.7	12.9	11.7	150.14	185.1	120.3	443.4	420.2	23.17	19.136	
6,500.0	6,488.1	6,483.4	6,479.3	13.1	11.9	150.13	188.3	122.2	450.8	427.3	23.54	19.156	
6,600.0	6,587.9	6,583.1	6,579.0	13.3	12.1	150.13	191.5	124.1	458.3	434.4	23.90	19.175	
6,700.0	6,687.7	6,683.8	6,679.6	13.5	12.3	150.67	190.3	125.9	465.7	441.5	24.22	19.226	
6,800.0	6,787.5	6,780.9	6,775.0	13.7	12.3	153.10	173.3	127.6	473.3	448.9	24.43	19.377	
6,900.0	6,887.3	6,870.5	6,859.4	13.9	12.4	-117.98	143.5	128.9	482.8	458.3	24.53	19.682	
7,000.0	6,985.5	6,955.9	6,934.6	14.0	12.4	-92.98	103.2	130.0	494.3	469.7	24.59	20.098	
7,100.0	7,079.2	7,038.2	7,000.6	14.1	12.5	-84.49	54.2	130.8	506.7	482.0	24.67	20.536	
7,200.0	7,165.6	7,118.1	7,057.4	14.2	12.6	-79.18	-1.9	131.4	519.3	494.5	24.82	20.923	
7,300.0	7,242.1	7,200.0	7,106.9	14.3	12.8	-75.25	-67.1	131.7	531.3	506.2	25.06	21.204	
7,400.0	7,306.2	7,272.6	7,142.6	14.6	13.1	-72.43	-130.2	131.8	541.9	516.4	25.43	21.311	
7,500.0	7,356.2	7,350.0	7,171.6	15.0	13.6	-70.31	-202.0	131.8	550.6	524.6	26.00	21.177	
7,600.0	7,390.4	7,422.8	7,189.7	15.5	14.1	-68.92	-272.4	131.5	557.0	530.2	26.81	20.774	
7,700.0	7,407.8	7,500.0	7,199.1	16.3	14.7	-68.17	-349.0	131.0	560.8	532.9	27.93	20.077	
7,800.0	7,410.0	7,585.1	7,200.0	17.2	15.6	-68.06	-434.0	130.3	562.1	532.5	29.52	19.037	
7,900.0	7,410.0	7,685.1	7,200.0	18.2	16.7	-68.08	-534.0	129.4	562.6	531.0	31.54	17.835	
8,000.0	7,410.0	7,785.0	7,200.0	19.3	17.9	-68.01	-634.0	128.5	561.0	527.3	33.68	16.655	
8,100.0	7,410.0	7,885.0	7,200.0	20.4	19.2	-67.82	-733.9	127.7	556.9	521.0	35.93	15.502	
8,200.0	7,410.0	7,984.7	7,200.0	21.7	20.5	-67.51	-833.6	126.8	550.5	512.3	38.24	14.395	
8,300.0	7,410.0	8,084.3	7,200.0	23.0	21.9	-67.11	-933.2	125.9	542.0	501.3	40.67	13.326	
8,400.0	7,410.0	8,183.8	7,200.0	24.3	23.4	-66.71	-1,032.7	125.0	533.1	489.9	43.23	12.333	
8,500.0	7,410.0	8,283.4	7,200.0	25.7	24.9	-66.29	-1,132.3	124.2	524.3	478.5	45.84	11.438	
8,600.0	7,410.0	8,382.9	7,200.0	27.2	26.4	-65.86	-1,231.8	123.3	515.6	467.1	48.49	10.633	
8,700.0	7,410.0	8,482.4	7,200.0	28.7	28.0	-65.42	-1,331.3	122.4	506.8	455.7	51.16	9.907	
8,800.0	7,410.0	8,582.0	7,200.0	30.2	29.5	-64.96	-1,430.9	121.6	498.1	444.3	53.84	9.252	
8,900.0	7,410.0	8,681.5	7,200.0	31.7	31.1	-64.49	-1,530.4	120.7	489.4	432.9	56.53	8.658	
9,000.0	7,410.0	8,781.1	7,200.0	33.3	32.7	-64.00	-1,630.0	119.8	480.8	421.6	59.21	8.120	
9,100.0	7,410.0	8,880.6	7,200.0	34.9	34.3	-63.49	-1,729.5	119.0	472.2	410.3	61.89	7.630	
9,200.0	7,410.0	8,980.1	7,200.0	36.4	36.0	-62.96	-1,829.0	118.1	463.6	399.1	64.54	7.183	
9,300.0	7,410.0	9,079.7	7,200.0	38.1	37.6	-62.41	-1,928.6	117.2	455.1	387.9	67.18	6.775	
9,400.0	7,410.0	9,179.2	7,200.0	39.7	39.3	-61.84	-2,028.1	116.4	446.6	376.9	69.78	6.401	
9,500.0	7,410.0	9,278.8	7,200.0	41.3	40.9	-61.25	-2,127.6	115.5	438.2	365.8	72.35	6.057	
9,600.0	7,410.0	9,378.3	7,200.0	43.0	42.6	-60.64	-2,227.2	114.6	429.8	354.9	74.87	5.740	
9,700.0	7,410.0	9,477.8	7,200.0	44.6	44.3	-60.00	-2,326.7	113.8	421.5	344.1	77.35	5.449	
9,800.0	7,410.0	9,577.4	7,200.0	46.3	45.9	-59.34	-2,426.2	112.9	413.2	333.4	79.78	5.179	
9,900.0	7,410.0	9,676.9	7,200.0	47.9	47.6	-58.65	-2,525.8	112.0	405.0	322.8	82.14	4.930	
10,000.0	7,410.0	9,776.4	7,200.0	49.6	49.3	-57.93	-2,625.3	111.1	396.8	312.4	84.44	4.699	
10,100.0	7,410.0	9,876.0	7,200.0	51.3	51.0	-57.18	-2,724.8	110.3	388.7	302.0	86.66	4.486	
10,200.0	7,410.0	9,975.5	7,200.0	53.0	52.7	-56.40	-2,824.4	109.4	380.7	291.9	88.79	4.287	
10,300.0	7,410.0	10,075.1	7,200.0	54.7	54.4	-55.64	-2,923.9	108.5	373.0	282.0	91.01	4.098	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Elmquist 2E-14H-C268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-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
10,400.0	7,410.0	10,174.8	7,200.0	56.4	56.1	-55.08	-3,023.7	107.7	367.2	273.8	93.43	3.930	
10,500.0	7,410.0	10,274.8	7,200.0	58.1	57.8	-54.71	-3,123.6	106.8	363.6	267.7	95.98	3.789	
10,600.0	7,410.0	10,374.7	7,200.0	59.8	59.5	-54.56	-3,223.6	105.9	362.2	263.5	98.69	3.670	
10,618.9	7,410.0	10,393.7	7,200.0	60.1	59.8	-54.56	-3,242.5	105.8	362.2	262.9	99.22	3.650	
10,700.0	7,410.0	10,474.7	7,200.0	61.5	61.2	-54.63	-3,323.6	105.1	362.8	261.2	101.58	3.571	
10,800.0	7,410.0	10,574.7	7,200.0	63.2	62.9	-54.74	-3,423.6	104.2	363.8	259.3	104.51	3.481	
10,900.0	7,410.0	10,674.7	7,200.0	64.9	64.7	-54.85	-3,523.5	103.3	364.8	257.3	107.45	3.395	
11,000.0	7,410.0	10,774.7	7,200.0	66.6	66.4	-54.96	-3,623.5	102.4	365.8	255.4	110.41	3.313	
11,100.0	7,410.0	10,874.7	7,200.0	68.4	68.1	-55.07	-3,723.5	101.6	366.8	253.4	113.37	3.235	
11,200.0	7,410.0	10,974.7	7,200.0	70.1	69.8	-55.18	-3,823.5	100.7	367.9	251.5	116.35	3.162	
11,300.0	7,410.0	11,074.7	7,200.0	71.8	71.6	-55.39	-3,923.5	99.8	369.8	250.4	119.46	3.096	
11,400.0	7,410.0	11,174.6	7,200.0	73.5	73.3	-55.61	-4,023.4	98.9	371.9	249.3	122.60	3.033	
11,500.0	7,410.0	11,274.6	7,200.0	75.3	75.0	-55.83	-4,123.4	98.1	374.0	248.2	125.76	2.974	
11,600.0	7,410.0	11,374.6	7,200.0	77.0	76.7	-56.05	-4,223.4	97.2	376.1	247.1	128.93	2.917	
11,700.0	7,410.0	11,474.5	7,200.0	78.7	78.5	-56.26	-4,323.3	96.3	378.2	246.1	132.11	2.862	
11,800.0	7,410.0	11,574.5	7,200.0	80.5	80.2	-56.47	-4,423.3	95.5	380.3	245.0	135.30	2.810	
11,900.0	7,410.0	11,674.5	7,200.0	82.2	81.9	-56.68	-4,523.3	94.6	382.4	243.9	138.50	2.761	
12,000.0	7,410.0	11,774.4	7,200.0	83.9	83.7	-56.88	-4,623.2	93.7	384.5	242.8	141.72	2.713	
12,100.0	7,410.0	11,874.4	7,200.0	85.7	85.4	-57.09	-4,723.2	92.8	386.6	241.6	144.94	2.667	
12,200.0	7,410.0	11,974.4	7,200.0	87.4	87.1	-57.29	-4,823.2	92.0	388.7	240.5	148.17	2.623	
12,300.0	7,410.0	12,074.3	7,200.0	89.1	88.9	-57.49	-4,923.1	91.1	390.8	239.4	151.41	2.581	
12,400.0	7,410.0	12,174.3	7,200.0	90.9	90.6	-57.69	-5,023.1	90.2	392.9	238.3	154.66	2.541	
12,500.0	7,410.0	12,274.3	7,200.0	92.6	92.3	-57.88	-5,123.0	89.4	395.1	237.2	157.92	2.502	
12,600.0	7,410.0	12,374.2	7,200.0	94.3	94.1	-58.07	-5,223.0	88.5	397.2	236.0	161.19	2.464	
12,700.0	7,410.0	12,474.2	7,200.0	96.1	95.8	-58.27	-5,323.0	87.6	399.3	234.9	164.46	2.428	
12,800.0	7,410.0	12,574.2	7,200.0	97.8	97.6	-58.46	-5,422.9	86.7	401.5	233.7	167.75	2.393	
12,900.0	7,410.0	12,674.2	7,200.0	99.6	99.3	-58.64	-5,522.9	85.9	403.6	232.6	171.04	2.360	
13,000.0	7,410.0	12,774.1	7,200.0	101.3	101.0	-58.83	-5,622.9	85.0	405.8	231.5	174.34	2.328	
13,100.0	7,410.0	12,874.1	7,200.0	103.0	102.8	-59.01	-5,722.8	84.1	408.0	230.3	177.64	2.296	
13,200.0	7,410.0	12,974.1	7,200.0	104.8	104.5	-59.19	-5,822.8	83.2	410.1	229.2	180.96	2.266	
13,300.0	7,410.0	13,074.0	7,200.0	106.5	106.3	-59.37	-5,922.8	82.4	412.3	228.0	184.28	2.237	
13,400.0	7,410.0	13,174.0	7,200.0	108.3	108.0	-59.55	-6,022.7	81.5	414.4	226.8	187.60	2.209	
13,500.0	7,410.0	13,274.0	7,200.0	110.0	109.7	-59.72	-6,122.7	80.6	416.6	225.7	190.94	2.182	
13,600.0	7,410.0	13,373.9	7,200.0	111.8	111.5	-59.90	-6,222.7	79.8	418.8	224.5	194.28	2.156	
13,700.0	7,410.0	13,473.9	7,200.0	113.5	113.2	-60.07	-6,322.6	78.9	421.0	223.4	197.62	2.130	
13,800.0	7,410.0	13,573.9	7,200.0	115.2	115.0	-60.24	-6,422.6	78.0	423.2	222.2	200.97	2.106	
13,900.0	7,410.0	13,673.8	7,200.0	117.0	116.7	-60.41	-6,522.5	77.1	425.4	221.0	204.33	2.082	
14,000.0	7,410.0	13,773.8	7,200.0	118.7	118.5	-60.57	-6,622.5	76.3	427.5	219.9	207.69	2.059	
14,090.8	7,410.0	13,861.3	7,200.0	120.3	120.0	-60.72	-6,710.0	75.5	429.5	218.9	210.69	2.039	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Elmquist 2F-14H-C268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-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	19.6	19.6				
100.0	100.0	100.0	100.0	0.2	0.2	90.00	0.0	19.6	19.6	19.3	0.30	64.439	
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	19.6	19.6	18.9	0.65	29.980	
300.0	300.0	300.0	300.0	0.5	0.5	90.00	0.0	19.6	19.6	18.6	1.00	19.534	
400.0	400.0	400.0	400.0	0.7	0.7	90.00	0.0	19.6	19.6	18.2	1.35	14.486	
500.0	500.0	500.0	500.0	0.8	0.8	90.00	0.0	19.6	19.6	17.9	1.70	11.512	CC, ES
600.0	600.0	599.3	599.2	1.0	1.0	151.76	0.5	21.2	22.7	20.7	2.05	11.106	
700.0	699.8	697.9	697.8	1.2	1.2	153.01	2.2	26.1	32.2	29.8	2.40	13.438	
800.0	799.6	795.8	795.3	1.4	1.4	152.84	4.8	34.0	45.9	43.1	2.75	16.698	
900.0	899.4	894.7	893.6	1.6	1.6	152.25	8.0	43.5	61.0	57.9	3.10	19.654	
1,000.0	999.2	993.5	992.0	1.8	1.9	151.90	11.2	53.0	76.1	72.7	3.46	21.994	
1,100.0	1,099.0	1,092.4	1,090.3	2.0	2.1	151.66	14.3	62.5	91.3	87.4	3.82	23.891	
1,200.0	1,198.8	1,191.2	1,188.6	2.2	2.3	151.49	17.5	72.0	106.4	102.2	4.18	25.458	
1,300.0	1,298.6	1,290.1	1,287.0	2.4	2.5	151.36	20.7	81.5	121.5	117.0	4.54	26.774	
1,400.0	1,398.4	1,388.9	1,385.3	2.6	2.8	151.26	23.9	91.0	136.6	131.7	4.90	27.894	
1,500.0	1,498.2	1,487.8	1,483.7	2.8	3.0	151.18	27.0	100.5	151.8	146.5	5.26	28.859	
1,600.0	1,598.0	1,586.6	1,582.0	3.0	3.3	151.12	30.2	110.0	166.9	161.3	5.62	29.698	
1,700.0	1,697.8	1,685.4	1,680.3	3.2	3.5	151.06	33.4	119.5	182.0	176.0	5.98	30.436	
1,800.0	1,797.6	1,784.3	1,778.7	3.4	3.7	151.02	36.5	129.0	197.1	190.8	6.34	31.088	
1,900.0	1,897.4	1,883.1	1,877.0	3.6	4.0	150.98	39.7	138.5	212.3	205.6	6.70	31.669	
2,000.0	1,997.2	1,982.0	1,975.4	3.8	4.2	150.94	42.9	148.0	227.4	220.3	7.06	32.191	
2,100.0	2,097.0	2,080.8	2,073.7	4.0	4.5	150.91	46.0	157.5	242.5	235.1	7.43	32.661	
2,200.0	2,196.8	2,179.7	2,172.1	4.2	4.7	150.89	49.2	167.0	257.6	249.9	7.79	33.087	
2,300.0	2,296.6	2,278.5	2,270.4	4.4	5.0	150.86	52.4	176.5	272.8	264.6	8.15	33.474	
2,400.0	2,396.4	2,377.4	2,368.7	4.6	5.2	150.84	55.6	186.0	287.9	279.4	8.51	33.829	
2,500.0	2,496.2	2,476.2	2,467.1	4.9	5.4	150.82	58.7	195.5	303.0	294.2	8.87	34.154	
2,600.0	2,596.0	2,575.1	2,565.4	5.1	5.7	150.81	61.9	205.0	318.2	308.9	9.23	34.454	
2,700.0	2,695.8	2,673.9	2,663.8	5.3	5.9	150.79	65.1	214.5	333.3	323.7	9.60	34.731	
2,800.0	2,795.6	2,772.8	2,762.1	5.5	6.2	150.78	68.2	224.0	348.4	338.5	9.96	34.988	
2,900.0	2,895.4	2,871.6	2,860.4	5.7	6.4	150.76	71.4	233.5	363.5	353.2	10.32	35.226	
3,000.0	2,995.2	2,970.5	2,958.8	5.9	6.7	150.75	74.6	243.0	378.7	368.0	10.68	35.448	
3,100.0	3,095.0	3,069.3	3,057.1	6.1	6.9	150.74	77.8	252.5	393.8	382.8	11.04	35.656	
3,200.0	3,194.8	3,168.2	3,155.5	6.3	7.2	150.73	80.9	262.0	408.9	397.5	11.41	35.850	
3,300.0	3,294.6	3,267.0	3,253.8	6.5	7.4	150.72	84.1	271.5	424.0	412.3	11.77	36.032	
3,400.0	3,394.4	3,365.9	3,352.1	6.7	7.6	150.71	87.3	281.0	439.2	427.0	12.13	36.203	
3,500.0	3,494.2	3,464.7	3,450.5	6.9	7.9	150.70	90.4	290.5	454.3	441.8	12.49	36.365	
3,600.0	3,594.0	3,563.6	3,548.8	7.1	8.1	150.70	93.6	300.0	469.4	456.6	12.86	36.517	
3,700.0	3,693.8	3,662.4	3,647.2	7.3	8.4	150.69	96.8	309.5	484.6	471.3	13.22	36.660	
3,800.0	3,793.6	3,761.3	3,745.5	7.5	8.6	150.68	99.9	319.0	499.7	486.1	13.58	36.796	
3,900.0	3,893.4	3,860.1	3,843.8	7.7	8.9	150.67	103.1	328.4	514.8	500.9	13.94	36.925	
4,000.0	3,993.2	3,959.0	3,942.2	7.9	9.1	150.67	106.3	337.9	529.9	515.6	14.30	37.048	
4,100.0	4,093.0	4,057.8	4,040.5	8.2	9.4	150.66	109.5	347.4	545.1	530.4	14.67	37.164	
4,200.0	4,192.8	4,156.7	4,138.9	8.4	9.6	150.66	112.6	356.9	560.2	545.2	15.03	37.274	
4,300.0	4,292.6	4,255.5	4,237.2	8.6	9.9	150.65	115.8	366.4	575.3	559.9	15.39	37.380	
4,400.0	4,392.4	4,354.4	4,335.5	8.8	10.1	150.65	119.0	375.9	590.5	574.7	15.75	37.480	
4,500.0	4,492.2	4,453.2	4,433.9	9.0	10.3	150.64	122.1	385.4	605.6	589.5	16.12	37.576	
4,600.0	4,592.0	4,552.1	4,532.2	9.2	10.6	150.64	125.3	394.9	620.7	604.2	16.48	37.668	
4,700.0	4,691.8	4,650.9	4,630.6	9.4	10.8	150.63	128.5	404.4	635.8	619.0	16.84	37.756	
4,800.0	4,791.6	4,749.8	4,728.9	9.6	11.1	150.63	131.7	413.9	651.0	633.8	17.20	37.840	
4,900.0	4,891.4	4,848.6	4,827.3	9.8	11.3	150.63	134.8	423.4	666.1	648.5	17.57	37.920	
5,000.0	4,991.2	4,947.5	4,925.6	10.0	11.6	150.62	138.0	432.9	681.2	663.3	17.93	37.998	
5,100.0	5,090.9	5,046.3	5,023.9	10.2	11.8	150.62	141.2	442.4	696.3	678.1	18.29	38.072	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Elmquist 2F-14H-C268 - Hz - Plan #2

Survey Program: 0-MWD

Offset Site Error: 0.0 ft

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
5,200.0	5,190.7	5,145.2	5,122.3	10.4	12.1	150.62	144.3	451.9	711.5	692.8	18.65	38.143	
5,300.0	5,290.5	5,244.0	5,220.6	10.6	12.3	150.61	147.5	461.4	726.6	707.6	19.02	38.212	
5,400.0	5,390.3	5,342.9	5,319.0	10.8	12.6	150.61	150.7	470.9	741.7	722.4	19.38	38.278	
5,500.0	5,490.1	5,441.7	5,417.3	11.0	12.8	150.61	153.8	480.4	756.9	737.1	19.74	38.341	
5,600.0	5,589.9	5,540.6	5,515.6	11.3	13.0	150.60	157.0	489.9	772.0	751.9	20.10	38.402	
5,700.0	5,689.7	5,639.4	5,614.0	11.5	13.3	150.60	160.2	499.4	787.1	766.6	20.46	38.461	
5,800.0	5,789.5	5,738.3	5,712.3	11.7	13.5	150.60	163.4	508.9	802.2	781.4	20.83	38.518	
5,900.0	5,889.3	5,837.1	5,810.7	11.9	13.8	150.60	166.5	518.4	817.4	796.2	21.19	38.574	
6,000.0	5,989.1	5,936.0	5,909.0	12.1	14.0	150.59	169.7	527.9	832.5	810.9	21.55	38.627	
6,100.0	6,088.9	6,034.8	6,007.3	12.3	14.3	150.59	172.9	537.4	847.6	825.7	21.91	38.678	
6,200.0	6,188.7	6,133.7	6,105.7	12.5	14.5	150.59	176.0	546.9	862.8	840.5	22.28	38.728	
6,300.0	6,288.5	6,232.5	6,204.0	12.7	14.8	150.59	179.2	556.4	877.9	855.2	22.64	38.776	
6,400.0	6,388.3	6,331.4	6,302.4	12.9	15.0	150.58	182.4	565.9	893.0	870.0	23.00	38.823	
6,500.0	6,488.1	6,430.2	6,400.7	13.1	15.3	150.58	185.5	575.4	908.1	884.8	23.36	38.868	
6,600.0	6,587.9	6,529.1	6,499.0	13.3	15.5	150.58	188.7	584.9	923.3	899.5	23.73	38.912	
6,700.0	6,687.7	6,627.9	6,597.4	13.5	15.7	150.58	191.9	594.4	938.4	914.3	24.09	38.954	
6,800.0	6,787.5	6,726.8	6,695.7	13.7	16.0	150.58	195.1	603.9	953.5	929.1	24.45	38.995	
6,900.0	6,887.3	6,825.4	6,793.9	13.9	16.2	-123.83	198.2	613.3	968.7	943.9	24.80	39.060	
7,000.0	6,985.5	6,927.1	6,895.0	14.0	16.5	-102.41	196.6	623.0	984.2	959.1	25.04	39.306	
7,100.0	7,079.2	7,033.2	6,998.6	14.1	16.6	-97.14	176.5	632.7	999.2	974.0	25.16	39.714	
7,200.0	7,165.6	7,142.9	7,099.9	14.2	16.7	-94.61	135.9	641.9	1,013.4	988.1	25.24	40.150	
7,300.0	7,242.1	7,256.1	7,194.5	14.3	16.9	-93.05	74.5	650.1	1,026.1	1,000.7	25.39	40.406	
7,400.0	7,306.2	7,372.7	7,277.4	14.6	17.1	-91.97	-6.8	657.0	1,036.9	1,011.1	25.79	40.211	
7,500.0	7,356.2	7,492.0	7,343.5	15.0	17.4	-91.17	-105.7	661.9	1,045.4	1,018.9	26.56	39.367	
7,600.0	7,390.4	7,613.1	7,388.4	15.5	18.0	-90.57	-218.0	664.7	1,051.3	1,023.4	27.82	37.787	
7,700.0	7,407.8	7,734.9	7,408.8	16.3	18.7	-90.13	-337.8	665.0	1,054.2	1,024.6	29.58	35.636	
7,800.0	7,410.0	7,841.3	7,410.0	17.2	19.5	-90.00	-444.2	663.6	1,054.8	1,023.2	31.59	33.385	
7,900.0	7,410.0	7,941.3	7,410.0	18.2	20.4	-90.00	-544.2	662.2	1,054.8	1,021.0	33.81	31.193	
8,000.0	7,410.0	8,041.3	7,410.0	19.3	21.4	-90.00	-644.1	660.8	1,052.5	1,016.3	36.29	29.007	
8,100.0	7,410.0	8,141.2	7,410.0	20.4	22.5	-90.00	-744.0	659.4	1,047.7	1,008.7	38.93	26.915	
8,200.0	7,410.0	8,240.9	7,410.0	21.7	23.7	-90.00	-843.7	658.0	1,040.2	998.5	41.69	24.949	
8,300.0	7,410.0	8,340.4	7,410.0	23.0	24.9	-90.00	-943.2	656.6	1,030.4	985.9	44.53	23.138	
8,400.0	7,410.0	8,439.9	7,410.0	24.3	26.2	-90.00	-1,042.7	655.2	1,020.3	972.9	47.44	21.508	
8,500.0	7,410.0	8,539.4	7,410.0	25.7	27.6	-90.00	-1,142.2	653.8	1,010.2	959.8	50.42	20.036	
8,600.0	7,410.0	8,638.9	7,410.0	27.2	28.9	-90.00	-1,241.7	652.5	1,000.1	946.6	53.46	18.706	
8,700.0	7,410.0	8,738.4	7,410.0	28.7	30.4	-90.00	-1,341.1	651.1	990.0	933.4	56.56	17.503	
8,800.0	7,410.0	8,837.9	7,410.0	30.2	31.8	-90.00	-1,440.6	649.7	979.9	920.2	59.70	16.413	
8,900.0	7,410.0	8,937.4	7,410.0	31.7	33.3	-90.00	-1,540.1	648.3	969.8	906.9	62.88	15.422	
9,000.0	7,410.0	9,036.8	7,410.0	33.3	34.8	-90.00	-1,639.6	646.9	959.7	893.6	66.09	14.520	
9,100.0	7,410.0	9,136.3	7,410.0	34.9	36.3	-90.00	-1,739.1	645.5	949.6	880.2	69.33	13.696	
9,200.0	7,410.0	9,235.8	7,410.0	36.4	37.9	-90.00	-1,838.5	644.1	939.5	866.9	72.60	12.941	
9,300.0	7,410.0	9,335.3	7,410.0	38.1	39.5	-90.00	-1,938.0	642.7	929.4	853.5	75.88	12.248	
9,400.0	7,410.0	9,434.8	7,410.0	39.7	41.0	-90.00	-2,037.5	641.3	919.2	840.1	79.18	11.609	
9,500.0	7,410.0	9,534.3	7,410.0	41.3	42.6	-90.00	-2,137.0	640.0	909.1	826.6	82.50	11.020	
9,600.0	7,410.0	9,633.8	7,410.0	43.0	44.2	-90.00	-2,236.4	638.6	899.0	813.2	85.83	10.474	
9,700.0	7,410.0	9,733.3	7,410.0	44.6	45.8	-90.00	-2,335.9	637.2	888.9	799.8	89.18	9.968	
9,800.0	7,410.0	9,832.8	7,410.0	46.3	47.5	-90.00	-2,435.4	635.8	878.8	786.3	92.53	9.497	
9,900.0	7,410.0	9,932.2	7,410.0	47.9	49.1	-90.00	-2,534.9	634.4	868.7	772.8	95.90	9.059	
10,000.0	7,410.0	10,031.7	7,410.0	49.6	50.7	-90.00	-2,634.4	633.0	858.6	759.3	99.27	8.649	
10,100.0	7,410.0	10,131.2	7,410.0	51.3	52.4	-90.00	-2,733.8	631.6	848.5	745.8	102.66	8.265	
10,200.0	7,410.0	10,230.7	7,410.0	53.0	54.0	-90.00	-2,833.3	630.2	838.4	732.4	106.05	7.906	
10,300.0	7,410.0	10,330.2	7,410.0	54.7	55.7	-90.00	-2,932.8	628.8	828.6	719.2	109.46	7.570	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Elmquist 2F-14H-C268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-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
10,400.0	7,410.0	10,429.9	7,410.0	56.4	57.4	-90.00	-3,032.5	627.5	821.1	708.3	112.85	7.276	
10,500.0	7,410.0	10,529.8	7,410.0	58.1	59.0	-90.00	-3,132.4	626.1	816.2	700.0	116.17	7.026	
10,600.0	7,410.0	10,629.8	7,410.0	59.8	60.7	-90.00	-3,232.4	624.7	813.9	694.5	119.43	6.815	
10,638.9	7,410.0	10,668.7	7,410.0	60.4	61.4	-90.00	-3,271.3	624.1	813.7	693.0	120.72	6.740	
10,700.0	7,410.0	10,729.8	7,410.0	61.5	62.4	-90.00	-3,332.3	623.3	814.1	691.4	122.72	6.634	
10,800.0	7,410.0	10,829.8	7,410.0	63.2	64.1	-90.00	-3,432.3	621.9	814.8	688.6	126.15	6.459	
10,900.0	7,410.0	10,929.8	7,410.0	64.9	65.8	-90.00	-3,532.3	620.5	815.5	685.9	129.59	6.293	
11,000.0	7,410.0	11,029.8	7,410.0	66.6	67.5	-90.00	-3,632.3	619.1	816.2	683.2	133.03	6.135	
11,100.0	7,410.0	11,129.8	7,410.0	68.4	69.2	-90.00	-3,732.3	617.7	816.9	680.4	136.47	5.986	
11,200.0	7,410.0	11,229.8	7,410.0	70.1	70.9	-90.00	-3,832.3	616.3	817.7	677.8	139.86	5.847	
11,300.0	7,410.0	11,329.8	7,410.0	71.8	72.6	-90.00	-3,932.3	614.9	819.6	676.3	143.24	5.722	
11,400.0	7,410.0	11,429.7	7,410.0	73.5	74.3	-90.00	-4,032.2	613.5	821.6	674.9	146.69	5.601	
11,500.0	7,410.0	11,529.7	7,410.0	75.3	76.0	-90.00	-4,132.2	612.1	823.6	673.4	150.15	5.485	
11,600.0	7,410.0	11,629.7	7,410.0	77.0	77.7	-90.00	-4,232.2	610.7	825.5	671.9	153.61	5.374	
11,700.0	7,410.0	11,729.7	7,410.0	78.7	79.4	-90.00	-4,332.1	609.3	827.5	670.5	157.07	5.269	
11,800.0	7,410.0	11,829.7	7,410.0	80.5	81.1	-90.00	-4,432.1	607.9	829.5	669.0	160.53	5.168	
11,900.0	7,410.0	11,929.6	7,410.0	82.2	82.8	-90.00	-4,532.1	606.5	831.5	667.5	163.99	5.071	
12,000.0	7,410.0	12,029.6	7,410.0	83.9	84.6	-90.00	-4,632.1	605.1	833.5	666.1	167.46	4.977	
12,100.0	7,410.0	12,129.6	7,410.0	85.7	86.3	-90.00	-4,732.0	603.7	835.5	664.6	170.93	4.888	
12,200.0	7,410.0	12,229.6	7,410.0	87.4	88.0	-90.00	-4,832.0	602.3	837.5	663.1	174.40	4.802	
12,300.0	7,410.0	12,329.6	7,410.0	89.1	89.7	-90.00	-4,932.0	600.9	839.5	661.6	177.87	4.720	
12,400.0	7,410.0	12,429.5	7,410.0	90.9	91.4	-90.00	-5,031.9	599.5	841.5	660.2	181.34	4.640	
12,500.0	7,410.0	12,529.5	7,410.0	92.6	93.2	-90.00	-5,131.9	598.1	843.5	658.7	184.81	4.564	
12,600.0	7,410.0	12,629.5	7,410.0	94.3	94.9	-90.00	-5,231.9	596.7	845.5	657.2	188.29	4.490	
12,700.0	7,410.0	12,729.5	7,410.0	96.1	96.6	-90.00	-5,331.8	595.4	847.5	655.7	191.77	4.419	
12,800.0	7,410.0	12,829.5	7,410.0	97.8	98.3	-90.00	-5,431.8	594.0	849.5	654.2	195.24	4.351	
12,900.0	7,410.0	12,929.4	7,410.0	99.6	100.1	-90.00	-5,531.8	592.6	851.5	652.8	198.72	4.285	
13,000.0	7,410.0	13,029.4	7,410.0	101.3	101.8	-90.00	-5,631.8	591.2	853.5	651.3	202.20	4.221	
13,100.0	7,410.0	13,129.4	7,410.0	103.0	103.5	-90.00	-5,731.7	589.8	855.5	649.8	205.68	4.159	
13,200.0	7,410.0	13,229.4	7,410.0	104.8	105.3	-90.00	-5,831.7	588.4	857.5	648.3	209.16	4.099	
13,300.0	7,410.0	13,329.4	7,410.0	106.5	107.0	-90.00	-5,931.7	587.0	859.5	646.8	212.65	4.042	
13,400.0	7,410.0	13,429.3	7,410.0	108.3	108.7	-90.00	-6,031.6	585.6	861.5	645.3	216.13	3.986	
13,500.0	7,410.0	13,529.3	7,410.0	110.0	110.4	-90.00	-6,131.6	584.2	863.4	643.8	219.61	3.932	
13,600.0	7,410.0	13,629.3	7,410.0	111.8	112.2	-90.00	-6,231.6	582.8	865.4	642.3	223.10	3.879	
13,700.0	7,410.0	13,729.3	7,410.0	113.5	113.9	-90.00	-6,331.5	581.4	867.4	640.9	226.58	3.828	
13,800.0	7,410.0	13,829.3	7,410.0	115.2	115.6	-90.00	-6,431.5	580.0	869.4	639.4	230.07	3.779	
13,900.0	7,410.0	13,929.2	7,410.0	117.0	117.4	-90.00	-6,531.5	578.6	871.4	637.9	233.56	3.731	
14,000.0	7,410.0	14,029.2	7,410.0	118.7	119.1	-90.00	-6,631.5	577.2	873.4	636.4	237.05	3.685	
14,090.8	7,410.0	14,111.4	7,410.0	120.3	120.5	-90.00	-6,713.7	576.1	875.3	635.2	240.06	3.646 SF	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Elmquist 2G-14H-C268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-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	11.0	11.0	0.0	0.0	89.99	0.0	30.8	30.8				
100.0	100.0	111.0	111.0	0.2	0.2	89.99	0.0	30.8	30.8	30.4	0.30	101.262	
200.0	200.0	211.0	211.0	0.3	0.3	89.99	0.0	30.8	30.8	30.1	0.65	47.111	
300.0	300.0	311.0	311.0	0.5	0.5	89.99	0.0	30.8	30.8	29.8	1.00	30.696	
362.5	362.5	373.5	373.5	0.6	0.6	89.99	0.0	30.8	30.8	29.5	1.22	25.203	CC
400.0	400.0	410.9	410.9	0.7	0.7	89.98	0.0	30.8	30.8	29.4	1.35	22.780	ES
500.0	500.0	509.8	509.8	0.8	0.9	89.17	0.5	32.8	32.8	31.1	1.70	19.298	
600.0	600.0	608.3	608.2	1.0	1.0	149.71	1.7	38.1	39.8	37.7	2.04	19.447	
700.0	699.8	705.9	705.3	1.2	1.3	150.45	3.7	46.7	53.0	50.6	2.39	22.156	
800.0	799.6	802.3	801.0	1.4	1.5	150.81	6.4	58.2	70.5	67.8	2.74	25.716	
900.0	899.4	900.0	897.6	1.6	1.8	150.71	9.5	72.0	90.1	87.0	3.10	29.117	
1,000.0	999.2	998.0	994.6	1.8	2.0	150.64	12.8	86.0	109.8	106.4	3.45	31.816	
1,100.0	1,099.0	1,096.1	1,091.6	2.0	2.3	150.60	16.0	99.9	129.5	125.7	3.81	34.003	
1,200.0	1,198.8	1,194.1	1,188.6	2.2	2.6	150.56	19.2	113.8	149.2	145.0	4.17	35.809	
1,300.0	1,298.6	1,292.2	1,285.6	2.4	2.9	150.53	22.4	127.7	168.8	164.3	4.52	37.325	
1,400.0	1,398.4	1,390.2	1,382.6	2.6	3.2	150.51	25.6	141.6	188.5	183.6	4.88	38.616	
1,500.0	1,498.2	1,488.3	1,479.6	2.8	3.5	150.49	28.8	155.5	208.2	202.9	5.24	39.728	
1,600.0	1,598.0	1,586.3	1,576.6	3.0	3.8	150.48	32.0	169.4	227.8	222.2	5.60	40.696	
1,700.0	1,697.8	1,684.4	1,673.6	3.2	4.1	150.47	35.3	183.3	247.5	241.6	5.96	41.546	
1,800.0	1,797.6	1,782.4	1,770.6	3.4	4.4	150.46	38.5	197.3	267.2	260.9	6.32	42.298	
1,900.0	1,897.4	1,880.5	1,867.6	3.6	4.7	150.45	41.7	211.2	286.9	280.2	6.68	42.968	
2,000.0	1,997.2	1,978.5	1,964.6	3.8	5.0	150.44	44.9	225.1	306.5	299.5	7.04	43.569	
2,100.0	2,097.0	2,076.5	2,061.6	4.0	5.3	150.43	48.1	239.0	326.2	318.8	7.40	44.110	
2,200.0	2,196.8	2,174.6	2,158.6	4.2	5.6	150.43	51.3	252.9	345.9	338.1	7.75	44.601	
2,300.0	2,296.6	2,272.6	2,255.6	4.4	5.9	150.42	54.6	266.8	365.5	357.4	8.11	45.048	
2,400.0	2,396.4	2,370.7	2,352.6	4.6	6.2	150.42	57.8	280.7	385.2	376.7	8.47	45.457	
2,500.0	2,496.2	2,468.7	2,449.6	4.9	6.5	150.41	61.0	294.6	404.9	396.1	8.83	45.832	
2,600.0	2,596.0	2,566.8	2,546.7	5.1	6.8	150.41	64.2	308.5	424.6	415.4	9.19	46.178	
2,700.0	2,695.8	2,664.8	2,643.7	5.3	7.1	150.41	67.4	322.5	444.2	434.7	9.55	46.497	
2,800.0	2,795.6	2,762.9	2,740.7	5.5	7.4	150.40	70.6	336.4	463.9	454.0	9.91	46.793	
2,900.0	2,895.4	2,860.9	2,837.7	5.7	7.7	150.40	73.8	350.3	483.6	473.3	10.27	47.068	
3,000.0	2,995.2	2,959.0	2,934.7	5.9	8.0	150.40	77.1	364.2	503.3	492.6	10.63	47.324	
3,100.0	3,095.0	3,057.0	3,031.7	6.1	8.3	150.39	80.3	378.1	522.9	511.9	10.99	47.563	
3,200.0	3,194.8	3,155.1	3,128.7	6.3	8.6	150.39	83.5	392.0	542.6	531.2	11.35	47.787	
3,300.0	3,294.6	3,253.1	3,225.7	6.5	8.9	150.39	86.7	405.9	562.3	550.6	11.71	47.997	
3,400.0	3,394.4	3,351.1	3,322.7	6.7	9.2	150.39	89.9	419.8	581.9	569.9	12.07	48.195	
3,500.0	3,494.2	3,449.2	3,419.7	6.9	9.5	150.39	93.1	433.8	601.6	589.2	12.44	48.381	
3,600.0	3,594.0	3,547.2	3,516.7	7.1	9.8	150.38	96.3	447.7	621.3	608.5	12.80	48.556	
3,700.0	3,693.8	3,645.3	3,613.7	7.3	10.1	150.38	99.6	461.6	641.0	627.8	13.16	48.722	
3,800.0	3,793.6	3,743.3	3,710.7	7.5	10.4	150.38	102.8	475.5	660.6	647.1	13.52	48.879	
3,900.0	3,893.4	3,841.4	3,807.7	7.7	10.7	150.38	106.0	489.4	680.3	666.4	13.88	49.027	
4,000.0	3,993.2	3,939.4	3,904.7	7.9	11.0	150.38	109.2	503.3	700.0	685.7	14.24	49.168	
4,100.0	4,093.0	4,037.5	4,001.7	8.2	11.3	150.38	112.4	517.2	719.6	705.0	14.60	49.302	
4,200.0	4,192.8	4,135.5	4,098.7	8.4	11.6	150.38	115.6	531.1	739.3	724.4	14.96	49.430	
4,300.0	4,292.6	4,233.6	4,195.7	8.6	12.0	150.37	118.8	545.0	759.0	743.7	15.32	49.551	
4,400.0	4,392.4	4,331.6	4,292.7	8.8	12.3	150.37	122.1	559.0	778.7	763.0	15.68	49.667	
4,500.0	4,492.2	4,429.6	4,389.7	9.0	12.6	150.37	125.3	572.9	798.3	782.3	16.04	49.778	
4,600.0	4,592.0	4,527.7	4,486.7	9.2	12.9	150.37	128.5	586.8	818.0	801.6	16.40	49.884	
4,700.0	4,691.8	4,625.7	4,583.7	9.4	13.2	150.37	131.7	600.7	837.7	820.9	16.76	49.985	
4,800.0	4,791.6	4,723.8	4,680.7	9.6	13.5	150.37	134.9	614.6	857.4	840.2	17.12	50.082	
4,900.0	4,891.4	4,821.8	4,777.7	9.8	13.8	150.37	138.1	628.5	877.0	859.5	17.48	50.175	
5,000.0	4,991.2	4,919.9	4,874.7	10.0	14.1	150.37	141.3	642.4	896.7	878.9	17.84	50.264	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Elmquist 2G-14H-C268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-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	5,090.9	5,017.9	4,971.7	10.2	14.4	150.37	144.6	656.3	916.4	898.2	18.20	50.349	
5,200.0	5,190.7	5,116.0	5,068.7	10.4	14.7	150.37	147.8	670.3	936.0	917.5	18.56	50.432	
5,300.0	5,290.5	5,214.0	5,165.7	10.6	15.0	150.36	151.0	684.2	955.7	936.8	18.92	50.511	
5,400.0	5,390.3	5,312.1	5,262.7	10.8	15.3	150.36	154.2	698.1	975.4	956.1	19.28	50.587	
5,500.0	5,490.1	5,410.1	5,359.7	11.0	15.6	150.36	157.4	712.0	995.1	975.4	19.64	50.660	
5,600.0	5,589.9	5,508.2	5,456.7	11.3	15.9	150.36	160.6	725.9	1,014.7	994.7	20.00	50.731	
5,700.0	5,689.7	5,606.2	5,553.7	11.5	16.2	150.36	163.8	739.8	1,034.4	1,014.0	20.36	50.799	
5,800.0	5,789.5	5,704.2	5,650.7	11.7	16.5	150.36	167.1	753.7	1,054.1	1,033.4	20.72	50.865	
5,900.0	5,889.3	5,802.3	5,747.7	11.9	16.8	150.36	170.3	767.6	1,073.7	1,052.7	21.08	50.928	
6,000.0	5,989.1	5,900.3	5,844.7	12.1	17.1	150.36	173.5	781.6	1,093.4	1,072.0	21.44	50.990	
6,100.0	6,088.9	5,998.4	5,941.7	12.3	17.4	150.36	176.7	795.5	1,113.1	1,091.3	21.80	51.049	
6,200.0	6,188.7	6,096.4	6,038.7	12.5	17.7	150.36	179.9	809.4	1,132.8	1,110.6	22.16	51.106	
6,300.0	6,288.5	6,194.5	6,135.7	12.7	18.0	150.36	183.1	823.3	1,152.4	1,129.9	22.53	51.162	
6,400.0	6,388.3	6,292.5	6,232.7	12.9	18.3	150.36	186.3	837.2	1,172.1	1,149.2	22.89	51.216	
6,500.0	6,488.1	6,390.6	6,329.7	13.1	18.6	150.36	189.6	851.1	1,191.8	1,168.5	23.25	51.268	
6,600.0	6,587.9	6,488.6	6,426.7	13.3	18.9	150.36	192.8	865.0	1,211.5	1,187.8	23.61	51.318	
6,700.0	6,687.7	6,586.7	6,523.7	13.5	19.2	150.36	196.0	878.9	1,231.1	1,207.2	23.97	51.367	
6,800.0	6,787.5	6,684.8	6,620.8	13.7	19.5	150.36	199.2	892.9	1,250.8	1,226.5	24.33	51.417	
6,900.0	6,887.3	6,783.6	6,718.3	13.9	19.8	-123.24	192.8	906.8	1,270.5	1,245.8	24.67	51.507	
9,400.0	7,410.0	9,248.0	7,200.0	39.7	42.6	-79.97	-2,024.7	975.9	1,273.1	1,194.9	78.21	16.278	
9,500.0	7,410.0	9,347.6	7,200.0	41.3	44.1	-79.90	-2,124.3	975.9	1,264.5	1,183.0	81.47	15.521	
9,600.0	7,410.0	9,447.2	7,200.0	43.0	45.7	-79.83	-2,223.9	975.9	1,255.9	1,171.2	84.74	14.821	
9,700.0	7,410.0	9,546.9	7,200.0	44.6	47.2	-79.76	-2,323.5	975.9	1,247.3	1,159.3	88.02	14.171	
9,800.0	7,410.0	9,646.5	7,200.0	46.3	48.8	-79.68	-2,423.1	975.9	1,238.8	1,147.4	91.31	13.566	
9,900.0	7,410.0	9,746.1	7,200.0	47.9	50.4	-79.61	-2,522.8	975.9	1,230.2	1,135.6	94.61	13.002	
10,000.0	7,410.0	9,845.7	7,200.0	49.6	52.0	-79.54	-2,622.4	975.9	1,221.6	1,123.7	97.92	12.476	
10,100.0	7,410.0	9,945.3	7,200.0	51.3	53.6	-79.46	-2,722.0	975.9	1,213.0	1,111.8	101.23	11.983	
10,200.0	7,410.0	10,044.9	7,200.0	53.0	55.2	-79.39	-2,821.6	975.9	1,204.5	1,099.9	104.55	11.521	
10,300.0	7,410.0	10,144.6	7,200.0	54.7	56.8	-79.32	-2,921.3	975.9	1,196.2	1,088.4	107.82	11.095	
10,400.0	7,410.0	10,244.4	7,200.0	56.4	58.5	-79.29	-3,021.1	975.9	1,190.2	1,079.2	111.00	10.723	
10,500.0	7,410.0	10,344.3	7,200.0	58.1	60.1	-79.27	-3,121.0	975.9	1,186.8	1,072.6	114.12	10.399	
10,583.9	7,410.0	10,428.2	7,200.0	59.5	61.5	-79.26	-3,204.9	975.9	1,185.9	1,069.2	116.70	10.162	
10,600.0	7,410.0	10,444.3	7,200.0	59.8	61.7	-79.26	-3,221.0	975.9	1,185.9	1,068.7	117.19	10.119	
10,700.0	7,410.0	10,544.3	7,200.0	61.5	63.4	-79.27	-3,321.0	975.9	1,187.4	1,067.1	120.34	9.867	
10,800.0	7,410.0	10,644.3	7,200.0	63.2	65.1	-79.29	-3,421.0	975.9	1,189.5	1,065.8	123.72	9.615	
10,900.0	7,410.0	10,744.3	7,200.0	64.9	66.7	-79.31	-3,520.9	975.9	1,191.5	1,064.4	127.10	9.375	
11,000.0	7,410.0	10,844.3	7,200.0	66.6	68.4	-79.33	-3,620.9	975.9	1,193.6	1,063.1	130.49	9.147	
11,100.0	7,410.0	10,944.2	7,200.0	68.4	70.1	-79.35	-3,720.9	975.9	1,195.7	1,061.8	133.88	8.931	
11,200.0	7,410.0	11,044.2	7,200.0	70.1	71.7	-79.36	-3,820.9	975.9	1,197.8	1,060.6	137.18	8.732	
11,300.0	7,410.0	11,144.2	7,200.0	71.8	73.4	-79.39	-3,920.8	975.9	1,201.0	1,060.6	140.47	8.550	
11,400.0	7,410.0	11,244.1	7,200.0	73.5	75.1	-79.42	-4,020.8	975.9	1,204.4	1,060.5	143.88	8.371	
11,500.0	7,410.0	11,344.0	7,200.0	75.3	76.8	-79.45	-4,120.7	975.9	1,207.7	1,060.4	147.29	8.199	
11,600.0	7,410.0	11,444.0	7,200.0	77.0	78.5	-79.48	-4,220.6	975.9	1,211.0	1,060.3	150.70	8.036	
11,700.0	7,410.0	11,543.9	7,200.0	78.7	80.2	-79.51	-4,320.6	975.9	1,214.4	1,060.2	154.12	7.879	
11,800.0	7,410.0	11,643.9	7,200.0	80.5	81.9	-79.54	-4,420.5	975.9	1,217.7	1,060.2	157.53	7.730	
11,900.0	7,410.0	11,743.8	7,200.0	82.2	83.6	-79.57	-4,520.5	975.9	1,221.0	1,060.1	160.95	7.586	
12,000.0	7,410.0	11,843.8	7,200.0	83.9	85.3	-79.60	-4,620.4	975.9	1,224.4	1,060.0	164.38	7.449	
12,100.0	7,410.0	11,943.7	7,200.0	85.7	87.0	-79.62	-4,720.4	975.9	1,227.7	1,059.9	167.80	7.316	
12,200.0	7,410.0	12,043.6	7,200.0	87.4	88.7	-79.65	-4,820.3	975.9	1,231.0	1,059.8	171.23	7.189	
12,300.0	7,410.0	12,143.6	7,200.0	89.1	90.4	-79.68	-4,920.2	975.9	1,234.4	1,059.7	174.66	7.067	
12,400.0	7,410.0	12,243.5	7,200.0	90.9	92.1	-79.71	-5,020.2	975.9	1,237.7	1,059.6	178.09	6.950	
12,500.0	7,410.0	12,343.5	7,200.0	92.6	93.8	-79.74	-5,120.1	975.9	1,241.0	1,059.5	181.52	6.837	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Elmquist 2G-14H-C268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-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
12,600.0	7,410.0	12,443.4	7,200.0	94.3	95.5	-79.76	-5,220.1	975.9	1,244.4	1,059.4	184.95	6.728	
12,700.0	7,410.0	12,543.3	7,200.0	96.1	97.2	-79.79	-5,320.0	975.9	1,247.7	1,059.3	188.39	6.623	
12,800.0	7,410.0	12,643.3	7,200.0	97.8	98.9	-79.82	-5,420.0	975.9	1,251.1	1,059.2	191.83	6.522	
12,900.0	7,410.0	12,743.2	7,200.0	99.6	100.6	-79.85	-5,519.9	975.9	1,254.4	1,059.1	195.27	6.424	
13,000.0	7,410.0	12,843.2	7,200.0	101.3	102.4	-79.87	-5,619.8	975.9	1,257.7	1,059.0	198.71	6.330	
13,100.0	7,410.0	12,943.1	7,200.0	103.0	104.1	-79.90	-5,719.8	975.9	1,261.1	1,058.9	202.15	6.238	
13,200.0	7,410.0	13,043.1	7,200.0	104.8	105.8	-79.93	-5,819.7	975.9	1,264.4	1,058.8	205.59	6.150	
13,300.0	7,410.0	13,143.0	7,200.0	106.5	107.5	-79.95	-5,919.7	975.9	1,267.8	1,058.7	209.04	6.065	
13,400.0	7,410.0	13,242.9	7,200.0	108.3	109.2	-79.98	-6,019.6	975.9	1,271.1	1,058.6	212.48	5.982	
13,500.0	7,410.0	13,342.9	7,200.0	110.0	111.0	-80.01	-6,119.5	975.9	1,274.4	1,058.5	215.93	5.902	
13,600.0	7,410.0	13,442.8	7,200.0	111.8	112.7	-80.03	-6,219.5	975.9	1,277.8	1,058.4	219.38	5.825	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Salisbury 2A-14H-C268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-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	-177.98	-553.7	-19.6	554.1				
100.0	100.0	100.0	100.0	0.2	0.2	-177.98	-553.7	-19.6	554.1	553.7	0.30	1,824.416	
200.0	200.0	200.0	200.0	0.3	0.3	-177.98	-553.7	-19.6	554.1	553.4	0.65	848.793	CC
300.0	300.0	298.2	298.1	0.5	0.5	-177.80	-553.8	-21.2	554.2	553.2	1.00	554.665	ES
400.0	400.0	396.1	395.9	0.7	0.7	-177.29	-554.1	-26.3	554.7	553.4	1.35	411.623	
500.0	500.0	493.6	493.1	0.8	0.9	-176.43	-554.6	-34.6	555.7	554.0	1.70	327.040	
600.0	600.0	590.5	589.3	1.0	1.2	-114.33	-555.3	-46.1	558.0	555.8	2.19	254.733	
700.0	699.8	687.1	684.7	1.2	1.5	-113.24	-556.2	-60.8	562.4	559.7	2.67	210.526	
800.0	799.6	782.9	778.9	1.4	1.8	-112.02	-557.2	-78.6	568.0	564.8	3.20	177.295	
900.0	899.4	878.0	871.7	1.6	2.2	-110.53	-558.5	-99.3	574.5	570.8	3.77	152.198	
1,000.0	999.2	976.3	967.3	1.8	2.6	-108.88	-559.8	-122.1	581.9	577.5	4.37	132.998	
1,100.0	1,099.0	1,074.6	1,062.9	2.0	3.1	-107.27	-561.2	-145.0	589.6	584.7	4.98	118.470	
1,200.0	1,198.8	1,172.9	1,158.5	2.2	3.5	-105.70	-562.6	-167.9	597.9	592.3	5.58	107.166	
1,300.0	1,298.6	1,271.2	1,254.1	2.4	3.9	-104.18	-563.9	-190.7	606.6	600.4	6.18	98.175	
1,400.0	1,398.4	1,369.5	1,349.7	2.6	4.4	-102.70	-565.3	-213.6	615.7	609.0	6.77	90.891	
1,500.0	1,498.2	1,467.8	1,445.3	2.8	4.8	-101.26	-566.6	-236.5	625.3	617.9	7.36	84.898	
1,600.0	1,598.0	1,566.1	1,540.9	3.0	5.2	-99.87	-568.0	-259.3	635.2	627.2	7.95	79.901	
1,700.0	1,697.8	1,664.4	1,636.4	3.2	5.7	-98.52	-569.4	-282.2	645.5	636.9	8.53	75.688	
1,800.0	1,797.6	1,762.7	1,732.0	3.4	6.1	-97.21	-570.7	-305.1	656.1	647.0	9.10	72.101	
1,900.0	1,897.4	1,861.0	1,827.6	3.6	6.6	-95.94	-572.1	-327.9	667.1	657.4	9.66	69.023	
2,000.0	1,997.2	1,959.3	1,923.2	3.8	7.0	-94.71	-573.5	-350.8	678.4	668.1	10.22	66.361	
2,100.0	2,097.0	2,057.6	2,018.8	4.0	7.4	-93.53	-574.8	-373.7	690.0	679.2	10.77	64.045	
2,200.0	2,196.8	2,155.9	2,114.4	4.2	7.9	-92.38	-576.2	-396.5	701.8	690.5	11.32	62.019	
2,300.0	2,296.6	2,254.2	2,210.0	4.4	8.3	-91.27	-577.6	-419.4	714.0	702.2	11.85	60.237	
2,400.0	2,396.4	2,352.5	2,305.6	4.6	8.8	-90.19	-578.9	-442.3	726.4	714.0	12.38	58.662	
2,500.0	2,496.2	2,450.8	2,401.2	4.9	9.2	-89.16	-580.3	-465.1	739.1	726.2	12.91	57.266	
2,600.0	2,596.0	2,549.1	2,496.8	5.1	9.7	-88.15	-581.7	-488.0	752.0	738.6	13.42	56.024	
2,700.0	2,695.8	2,647.4	2,592.4	5.3	10.1	-87.18	-583.0	-510.9	765.1	751.2	13.93	54.915	
2,800.0	2,795.6	2,745.7	2,688.0	5.5	10.5	-86.25	-584.4	-533.7	778.5	764.0	14.44	53.921	
2,900.0	2,895.4	2,844.0	2,783.6	5.7	11.0	-85.34	-585.7	-556.6	792.0	777.1	14.93	53.030	
3,000.0	2,995.2	2,942.3	2,879.2	5.9	11.4	-84.47	-587.1	-579.5	805.7	790.3	15.43	52.228	
3,100.0	3,095.0	3,040.6	2,974.8	6.1	11.9	-83.62	-588.5	-602.3	819.6	803.7	15.91	51.505	
3,200.0	3,194.8	3,138.9	3,070.4	6.3	12.3	-82.80	-589.8	-625.2	833.7	817.3	16.39	50.851	
3,300.0	3,294.6	3,237.2	3,166.0	6.5	12.8	-82.01	-591.2	-648.1	848.0	831.1	16.87	50.260	
3,400.0	3,394.4	3,335.5	3,261.6	6.7	13.2	-81.24	-592.6	-670.9	862.4	845.0	17.34	49.724	
3,500.0	3,494.2	3,433.8	3,357.2	6.9	13.7	-80.50	-593.9	-693.8	876.9	859.1	17.81	49.238	
3,600.0	3,594.0	3,532.1	3,452.7	7.1	14.1	-79.79	-595.3	-716.7	891.6	873.3	18.27	48.796	
3,700.0	3,693.8	3,630.4	3,548.3	7.3	14.5	-79.09	-596.7	-739.5	906.4	887.7	18.73	48.394	
3,800.0	3,793.6	3,728.7	3,643.9	7.5	15.0	-78.42	-598.0	-762.4	921.4	902.2	19.18	48.028	
3,900.0	3,893.4	3,827.0	3,739.5	7.7	15.4	-77.77	-599.4	-785.3	936.4	916.8	19.63	47.695	
4,000.0	3,993.2	3,925.3	3,835.1	7.9	15.9	-77.14	-600.8	-808.1	951.6	931.5	20.08	47.390	
4,100.0	4,093.0	4,023.6	3,930.7	8.2	16.3	-76.53	-602.1	-831.0	966.9	946.4	20.52	47.113	
4,200.0	4,192.8	4,121.9	4,026.3	8.4	16.8	-75.94	-603.5	-853.9	982.3	961.3	20.96	46.859	
4,300.0	4,292.6	4,220.2	4,121.9	8.6	17.2	-75.37	-604.8	-876.7	997.8	976.4	21.40	46.628	
4,400.0	4,392.4	4,318.5	4,217.5	8.8	17.7	-74.81	-606.2	-899.6	1,013.4	991.6	21.83	46.416	
4,500.0	4,492.2	4,416.8	4,313.1	9.0	18.1	-74.27	-607.6	-922.5	1,029.1	1,006.8	22.26	46.223	
4,600.0	4,592.0	4,515.1	4,408.7	9.2	18.5	-73.75	-608.9	-945.3	1,044.9	1,022.2	22.69	46.046	
4,700.0	4,691.8	4,613.4	4,504.3	9.4	19.0	-73.24	-610.3	-968.2	1,060.7	1,037.6	23.12	45.885	
4,800.0	4,791.6	4,711.7	4,599.9	9.6	19.4	-72.75	-611.7	-991.1	1,076.7	1,053.1	23.54	45.738	
4,900.0	4,891.4	4,810.0	4,695.5	9.8	19.9	-72.27	-613.0	-1,013.9	1,092.7	1,068.7	23.96	45.603	
5,000.0	4,991.2	4,908.3	4,791.1	10.0	20.3	-71.81	-614.4	-1,036.8	1,108.8	1,084.4	24.38	45.480	
5,100.0	5,090.9	5,006.6	4,886.7	10.2	20.8	-71.36	-615.8	-1,059.7	1,124.9	1,100.1	24.79	45.368	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Salisbury 2A-14H-C268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-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
5,200.0	5,190.7	5,104.9	4,982.3	10.4	21.2	-70.92	-617.1	-1,082.5	1,141.1	1,115.9	25.21	45.266	
5,300.0	5,290.5	5,203.2	5,077.9	10.6	21.7	-70.49	-618.5	-1,105.4	1,157.4	1,131.8	25.62	45.173	
5,400.0	5,390.3	5,301.5	5,173.5	10.8	22.1	-70.08	-619.9	-1,128.3	1,173.8	1,147.7	26.03	45.089	
5,500.0	5,490.1	5,399.8	5,269.0	11.0	22.5	-69.67	-621.2	-1,151.1	1,190.2	1,163.7	26.44	45.012	
5,600.0	5,589.9	5,498.2	5,364.6	11.3	23.0	-69.28	-622.6	-1,174.0	1,206.6	1,179.8	26.85	44.942	
5,700.0	5,689.7	5,596.5	5,460.2	11.5	23.4	-68.90	-623.9	-1,196.9	1,223.1	1,195.9	27.25	44.879	
5,800.0	5,789.5	5,694.8	5,555.8	11.7	23.9	-68.53	-625.3	-1,219.7	1,239.7	1,212.0	27.66	44.822	
5,900.0	5,889.3	5,793.1	5,651.4	11.9	24.3	-68.17	-626.7	-1,242.6	1,256.3	1,228.3	28.06	44.771	
6,000.0	5,989.1	5,891.4	5,747.0	12.1	24.8	-67.81	-628.0	-1,265.5	1,273.0	1,244.5	28.46	44.725	
7,600.0	7,390.4	7,636.3	7,352.9	15.5	32.3	86.17	-374.0	-1,645.7	1,267.9	1,240.2	27.63	45.881	
7,700.0	7,407.8	7,512.5	7,278.4	16.3	31.8	83.37	-471.2	-1,629.3	1,254.9	1,226.9	27.97	44.866	
7,800.0	7,410.0	7,417.7	7,208.7	17.2	31.5	80.64	-533.3	-1,613.5	1,243.3	1,214.6	28.68	43.345	
7,900.0	7,410.0	7,351.2	7,154.3	18.2	31.2	78.05	-569.4	-1,601.0	1,235.9	1,206.4	29.52	41.867	
7,942.5	7,410.0	7,329.1	7,135.4	18.6	31.2	77.15	-580.0	-1,596.6	1,235.1	1,205.2	29.90	41.313	
8,000.0	7,410.0	7,303.5	7,113.0	19.3	31.1	76.09	-591.2	-1,591.5	1,236.6	1,206.2	30.40	40.678	
8,100.0	7,410.0	7,268.0	7,081.2	20.4	30.9	74.54	-605.1	-1,584.0	1,246.5	1,215.1	31.36	39.743	
8,200.0	7,410.0	7,240.5	7,056.0	21.7	30.8	73.26	-614.5	-1,578.2	1,265.7	1,233.3	32.40	39.067	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Salisbury 2B-14H-C268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-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	-178.84	-553.7	-11.2	553.8				
100.0	100.0	100.0	100.0	0.2	0.2	-178.84	-553.7	-11.2	553.8	553.5	0.30	1,823.649	
200.0	200.0	200.0	200.0	0.3	0.3	-178.84	-553.7	-11.2	553.8	553.2	0.65	848.436	
300.0	300.0	300.0	300.0	0.5	0.5	-178.84	-553.7	-11.2	553.8	552.8	1.00	552.814	CC
400.0	400.0	398.0	398.0	0.7	0.7	-178.67	-553.8	-12.9	554.0	552.7	1.35	411.030	ES
500.0	500.0	495.8	495.6	0.8	0.9	-178.16	-554.3	-17.8	554.6	552.9	1.70	327.102	
600.0	600.0	593.2	592.7	1.0	1.1	-116.38	-554.9	-26.1	556.4	554.3	2.10	265.189	
700.0	699.8	690.4	689.2	1.2	1.3	-115.61	-555.9	-37.6	560.3	557.7	2.53	221.725	
800.0	799.6	787.0	784.7	1.4	1.6	-114.69	-557.1	-52.3	565.2	562.2	3.00	188.205	
900.0	899.4	885.1	881.2	1.6	1.9	-113.51	-558.6	-69.8	570.8	567.3	3.51	162.607	
1,000.0	999.2	984.2	978.6	1.8	2.3	-112.33	-560.1	-87.7	576.7	572.6	4.03	142.968	
1,100.0	1,099.0	1,083.3	1,076.1	2.0	2.6	-111.16	-561.5	-105.5	582.8	578.2	4.56	127.717	
1,200.0	1,198.8	1,182.4	1,173.6	2.2	3.0	-110.03	-563.0	-123.4	589.1	584.0	5.10	115.605	
1,300.0	1,298.6	1,281.5	1,271.1	2.4	3.3	-108.91	-564.5	-141.2	595.7	590.1	5.63	105.798	
1,400.0	1,398.4	1,380.6	1,368.5	2.6	3.7	-107.82	-566.0	-159.1	602.5	596.4	6.17	97.725	
1,500.0	1,498.2	1,479.7	1,466.0	2.8	4.0	-106.76	-567.5	-176.9	609.6	602.9	6.70	90.982	
1,600.0	1,598.0	1,578.8	1,563.5	3.0	4.4	-105.72	-569.0	-194.8	616.8	609.5	7.23	85.279	
1,700.0	1,697.8	1,678.0	1,661.0	3.2	4.7	-104.70	-570.4	-212.6	624.2	616.4	7.76	80.403	
1,800.0	1,797.6	1,777.1	1,758.5	3.4	5.1	-103.71	-571.9	-230.5	631.8	623.5	8.29	76.195	
1,900.0	1,897.4	1,876.2	1,855.9	3.6	5.4	-102.74	-573.4	-248.3	639.6	630.8	8.82	72.533	
2,000.0	1,997.2	1,975.3	1,953.4	3.8	5.8	-101.79	-574.9	-266.2	647.6	638.3	9.34	69.323	
2,100.0	2,097.0	2,074.4	2,050.9	4.0	6.2	-100.87	-576.4	-284.0	655.8	645.9	9.86	66.491	
2,200.0	2,196.8	2,173.5	2,148.4	4.2	6.5	-99.97	-577.9	-301.9	664.1	653.7	10.38	63.978	
2,300.0	2,296.6	2,272.6	2,245.8	4.4	6.9	-99.09	-579.3	-319.7	672.6	661.7	10.89	61.735	
2,400.0	2,396.4	2,371.7	2,343.3	4.6	7.2	-98.24	-580.8	-337.6	681.2	669.8	11.41	59.726	
2,500.0	2,496.2	2,470.8	2,440.8	4.9	7.6	-97.40	-582.3	-355.4	690.0	678.1	11.91	57.916	
2,600.0	2,596.0	2,569.9	2,538.3	5.1	8.0	-96.59	-583.8	-373.3	699.0	686.5	12.42	56.281	
2,700.0	2,695.8	2,669.1	2,635.8	5.3	8.3	-95.79	-585.3	-391.1	708.0	695.1	12.92	54.799	
2,800.0	2,795.6	2,768.2	2,733.2	5.5	8.7	-95.02	-586.8	-409.0	717.2	703.8	13.42	53.450	
2,900.0	2,895.4	2,867.3	2,830.7	5.7	9.0	-94.27	-588.2	-426.8	726.6	712.6	13.91	52.218	
3,000.0	2,995.2	2,966.4	2,928.2	5.9	9.4	-93.53	-589.7	-444.7	736.0	721.6	14.41	51.091	
3,100.0	3,095.0	3,065.5	3,025.7	6.1	9.8	-92.82	-591.2	-462.5	745.6	730.7	14.89	50.057	
3,200.0	3,194.8	3,164.6	3,123.1	6.3	10.1	-92.12	-592.7	-480.4	755.3	739.9	15.38	49.106	
3,300.0	3,294.6	3,263.7	3,220.6	6.5	10.5	-91.44	-594.2	-498.2	765.1	749.2	15.86	48.230	
3,400.0	3,394.4	3,362.8	3,318.1	6.7	10.8	-90.78	-595.7	-516.1	775.0	758.6	16.34	47.420	
3,500.0	3,494.2	3,461.9	3,415.6	6.9	11.2	-90.13	-597.1	-533.9	785.0	768.1	16.82	46.670	
3,600.0	3,594.0	3,561.0	3,513.1	7.1	11.6	-89.50	-598.6	-551.8	795.1	777.8	17.29	45.975	
3,700.0	3,693.8	3,660.2	3,610.5	7.3	11.9	-88.88	-600.1	-569.6	805.2	787.5	17.76	45.330	
3,800.0	3,793.6	3,759.3	3,708.0	7.5	12.3	-88.29	-601.6	-587.5	815.5	797.3	18.23	44.729	
3,900.0	3,893.4	3,858.4	3,805.5	7.7	12.6	-87.70	-603.1	-605.3	825.9	807.2	18.70	44.169	
4,000.0	3,993.2	3,957.5	3,903.0	7.9	13.0	-87.13	-604.6	-623.2	836.3	817.2	19.16	43.647	
4,100.0	4,093.0	4,056.6	4,000.4	8.2	13.4	-86.58	-606.0	-641.0	846.9	827.2	19.62	43.159	
4,200.0	4,192.8	4,155.7	4,097.9	8.4	13.7	-86.03	-607.5	-658.9	857.5	837.4	20.08	42.702	
4,300.0	4,292.6	4,254.8	4,195.4	8.6	14.1	-85.50	-609.0	-676.7	868.2	847.6	20.54	42.275	
4,400.0	4,392.4	4,353.9	4,292.9	8.8	14.5	-84.99	-610.5	-694.6	878.9	857.9	20.99	41.873	
4,500.0	4,492.2	4,453.0	4,390.4	9.0	14.8	-84.48	-612.0	-712.4	889.7	868.3	21.44	41.497	
4,600.0	4,592.0	4,552.1	4,487.8	9.2	15.2	-83.99	-613.5	-730.3	900.6	878.7	21.89	41.142	
4,700.0	4,691.8	4,651.3	4,585.3	9.4	15.5	-83.51	-614.9	-748.1	911.6	889.2	22.34	40.809	
4,800.0	4,791.6	4,750.4	4,682.8	9.6	15.9	-83.04	-616.4	-766.0	922.6	899.8	22.78	40.495	
4,900.0	4,891.4	4,849.5	4,780.3	9.8	16.3	-82.59	-617.9	-783.8	933.7	910.4	23.23	40.199	
5,000.0	4,991.2	4,948.6	4,877.8	10.0	16.6	-82.14	-619.4	-801.7	944.8	921.1	23.67	39.920	
5,100.0	5,090.9	5,047.7	4,975.2	10.2	17.0	-81.70	-620.9	-819.5	956.0	931.9	24.11	39.657	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Salisbury 2B-14H-C268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-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
5,200.0	5,190.7	5,146.8	5,072.7	10.4	17.3	-81.28	-622.4	-837.4	967.2	942.7	24.54	39.407	
5,300.0	5,290.5	5,245.9	5,170.2	10.6	17.7	-80.86	-623.8	-855.2	978.5	953.5	24.98	39.172	
5,400.0	5,390.3	5,345.0	5,267.7	10.8	18.1	-80.45	-625.3	-873.1	989.9	964.5	25.41	38.948	
5,500.0	5,490.1	5,444.1	5,365.1	11.0	18.4	-80.06	-626.8	-890.9	1,001.3	975.4	25.85	38.737	
5,600.0	5,589.9	5,543.2	5,462.6	11.3	18.8	-79.67	-628.3	-908.8	1,012.7	986.4	26.28	38.536	
5,700.0	5,689.7	5,642.4	5,560.1	11.5	19.1	-79.29	-629.8	-926.6	1,024.2	997.5	26.71	38.346	
5,800.0	5,789.5	5,741.5	5,657.6	11.7	19.5	-78.91	-631.3	-944.5	1,035.7	1,008.6	27.14	38.166	
5,900.0	5,889.3	5,840.6	5,755.1	11.9	19.9	-78.55	-632.7	-962.3	1,047.3	1,019.7	27.56	37.994	
6,000.0	5,989.1	5,939.7	5,852.5	12.1	20.2	-78.20	-634.2	-980.2	1,058.9	1,030.9	27.99	37.831	
6,100.0	6,088.9	6,038.8	5,950.0	12.3	20.6	-77.85	-635.7	-998.0	1,070.6	1,042.1	28.41	37.676	
6,200.0	6,188.7	6,137.9	6,047.5	12.5	21.0	-77.51	-637.2	-1,015.9	1,082.2	1,053.4	28.84	37.529	
6,300.0	6,288.5	6,237.0	6,145.0	12.7	21.3	-77.17	-638.7	-1,033.7	1,094.0	1,064.7	29.26	37.388	
6,400.0	6,388.3	6,336.1	6,242.4	12.9	21.7	-76.85	-640.2	-1,051.6	1,105.7	1,076.1	29.68	37.254	
6,500.0	6,488.1	6,435.2	6,339.9	13.1	22.0	-76.53	-641.6	-1,069.4	1,117.5	1,087.4	30.10	37.127	
6,600.0	6,587.9	7,926.7	7,231.0	13.3	28.9	-30.32	184.9	-1,232.6	1,104.9	1,073.4	31.54	35.034	
6,700.0	6,687.7	7,929.7	7,231.0	13.5	29.0	-30.12	187.9	-1,232.6	1,045.2	1,013.5	31.70	32.968	
6,800.0	6,787.5	7,932.8	7,231.0	13.7	29.0	-29.91	191.0	-1,232.6	992.0	960.2	31.87	31.128	
6,900.0	6,887.3	7,932.0	7,231.0	13.9	29.0	58.12	190.2	-1,232.6	946.4	915.3	31.08	30.454	
7,000.0	6,985.5	7,914.9	7,231.0	14.0	28.8	81.76	173.1	-1,232.6	909.7	879.5	30.18	30.140	
7,100.0	7,079.2	7,880.9	7,231.0	14.1	28.6	87.11	139.1	-1,232.6	883.2	853.5	29.73	29.706	
7,200.0	7,165.6	7,831.1	7,231.0	14.2	28.1	87.91	89.3	-1,232.6	866.8	837.2	29.56	29.321	
7,300.0	7,242.1	7,767.1	7,231.0	14.3	27.7	86.49	25.3	-1,232.6	859.0	829.5	29.47	29.150	SF
7,388.3	7,299.4	7,700.2	7,231.0	14.5	27.2	84.33	-41.6	-1,232.6	857.3	828.0	29.29	29.272	
7,400.0	7,306.2	7,690.7	7,231.0	14.6	27.1	84.01	-51.1	-1,232.6	857.3	828.0	29.24	29.315	
7,500.0	7,356.2	7,601.1	7,227.1	15.0	26.5	81.03	-140.5	-1,231.9	858.7	829.9	28.84	29.779	
7,600.0	7,390.4	7,515.5	7,211.1	15.5	26.1	78.03	-224.5	-1,229.0	861.3	832.9	28.48	30.247	
7,700.0	7,407.8	7,435.4	7,185.1	16.3	25.6	75.19	-300.0	-1,224.2	864.7	836.4	28.32	30.531	
7,800.0	7,410.0	7,360.4	7,151.6	17.2	25.3	72.67	-366.8	-1,218.1	868.7	840.1	28.56	30.418	
7,900.0	7,410.0	7,300.0	7,118.6	18.2	25.0	70.44	-417.0	-1,212.0	877.0	847.9	29.12	30.113	
8,000.0	7,410.0	7,238.9	7,080.1	19.3	24.8	67.83	-463.8	-1,205.0	893.2	863.5	29.71	30.064	
8,100.0	7,410.0	7,200.0	7,053.1	20.4	24.7	65.94	-491.4	-1,200.0	918.2	887.8	30.46	30.142	
8,200.0	7,410.0	7,150.0	7,015.8	21.7	24.5	63.37	-524.0	-1,193.2	952.1	921.0	31.07	30.643	
8,300.0	7,410.0	7,116.2	6,989.0	23.0	24.4	61.58	-544.1	-1,188.3	994.4	962.5	31.85	31.222	
8,400.0	7,410.0	7,086.5	6,964.7	24.3	24.3	60.11	-560.4	-1,183.8	1,043.0	1,010.3	32.72	31.883	
8,500.0	7,410.0	7,050.0	6,933.6	25.7	24.2	58.28	-578.6	-1,178.1	1,097.4	1,064.0	33.48	32.777	
8,600.0	7,410.0	7,050.0	6,933.6	27.2	24.2	58.28	-578.6	-1,178.1	1,156.8	1,122.0	34.76	33.283	
8,700.0	7,410.0	7,019.5	6,906.7	28.7	24.1	56.74	-592.3	-1,173.2	1,220.5	1,185.0	35.58	34.303	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Salisbury 2C-14H-C268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-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	-180.00	-553.7	0.0	553.7				
100.0	100.0	100.0	100.0	0.2	0.2	-180.00	-553.7	0.0	553.7	553.4	0.30	1,823.277	
200.0	200.0	200.0	200.0	0.3	0.3	-180.00	-553.7	0.0	553.7	553.1	0.65	848.263	
300.0	300.0	300.0	300.0	0.5	0.5	-180.00	-553.7	0.0	553.7	552.7	1.00	552.701	
400.0	400.0	400.0	400.0	0.7	0.7	-180.00	-553.7	0.0	553.7	552.4	1.35	409.884	
500.0	500.0	497.7	497.7	0.8	0.8	-179.83	-553.9	-1.7	553.9	552.2	1.70	326.559	
600.0	600.0	595.2	595.1	1.0	1.0	-118.40	-554.5	-6.6	555.4	553.3	2.06	269.984	
700.0	699.8	692.6	692.0	1.2	1.2	-117.96	-555.5	-14.8	559.0	556.5	2.44	228.639	
800.0	799.6	790.5	789.4	1.4	1.5	-117.37	-556.9	-26.2	563.6	560.7	2.86	196.874	
900.0	899.4	890.2	888.3	1.6	1.7	-116.70	-558.4	-38.4	568.4	565.1	3.30	172.192	
1,000.0	999.2	989.9	987.2	1.8	2.0	-116.05	-559.9	-50.7	573.2	569.5	3.75	152.935	
1,100.0	1,099.0	1,089.6	1,086.1	2.0	2.2	-115.41	-561.3	-62.9	578.2	574.0	4.20	137.595	
1,200.0	1,198.8	1,189.2	1,185.0	2.2	2.5	-114.77	-562.8	-75.1	583.2	578.5	4.66	125.145	
1,300.0	1,298.6	1,288.9	1,283.9	2.4	2.8	-114.15	-564.3	-87.4	588.3	583.2	5.12	114.870	
1,400.0	1,398.4	1,388.6	1,382.8	2.6	3.0	-113.54	-565.8	-99.6	593.4	587.8	5.58	106.265	
1,500.0	1,498.2	1,488.2	1,481.7	2.8	3.3	-112.94	-567.3	-111.9	598.6	592.6	6.05	98.965	
1,600.0	1,598.0	1,587.9	1,580.6	3.0	3.6	-112.35	-568.8	-124.1	603.9	597.4	6.51	92.702	
1,700.0	1,697.8	1,687.6	1,679.5	3.2	3.9	-111.77	-570.3	-136.4	609.3	602.3	6.98	87.276	
1,800.0	1,797.6	1,787.2	1,778.4	3.4	4.1	-111.20	-571.8	-148.6	614.7	607.2	7.45	82.533	
1,900.0	1,897.4	1,886.9	1,877.3	3.6	4.4	-110.64	-573.2	-160.8	620.1	612.2	7.91	78.355	
2,000.0	1,997.2	1,986.6	1,976.2	3.8	4.7	-110.09	-574.7	-173.1	625.6	617.3	8.38	74.650	
2,100.0	2,097.0	2,086.2	2,075.1	4.0	5.0	-109.55	-576.2	-185.3	631.2	622.4	8.85	71.342	
2,200.0	2,196.8	2,185.9	2,174.0	4.2	5.2	-109.02	-577.7	-197.6	636.9	627.5	9.31	68.374	
2,300.0	2,296.6	2,285.6	2,272.9	4.4	5.5	-108.50	-579.2	-209.8	642.5	632.8	9.78	65.697	
2,400.0	2,396.4	2,385.2	2,371.8	4.6	5.8	-107.98	-580.7	-222.0	648.3	638.0	10.25	63.271	
2,500.0	2,496.2	2,484.9	2,470.7	4.9	6.1	-107.48	-582.2	-234.3	654.1	643.4	10.71	61.063	
2,600.0	2,596.0	2,584.6	2,569.6	5.1	6.3	-106.98	-583.7	-246.5	659.9	648.7	11.18	59.046	
2,700.0	2,695.8	2,684.2	2,668.5	5.3	6.6	-106.50	-585.1	-258.8	665.8	654.2	11.64	57.197	
2,800.0	2,795.6	2,783.9	2,767.4	5.5	6.9	-106.02	-586.6	-271.0	671.7	659.6	12.10	55.497	
2,900.0	2,895.4	2,883.6	2,866.3	5.7	7.2	-105.55	-588.1	-283.3	677.7	665.2	12.57	53.928	
3,000.0	2,995.2	2,983.2	2,965.2	5.9	7.4	-105.09	-589.6	-295.5	683.8	670.7	13.03	52.477	
3,100.0	3,095.0	3,082.9	3,064.1	6.1	7.7	-104.64	-591.1	-307.7	689.8	676.3	13.49	51.131	
3,200.0	3,194.8	3,182.6	3,163.0	6.3	8.0	-104.19	-592.6	-320.0	695.9	682.0	13.95	49.880	
3,300.0	3,294.6	3,282.2	3,261.9	6.5	8.3	-103.76	-594.1	-332.2	702.1	687.7	14.41	48.714	
3,400.0	3,394.4	3,381.9	3,360.8	6.7	8.5	-103.33	-595.6	-344.5	708.3	693.4	14.87	47.625	
3,500.0	3,494.2	3,481.6	3,459.7	6.9	8.8	-102.90	-597.0	-356.7	714.5	699.2	15.33	46.607	
3,600.0	3,594.0	3,581.3	3,558.6	7.1	9.1	-102.49	-598.5	-369.0	720.8	705.0	15.79	45.652	
3,700.0	3,693.8	3,680.9	3,657.5	7.3	9.4	-102.08	-600.0	-381.2	727.1	710.8	16.25	44.755	
3,800.0	3,793.6	3,780.6	3,756.4	7.5	9.7	-101.68	-601.5	-393.4	733.4	716.7	16.70	43.912	
3,900.0	3,893.4	3,880.3	3,855.3	7.7	9.9	-101.29	-603.0	-405.7	739.8	722.7	17.16	43.117	
4,000.0	3,993.2	3,979.9	3,954.2	7.9	10.2	-100.90	-604.5	-417.9	746.2	728.6	17.61	42.368	
4,100.0	4,093.0	4,079.6	4,053.1	8.2	10.5	-100.52	-606.0	-430.2	752.7	734.6	18.07	41.659	
4,200.0	4,192.8	4,179.3	4,152.0	8.4	10.8	-100.15	-607.5	-442.4	759.2	740.6	18.52	40.989	
4,300.0	4,292.6	4,278.9	4,250.9	8.6	11.0	-99.78	-608.9	-454.7	765.7	746.7	18.97	40.355	
4,400.0	4,392.4	4,378.6	4,349.8	8.8	11.3	-99.42	-610.4	-466.9	772.2	752.8	19.43	39.753	
4,500.0	4,492.2	4,478.3	4,448.7	9.0	11.6	-99.06	-611.9	-479.1	778.8	758.9	19.88	39.181	
4,600.0	4,592.0	4,577.9	4,547.6	9.2	11.9	-98.71	-613.4	-491.4	785.4	765.0	20.33	38.638	
4,700.0	4,691.8	4,677.6	4,646.6	9.4	12.2	-98.37	-614.9	-503.6	792.0	771.2	20.78	38.120	
4,800.0	4,791.6	4,777.3	4,745.5	9.6	12.4	-98.03	-616.4	-515.9	798.7	777.4	21.23	37.628	
4,900.0	4,891.4	4,876.9	4,844.4	9.8	12.7	-97.70	-617.9	-528.1	805.3	783.7	21.67	37.158	
5,000.0	4,991.2	4,976.6	4,943.3	10.0	13.0	-97.37	-619.3	-540.3	812.1	789.9	22.12	36.710	
5,100.0	5,090.9	5,076.3	5,042.2	10.2	13.3	-97.05	-620.8	-552.6	818.8	796.2	22.57	36.282	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Salisbury 2C-14H-C268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-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
5,200.0	5,190.7	5,175.9	5,141.1	10.4	13.5	-96.73	-622.3	-564.8	825.6	802.5	23.01	35.872	
5,300.0	5,290.5	5,275.6	5,240.0	10.6	13.8	-96.42	-623.8	-577.1	832.3	808.9	23.46	35.481	
5,400.0	5,390.3	5,375.3	5,338.9	10.8	14.1	-96.12	-625.3	-589.3	839.2	815.3	23.90	35.106	
5,500.0	5,490.1	5,474.9	5,437.8	11.0	14.4	-95.81	-626.8	-601.6	846.0	821.6	24.35	34.746	
5,600.0	5,589.9	5,574.6	5,536.7	11.3	14.6	-95.52	-628.3	-613.8	852.9	828.1	24.79	34.402	
5,700.0	5,689.7	5,674.3	5,635.6	11.5	14.9	-95.23	-629.8	-626.0	859.7	834.5	25.23	34.071	
5,800.0	5,789.5	5,774.0	5,734.5	11.7	15.2	-94.94	-631.2	-638.3	866.6	841.0	25.68	33.753	
5,900.0	5,889.3	5,873.6	5,833.4	11.9	15.5	-94.66	-632.7	-650.5	873.6	847.4	26.12	33.448	
6,000.0	5,989.1	5,973.3	5,932.3	12.1	15.8	-94.38	-634.2	-662.8	880.5	853.9	26.56	33.154	
6,100.0	6,088.9	6,073.0	6,031.2	12.3	16.0	-94.11	-635.7	-675.0	887.5	860.5	27.00	32.872	
6,200.0	6,188.7	6,172.6	6,130.1	12.5	16.3	-93.84	-637.2	-687.3	894.5	867.0	27.44	32.600	
6,300.0	6,288.5	6,272.3	6,229.0	12.7	16.6	-93.57	-638.7	-699.5	901.5	873.6	27.88	32.338	
6,400.0	6,388.3	6,372.0	6,327.9	12.9	16.9	-93.31	-640.2	-711.7	908.5	880.2	28.31	32.085	
6,500.0	6,488.1	6,471.6	6,426.8	13.1	17.1	-93.05	-641.7	-724.0	915.5	886.8	28.75	31.842	
6,600.0	6,587.9	7,901.2	7,269.0	13.3	24.1	-32.14	180.5	-835.5	845.8	814.1	31.71	26.675	
6,700.0	6,687.7	7,904.4	7,269.0	13.5	24.1	-31.76	183.6	-835.5	764.1	732.2	31.86	23.986	
6,800.0	6,787.5	7,907.5	7,269.0	13.7	24.2	-31.37	186.7	-835.6	687.2	655.2	32.00	21.474	
6,900.0	6,887.3	7,906.7	7,269.0	13.9	24.2	59.68	186.0	-835.6	617.0	586.1	30.85	19.997	
7,000.0	6,985.5	7,889.6	7,269.0	14.0	24.0	86.05	168.9	-835.4	556.4	526.8	29.66	18.760	
7,100.0	7,079.2	7,855.7	7,269.0	14.1	23.6	92.24	135.0	-835.1	509.3	480.1	29.16	17.464	
7,200.0	7,165.6	7,806.0	7,269.0	14.2	23.1	92.33	85.3	-834.7	477.8	448.7	29.11	16.414	
7,300.0	7,242.1	7,742.0	7,269.0	14.3	22.5	89.04	21.3	-834.1	461.3	432.0	29.23	15.780	
7,400.0	7,306.2	7,665.7	7,269.0	14.6	21.9	84.01	-55.1	-833.5	456.4	427.2	29.16	15.653	SF
7,410.5	7,312.2	7,657.0	7,269.0	14.6	21.8	83.45	-63.7	-833.4	456.3	427.2	29.14	15.663	CC, ES
7,500.0	7,356.2	7,583.1	7,265.4	15.0	21.2	78.60	-137.5	-832.3	458.4	429.7	28.77	15.935	
7,600.0	7,390.4	7,505.2	7,251.6	15.5	20.6	73.28	-214.0	-829.9	464.9	436.7	28.24	16.463	
7,700.0	7,407.8	7,431.2	7,229.0	16.3	20.2	68.24	-284.4	-826.5	474.6	446.8	27.77	17.091	
7,800.0	7,410.0	7,360.9	7,199.4	17.2	19.8	64.04	-348.0	-822.3	486.8	459.1	27.65	17.604	
7,900.0	7,410.0	7,300.0	7,167.7	18.2	19.5	60.37	-399.7	-817.9	506.5	478.7	27.78	18.231	
8,000.0	7,410.0	7,250.0	7,137.7	19.3	19.3	56.91	-439.5	-813.8	537.1	509.2	27.97	19.202	
8,100.0	7,410.0	7,200.0	7,104.3	20.4	19.1	53.20	-476.5	-809.4	578.7	550.6	28.05	20.629	
8,200.0	7,410.0	7,150.0	7,067.9	21.7	18.9	49.30	-510.4	-804.6	630.2	602.3	27.99	22.519	
8,300.0	7,410.0	7,121.4	7,045.8	23.0	18.9	47.07	-528.2	-801.7	690.1	661.8	28.33	24.363	
8,400.0	7,410.0	7,100.0	7,028.7	24.3	18.8	45.67	-540.9	-799.4	756.2	727.3	28.90	26.164	
8,500.0	7,410.0	7,064.9	6,999.7	25.7	18.7	43.42	-560.3	-795.7	827.0	797.8	29.16	28.365	
8,600.0	7,410.0	7,050.0	6,987.0	27.2	18.7	42.48	-567.9	-794.0	902.0	872.2	29.83	30.236	
8,700.0	7,410.0	7,021.8	6,962.5	28.7	18.6	40.73	-581.5	-790.9	980.2	950.1	30.17	32.487	
8,800.0	7,410.0	7,000.0	6,943.1	30.2	18.5	39.41	-591.2	-788.4	1,061.4	1,030.8	30.62	34.659	
8,900.0	7,410.0	7,000.0	6,943.1	31.7	18.5	39.41	-591.2	-788.4	1,145.0	1,113.4	31.61	36.218	
9,000.0	7,410.0	6,974.1	6,919.6	33.3	18.5	37.89	-601.7	-785.4	1,230.3	1,198.4	31.91	38.552	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Salisbury 2D-14H-C268 - Hz - Plan #1

Survey Program: 0-MWD

Offset Site Error: 0.0 ft

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	179.13	-553.7	8.4	553.8				
100.0	100.0	100.0	100.0	0.2	0.2	179.13	-553.7	8.4	553.8	553.5	0.30	1,823.487	
200.0	200.0	200.0	200.0	0.3	0.3	179.13	-553.7	8.4	553.8	553.1	0.65	848.361	
300.0	300.0	300.0	300.0	0.5	0.5	179.13	-553.7	8.4	553.8	552.8	1.00	552.765	
400.0	400.0	400.0	400.0	0.7	0.7	179.13	-553.7	8.4	553.8	552.4	1.35	409.931	
500.0	500.0	496.5	496.5	0.8	0.8	179.30	-554.0	6.8	554.1	552.4	1.69	327.073	
600.0	600.0	592.9	592.7	1.0	1.0	-119.28	-555.0	2.0	555.9	553.9	2.05	270.677	
700.0	699.8	692.1	691.7	1.2	1.2	-118.96	-556.4	-5.0	559.9	557.4	2.43	230.332	
800.0	799.6	792.0	791.3	1.4	1.4	-118.80	-557.9	-12.2	564.4	561.6	2.82	200.157	
900.0	899.4	891.9	890.9	1.6	1.6	-118.64	-559.4	-19.4	568.9	565.7	3.22	176.953	
1,000.0	999.2	991.7	990.5	1.8	1.8	-118.48	-560.8	-26.5	573.5	569.9	3.61	158.645	
1,100.0	1,099.0	1,091.6	1,090.2	2.0	2.1	-118.32	-562.3	-33.7	578.1	574.0	4.02	143.875	
1,200.0	1,198.8	1,191.5	1,189.8	2.2	2.3	-118.17	-563.8	-40.9	582.6	578.2	4.42	131.732	
1,300.0	1,298.6	1,291.4	1,289.4	2.4	2.5	-118.02	-565.2	-48.0	587.2	582.3	4.83	121.585	
1,400.0	1,398.4	1,391.3	1,389.0	2.6	2.7	-117.87	-566.7	-55.2	591.7	586.5	5.24	112.987	
1,500.0	1,498.2	1,491.2	1,488.6	2.8	2.9	-117.72	-568.2	-62.4	596.3	590.7	5.65	105.614	
1,600.0	1,598.0	1,591.1	1,588.2	3.0	3.1	-117.58	-569.6	-69.5	600.9	594.8	6.06	99.224	
1,700.0	1,697.8	1,690.9	1,687.8	3.2	3.3	-117.43	-571.1	-76.7	605.5	599.0	6.47	93.634	
1,800.0	1,797.6	1,790.8	1,787.5	3.4	3.5	-117.29	-572.6	-83.8	610.1	603.2	6.88	88.706	
1,900.0	1,897.4	1,890.7	1,887.1	3.6	3.8	-117.15	-574.0	-91.0	614.6	607.4	7.29	84.328	
2,000.0	1,997.2	1,990.6	1,986.7	3.8	4.0	-117.02	-575.5	-98.2	619.2	611.5	7.70	80.415	
2,100.0	2,097.0	2,090.5	2,086.3	4.0	4.2	-116.88	-576.9	-105.3	623.8	615.7	8.11	76.896	
2,200.0	2,196.8	2,190.4	2,185.9	4.2	4.4	-116.75	-578.4	-112.5	628.4	619.9	8.52	73.715	
2,300.0	2,296.6	2,290.2	2,285.5	4.4	4.6	-116.62	-579.9	-119.7	633.0	624.1	8.94	70.826	
2,400.0	2,396.4	2,390.1	2,385.2	4.6	4.8	-116.49	-581.3	-126.8	637.6	628.3	9.35	68.191	
2,500.0	2,496.2	2,490.0	2,484.8	4.9	5.1	-116.36	-582.8	-134.0	642.2	632.5	9.76	65.778	
2,600.0	2,596.0	2,589.9	2,584.4	5.1	5.3	-116.24	-584.3	-141.2	646.8	636.7	10.18	63.560	
2,700.0	2,695.8	2,689.8	2,684.0	5.3	5.5	-116.12	-585.7	-148.3	651.5	640.9	10.59	61.515	
2,800.0	2,795.6	2,789.7	2,783.6	5.5	5.7	-116.00	-587.2	-155.5	656.1	645.1	11.00	59.623	
2,900.0	2,895.4	2,889.5	2,883.2	5.7	5.9	-115.88	-588.7	-162.7	660.7	649.3	11.42	57.867	
3,000.0	2,995.2	2,989.4	2,982.9	5.9	6.1	-115.76	-590.1	-169.8	665.3	653.5	11.83	56.234	
3,100.0	3,095.0	3,089.3	3,082.5	6.1	6.3	-115.64	-591.6	-177.0	669.9	657.7	12.24	54.711	
3,200.0	3,194.8	3,189.2	3,182.1	6.3	6.6	-115.53	-593.0	-184.1	674.6	661.9	12.66	53.288	
3,300.0	3,294.6	3,289.1	3,281.7	6.5	6.8	-115.41	-594.5	-191.3	679.2	666.1	13.07	51.955	
3,400.0	3,394.4	3,389.0	3,381.3	6.7	7.0	-115.30	-596.0	-198.5	683.8	670.3	13.49	50.703	
3,500.0	3,494.2	3,488.8	3,480.9	6.9	7.2	-115.19	-597.4	-205.6	688.5	674.6	13.90	49.526	
3,600.0	3,594.0	3,588.7	3,580.5	7.1	7.4	-115.08	-598.9	-212.8	693.1	678.8	14.31	48.417	
3,700.0	3,693.8	3,688.6	3,680.2	7.3	7.6	-114.97	-600.4	-220.0	697.7	683.0	14.73	47.370	
3,800.0	3,793.6	3,788.5	3,779.8	7.5	7.9	-114.87	-601.8	-227.1	702.4	687.2	15.14	46.381	
3,900.0	3,893.4	3,888.4	3,879.4	7.7	8.1	-114.76	-603.3	-234.3	707.0	691.5	15.56	45.445	
4,000.0	3,993.2	3,988.3	3,979.0	7.9	8.3	-114.66	-604.8	-241.5	711.7	695.7	15.97	44.557	
4,100.0	4,093.0	4,088.1	4,078.6	8.2	8.5	-114.56	-606.2	-248.6	716.3	699.9	16.39	43.714	
4,200.0	4,192.8	4,188.0	4,178.2	8.4	8.7	-114.46	-607.7	-255.8	721.0	704.2	16.80	42.912	
4,300.0	4,292.6	4,287.9	4,277.9	8.6	8.9	-114.36	-609.1	-263.0	725.6	708.4	17.22	42.150	
4,400.0	4,392.4	4,387.8	4,377.5	8.8	9.1	-114.26	-610.6	-270.1	730.3	712.6	17.63	41.423	
4,500.0	4,492.2	4,487.7	4,477.1	9.0	9.4	-114.16	-612.1	-277.3	734.9	716.9	18.04	40.729	
4,600.0	4,592.0	4,587.6	4,576.7	9.2	9.6	-114.07	-613.5	-284.4	739.6	721.1	18.46	40.067	
4,700.0	4,691.8	4,687.5	4,676.3	9.4	9.8	-113.97	-615.0	-291.6	744.2	725.4	18.87	39.434	
4,800.0	4,791.6	4,787.3	4,775.9	9.6	10.0	-113.88	-616.5	-298.8	748.9	729.6	19.29	38.829	
4,900.0	4,891.4	4,887.2	4,875.6	9.8	10.2	-113.79	-617.9	-305.9	753.6	733.9	19.70	38.248	
5,000.0	4,991.2	4,987.1	4,975.2	10.0	10.4	-113.70	-619.4	-313.1	758.2	738.1	20.12	37.692	
5,100.0	5,090.9	5,087.0	5,074.8	10.2	10.7	-113.61	-620.9	-320.3	762.9	742.4	20.53	37.159	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Salisbury 2D-14H-C268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-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
5,200.0	5,190.7	5,186.9	5,174.4	10.4	10.9	-113.52	-622.3	-327.4	767.6	746.6	20.95	36.646	
5,300.0	5,290.5	5,286.8	5,274.0	10.6	11.1	-113.43	-623.8	-334.6	772.3	750.9	21.36	36.154	
5,400.0	5,390.3	5,386.6	5,373.6	10.8	11.3	-113.35	-625.2	-341.8	776.9	755.2	21.77	35.680	
5,500.0	5,490.1	5,486.5	5,473.2	11.0	11.5	-113.26	-626.7	-348.9	781.6	759.4	22.19	35.224	
5,600.0	5,589.9	5,586.4	5,572.9	11.3	11.7	-113.18	-628.2	-356.1	786.3	763.7	22.60	34.785	
5,700.0	5,689.7	5,686.3	5,672.5	11.5	12.0	-113.09	-629.6	-363.3	791.0	767.9	23.02	34.362	
5,800.0	5,789.5	5,786.2	5,772.1	11.7	12.2	-113.01	-631.1	-370.4	795.6	772.2	23.43	33.954	
5,900.0	5,889.3	5,886.1	5,871.7	11.9	12.4	-112.93	-632.6	-377.6	800.3	776.5	23.85	33.560	
6,000.0	5,989.1	5,985.9	5,971.3	12.1	12.6	-112.85	-634.0	-384.7	805.0	780.8	24.26	33.180	
6,100.0	6,088.9	6,085.8	6,070.9	12.3	12.8	-112.77	-635.5	-391.9	809.7	785.0	24.68	32.812	
6,200.0	6,188.7	6,185.7	6,170.6	12.5	13.0	-112.69	-637.0	-399.1	814.4	789.3	25.09	32.457	
6,300.0	6,288.5	6,285.6	6,270.2	12.7	13.3	-112.61	-638.4	-406.2	819.1	793.6	25.51	32.113	
6,400.0	6,388.3	6,385.5	6,369.8	12.9	13.5	-112.54	-639.9	-413.4	823.8	797.9	25.92	31.780	
6,500.0	6,488.1	6,485.4	6,469.4	13.1	13.7	-112.46	-641.3	-420.6	828.5	802.1	26.34	31.458	
6,600.0	6,587.9	6,585.2	6,569.0	13.3	13.9	-112.38	-642.8	-427.7	833.2	806.4	26.75	31.146	
6,700.0	6,687.7	8,018.0	7,410.0	13.5	21.2	-40.78	189.2	-480.8	736.0	703.1	32.90	22.372	
6,800.0	6,787.5	8,021.1	7,410.0	13.7	21.2	-39.13	192.2	-480.8	637.1	604.1	32.95	19.335	
6,900.0	6,887.3	8,020.2	7,410.0	13.9	21.2	80.79	191.4	-480.8	538.6	510.2	28.42	18.955	
7,000.0	6,985.5	8,003.0	7,410.0	14.0	21.0	125.36	174.2	-481.0	442.3	416.1	26.21	16.879	
7,100.0	7,079.2	7,969.0	7,410.0	14.1	20.6	137.10	140.1	-481.3	351.4	325.9	25.53	13.764	
7,200.0	7,165.6	7,919.2	7,410.0	14.2	20.0	139.47	90.3	-481.7	269.4	244.7	24.75	10.884	
7,300.0	7,242.1	7,855.1	7,410.0	14.3	19.3	136.41	26.2	-482.3	200.0	175.7	24.25	8.248	
7,400.0	7,306.2	7,778.7	7,410.0	14.6	18.5	128.25	-50.2	-482.9	147.1	122.4	24.71	5.955	
7,500.0	7,356.2	7,685.1	7,405.7	15.0	17.6	111.99	-143.6	-483.4	112.2	85.5	26.74	4.196	
7,600.0	7,390.4	7,595.2	7,387.8	15.5	16.9	87.97	-231.6	-482.9	96.5	68.0	28.48	3.387	
7,610.4	7,393.0	7,586.2	7,385.2	15.6	16.8	85.25	-240.2	-482.8	96.3	67.8	28.50	3.379	CC, ES, SF
7,700.0	7,407.8	7,511.9	7,359.1	16.3	16.3	63.18	-309.8	-481.5	106.2	79.3	26.99	3.937	
7,800.0	7,410.0	7,434.4	7,322.6	17.2	15.9	45.63	-378.0	-479.5	134.6	110.3	24.26	5.548	
7,900.0	7,410.0	7,367.4	7,283.9	18.2	15.6	34.03	-432.5	-477.2	180.2	158.1	22.09	8.158	
8,000.0	7,410.0	7,311.0	7,246.5	19.3	15.4	26.04	-474.7	-474.9	240.0	219.4	20.60	11.649	
8,100.0	7,410.0	7,263.6	7,212.0	20.4	15.3	20.45	-507.2	-472.7	309.4	289.7	19.68	15.724	
8,200.0	7,410.0	7,223.7	7,181.1	21.7	15.2	16.18	-532.2	-470.7	385.4	366.3	19.07	20.205	
8,300.0	7,410.0	7,200.0	7,161.8	23.0	15.1	14.03	-546.0	-469.4	466.2	447.2	18.96	24.584	
8,400.0	7,410.0	7,150.0	7,119.5	24.3	15.0	11.96	-572.5	-466.6	550.1	531.3	18.83	29.220	
8,500.0	7,410.0	7,136.7	7,107.9	25.7	15.0	11.48	-578.9	-465.9	636.3	617.2	19.06	33.380	
8,600.0	7,410.0	7,115.5	7,089.1	27.2	14.9	10.75	-588.5	-464.6	724.7	705.5	19.22	37.698	
8,700.0	7,410.0	7,100.0	7,075.1	28.7	14.9	10.25	-595.2	-463.6	814.7	795.3	19.43	41.926	
8,800.0	7,410.0	7,080.8	7,057.6	30.2	14.9	9.67	-602.8	-462.5	906.0	886.4	19.61	46.204	
8,900.0	7,410.0	7,066.6	7,044.3	31.7	14.9	9.26	-608.1	-461.6	998.4	978.6	19.82	50.368	
9,000.0	7,410.0	7,050.0	7,028.8	33.3	14.8	8.80	-613.9	-460.5	1,091.7	1,071.7	20.01	54.549	
9,100.0	7,410.0	7,050.0	7,028.8	34.9	14.8	8.80	-613.9	-460.5	1,185.8	1,165.5	20.33	58.318	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Salisbury 2E-14H-C268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-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	177.98	-553.7	19.6	554.1				
100.0	100.0	100.0	100.0	0.2	0.2	177.98	-553.7	19.6	554.1	553.7	0.30	1,824.416	
200.0	200.0	200.0	200.0	0.3	0.3	177.98	-553.7	19.6	554.1	553.4	0.65	848.793	
300.0	300.0	300.0	300.0	0.5	0.5	177.98	-553.7	19.6	554.1	553.1	1.00	553.046	
400.0	400.0	400.0	400.0	0.7	0.7	177.98	-553.7	19.6	554.1	552.7	1.35	410.140	
500.0	500.0	500.0	500.0	0.8	0.8	177.98	-553.7	19.6	554.1	552.4	1.70	325.923	
600.0	600.0	600.0	600.0	1.0	1.0	-121.12	-553.7	19.6	555.0	552.9	2.05	270.696	
700.0	699.8	699.8	699.8	1.2	1.2	-121.54	-553.7	19.6	557.6	555.2	2.41	231.777	
800.0	799.6	799.6	799.6	1.4	1.4	-122.09	-553.7	19.6	561.0	558.2	2.77	202.785	
900.0	899.4	899.4	899.4	1.6	1.5	-122.64	-553.7	19.6	564.4	561.3	3.13	180.347	
1,000.0	999.2	999.2	999.2	1.8	1.7	-123.18	-553.7	19.6	567.9	564.4	3.49	162.517	
1,100.0	1,099.0	1,099.0	1,099.0	2.0	1.9	-123.71	-553.7	19.6	571.4	567.5	3.86	148.033	
1,200.0	1,198.8	1,198.8	1,198.8	2.2	2.1	-124.23	-553.7	19.6	574.9	570.7	4.23	136.049	
1,300.0	1,298.6	1,298.6	1,298.6	2.4	2.2	-124.75	-553.7	19.6	578.5	573.9	4.59	125.979	
1,400.0	1,398.4	1,398.4	1,398.4	2.6	2.4	-125.27	-553.7	19.6	582.2	577.2	4.96	117.405	
1,500.0	1,498.2	1,498.2	1,498.2	2.8	2.6	-125.77	-553.7	19.6	585.9	580.6	5.33	110.019	
1,600.0	1,598.0	1,598.0	1,598.0	3.0	2.8	-126.27	-553.7	19.6	589.6	583.9	5.69	103.595	
1,700.0	1,697.8	1,697.8	1,697.8	3.2	2.9	-126.77	-553.7	19.6	593.4	587.3	6.06	97.959	
1,800.0	1,797.6	1,797.6	1,797.6	3.4	3.1	-127.26	-553.7	19.6	597.2	590.8	6.42	92.975	
1,900.0	1,897.4	1,897.4	1,897.4	3.6	3.3	-127.74	-553.7	19.6	601.1	594.3	6.79	88.538	
2,000.0	1,997.2	1,997.2	1,997.2	3.8	3.5	-128.21	-553.7	19.6	605.0	597.9	7.15	84.565	
2,100.0	2,097.0	2,097.0	2,097.0	4.0	3.6	-128.68	-553.7	19.6	609.0	601.5	7.52	80.986	
2,200.0	2,196.8	2,196.8	2,196.8	4.2	3.8	-129.14	-553.7	19.6	613.0	605.1	7.88	77.747	
2,300.0	2,296.6	2,296.6	2,296.6	4.4	4.0	-129.60	-553.7	19.6	617.0	608.8	8.25	74.803	
2,400.0	2,396.4	2,396.4	2,396.4	4.6	4.2	-130.05	-553.7	19.6	621.1	612.5	8.61	72.115	
2,500.0	2,496.2	2,496.2	2,496.2	4.9	4.3	-130.50	-553.7	19.6	625.2	616.2	8.98	69.652	
2,600.0	2,596.0	2,596.0	2,596.0	5.1	4.5	-130.94	-553.7	19.6	629.4	620.0	9.34	67.388	
2,700.0	2,695.8	2,695.8	2,695.8	5.3	4.7	-131.37	-553.7	19.6	633.5	623.8	9.70	65.300	
2,800.0	2,795.6	2,795.6	2,795.6	5.5	4.9	-131.80	-553.7	19.6	637.8	627.7	10.06	63.368	
2,900.0	2,895.4	2,895.4	2,895.4	5.7	5.0	-132.22	-553.7	19.6	642.0	631.6	10.43	61.576	
3,000.0	2,995.2	2,995.2	2,995.2	5.9	5.2	-132.64	-553.7	19.6	646.3	635.5	10.79	59.909	
3,100.0	3,095.0	3,095.0	3,095.0	6.1	5.4	-133.05	-553.7	19.6	650.6	639.5	11.15	58.355	
3,200.0	3,194.8	3,194.8	3,194.8	6.3	5.6	-133.45	-553.7	19.6	655.0	643.5	11.51	56.904	
3,300.0	3,294.6	3,294.6	3,294.6	6.5	5.7	-133.86	-553.7	19.6	659.4	647.5	11.87	55.545	
3,400.0	3,394.4	3,394.4	3,394.4	6.7	5.9	-134.25	-553.7	19.6	663.8	651.6	12.23	54.271	
3,500.0	3,494.2	3,494.2	3,494.2	6.9	6.1	-134.64	-553.7	19.6	668.3	655.7	12.59	53.073	
3,600.0	3,594.0	3,594.0	3,594.0	7.1	6.2	-135.02	-553.7	19.6	672.7	659.8	12.95	51.946	
3,700.0	3,693.8	3,693.8	3,693.8	7.3	6.4	-135.40	-553.7	19.6	677.3	664.0	13.31	50.883	
3,800.0	3,793.6	3,793.6	3,793.6	7.5	6.6	-135.78	-553.7	19.6	681.8	668.1	13.67	49.880	
3,900.0	3,893.4	3,893.4	3,893.4	7.7	6.8	-136.15	-553.7	19.6	686.4	672.3	14.03	48.931	
4,000.0	3,993.2	3,993.2	3,993.2	7.9	6.9	-136.51	-553.7	19.6	691.0	676.6	14.39	48.032	
4,100.0	4,093.0	4,093.0	4,093.0	8.2	7.1	-136.87	-553.7	19.6	695.6	680.9	14.74	47.180	
4,200.0	4,192.8	4,192.8	4,192.8	8.4	7.3	-137.23	-553.7	19.6	700.3	685.2	15.10	46.370	
4,300.0	4,292.6	4,292.6	4,292.6	8.6	7.5	-137.58	-553.7	19.6	704.9	689.5	15.46	45.601	
4,400.0	4,392.4	4,392.4	4,392.4	8.8	7.6	-137.92	-553.7	19.6	709.7	693.8	15.82	44.870	
4,500.0	4,492.2	4,492.2	4,492.2	9.0	7.8	-138.27	-553.7	19.6	714.4	698.2	16.17	44.172	
4,600.0	4,592.0	4,592.0	4,592.0	9.2	8.0	-138.60	-553.7	19.6	719.1	702.6	16.53	43.508	
4,700.0	4,691.8	4,691.8	4,691.8	9.4	8.2	-138.93	-553.7	19.6	723.9	707.0	16.89	42.873	
4,800.0	4,791.6	4,791.6	4,791.6	9.6	8.3	-139.26	-553.7	19.6	728.7	711.5	17.24	42.267	
4,900.0	4,891.4	4,891.4	4,891.4	9.8	8.5	-139.59	-553.7	19.6	733.6	716.0	17.60	41.687	
5,000.0	4,991.2	4,991.2	4,991.2	10.0	8.7	-139.91	-553.7	19.6	738.4	720.5	17.95	41.132	
5,100.0	5,090.9	5,076.4	5,076.4	10.2	8.8	-140.12	-554.7	19.2	744.2	725.9	18.28	40.700	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Salisbury 2E-14H-C268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-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
5,200.0	5,190.7	5,160.1	5,160.0	10.4	9.0	-140.20	-557.9	17.9	752.1	733.5	18.62	40.397	
5,300.0	5,290.5	5,252.7	5,252.4	10.6	9.1	-140.17	-563.5	15.7	761.8	742.8	18.97	40.159	
5,400.0	5,390.3	5,352.2	5,351.7	10.8	9.3	-140.13	-569.9	13.2	771.7	752.3	19.33	39.914	
5,500.0	5,490.1	5,451.7	5,450.9	11.0	9.5	-140.09	-576.2	10.7	781.5	761.8	19.70	39.676	
5,600.0	5,589.9	5,551.2	5,550.2	11.3	9.7	-140.04	-582.5	8.2	791.4	771.4	20.06	39.445	
5,700.0	5,689.7	5,650.7	5,649.5	11.5	9.9	-140.00	-588.9	5.7	801.3	780.9	20.43	39.222	
5,800.0	5,789.5	5,750.2	5,748.8	11.7	10.0	-139.96	-595.2	3.2	811.2	790.4	20.80	39.006	
5,900.0	5,889.3	5,849.7	5,848.0	11.9	10.2	-139.93	-601.5	0.6	821.1	799.9	21.16	38.796	
6,000.0	5,989.1	5,949.2	5,947.3	12.1	10.4	-139.89	-607.9	-1.9	831.0	809.5	21.53	38.593	
6,100.0	6,088.9	6,048.7	6,046.6	12.3	10.6	-139.85	-614.2	-4.4	840.9	819.0	21.90	38.395	
6,200.0	6,188.7	6,148.2	6,145.9	12.5	10.8	-139.82	-620.5	-6.9	850.8	828.5	22.27	38.204	
6,300.0	6,288.5	6,247.7	6,245.1	12.7	11.0	-139.78	-626.8	-9.4	860.7	838.0	22.64	38.018	
6,400.0	6,388.3	7,789.7	7,203.0	12.9	18.9	155.29	178.7	-33.5	864.6	834.3	30.31	28.523	
6,500.0	6,488.1	7,792.7	7,203.0	13.1	19.0	154.77	181.8	-33.5	773.4	742.8	30.56	25.309	
6,600.0	6,587.9	7,795.8	7,203.0	13.3	19.0	154.24	184.9	-33.5	684.6	653.8	30.80	22.226	
6,700.0	6,687.7	7,798.9	7,203.0	13.5	19.1	153.71	187.9	-33.5	599.4	568.3	31.05	19.305	
6,800.0	6,787.5	7,802.0	7,203.0	13.7	19.1	153.19	191.0	-33.5	519.4	488.1	31.29	16.597	
6,900.0	6,887.3	7,801.2	7,203.0	13.9	19.1	-128.44	190.2	-33.5	447.6	416.0	31.67	14.136	
7,000.0	6,985.5	7,784.0	7,203.0	14.0	18.9	-111.93	173.1	-33.5	389.5	358.0	31.54	12.350	
7,100.0	7,079.2	7,750.1	7,203.0	14.1	18.4	-106.00	139.1	-33.5	351.5	320.5	31.03	11.329	
7,200.0	7,165.6	7,700.3	7,203.0	14.2	17.8	-98.23	89.3	-33.5	336.8	306.5	30.35	11.098	SF
7,217.4	7,179.7	7,690.1	7,203.0	14.2	17.7	-96.62	79.1	-33.5	336.5	306.3	30.23	11.130	CC, ES
7,300.0	7,242.1	7,636.3	7,203.0	14.3	17.0	-88.32	25.3	-33.5	342.4	312.8	29.58	11.573	
7,400.0	7,306.2	7,559.9	7,203.0	14.6	16.1	-77.98	-51.1	-33.5	360.2	331.6	28.59	12.597	
7,500.0	7,356.2	7,486.9	7,201.1	15.0	15.3	-69.77	-124.0	-33.5	382.6	355.0	27.59	13.867	
7,600.0	7,390.4	7,420.5	7,191.9	15.5	14.6	-63.16	-189.7	-33.3	407.3	380.7	26.62	15.302	
7,700.0	7,407.8	7,350.0	7,173.8	16.3	14.0	-57.49	-257.8	-32.8	432.3	406.7	25.62	16.872	
7,800.0	7,410.0	7,300.0	7,156.0	17.2	13.6	-54.53	-304.5	-32.3	456.9	431.5	25.41	17.981	
7,900.0	7,410.0	7,235.5	7,127.2	18.2	13.2	-51.85	-362.2	-31.6	488.1	462.7	25.37	19.237	
8,000.0	7,410.0	7,183.8	7,099.5	19.3	12.9	-49.65	-405.8	-30.9	525.9	500.4	25.50	20.620	
8,100.0	7,410.0	7,137.9	7,071.7	20.4	12.7	-47.66	-442.3	-30.2	570.1	544.3	25.73	22.158	
8,200.0	7,410.0	7,100.0	7,046.6	21.7	12.5	-46.13	-470.7	-29.6	620.3	594.2	26.09	23.772	
8,300.0	7,410.0	7,050.0	7,010.7	23.0	12.4	-43.63	-505.5	-28.7	676.5	650.3	26.21	25.814	
8,400.0	7,410.0	7,030.2	6,995.7	24.3	12.3	-42.51	-518.4	-28.3	738.3	711.5	26.82	27.532	
8,500.0	7,410.0	7,000.0	6,972.0	25.7	12.2	-40.85	-537.1	-27.7	805.7	778.5	27.21	29.611	
8,600.0	7,410.0	6,977.7	6,953.9	27.2	12.2	-39.66	-550.0	-27.2	877.5	849.7	27.74	31.632	
8,700.0	7,410.0	6,950.0	6,930.6	28.7	12.1	-38.21	-565.1	-26.7	953.0	924.9	28.13	33.874	
8,800.0	7,410.0	6,950.0	6,930.6	30.2	12.1	-38.21	-565.1	-26.7	1,031.8	1,002.7	29.10	35.457	
8,900.0	7,410.0	6,918.8	6,903.6	31.7	12.1	-36.65	-580.8	-26.0	1,112.8	1,083.4	29.38	37.877	
9,000.0	7,410.0	6,900.0	6,887.0	33.3	12.1	-35.74	-589.4	-25.6	1,196.2	1,166.3	29.90	40.001	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Salisbury 2F-14H-C268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-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	177.11	-553.7	28.0	554.4				
100.0	100.0	100.0	100.0	0.2	0.2	177.11	-553.7	28.0	554.4	554.1	0.30	1,825.600	
200.0	200.0	200.0	200.0	0.3	0.3	177.11	-553.7	28.0	554.4	553.8	0.65	849.344	
300.0	300.0	300.0	300.0	0.5	0.5	177.11	-553.7	28.0	554.4	553.4	1.00	553.405	
400.0	400.0	400.0	400.0	0.7	0.7	177.11	-553.7	28.0	554.4	553.1	1.35	410.407	
500.0	500.0	500.0	500.0	0.8	0.8	177.11	-553.7	28.0	554.4	552.7	1.70	326.134	CC, ES
600.0	600.0	600.0	600.0	1.0	1.0	-121.98	-553.7	28.0	555.3	553.3	2.05	270.887	
700.0	699.8	692.6	692.6	1.2	1.2	-122.50	-554.2	29.4	558.7	556.4	2.39	233.371	
800.0	799.6	788.8	788.7	1.4	1.4	-123.41	-555.7	33.3	564.0	561.2	2.75	204.917	
900.0	899.4	888.2	888.0	1.6	1.5	-124.36	-557.3	37.6	569.5	566.4	3.12	182.507	
1,000.0	999.2	987.6	987.3	1.8	1.7	-125.30	-558.8	41.9	575.2	571.7	3.49	164.751	
1,100.0	1,099.0	1,087.0	1,086.6	2.0	1.9	-126.21	-560.4	46.3	581.0	577.2	3.86	150.387	
1,200.0	1,198.8	1,186.4	1,185.8	2.2	2.1	-127.11	-562.0	50.6	587.0	582.8	4.24	138.560	
1,300.0	1,298.6	1,285.8	1,285.1	2.4	2.3	-127.99	-563.6	54.9	593.1	588.5	4.61	128.671	
1,400.0	1,398.4	1,385.2	1,384.4	2.6	2.5	-128.85	-565.2	59.3	599.4	594.4	4.98	120.295	
1,500.0	1,498.2	1,484.6	1,483.7	2.8	2.7	-129.69	-566.8	63.6	605.8	600.4	5.36	113.119	
1,600.0	1,598.0	1,584.0	1,583.0	3.0	2.9	-130.52	-568.4	67.9	612.3	606.6	5.73	106.909	
1,700.0	1,697.8	1,683.4	1,682.3	3.2	3.0	-131.33	-570.0	72.2	619.0	612.9	6.10	101.488	
1,800.0	1,797.6	1,782.8	1,781.6	3.4	3.2	-132.12	-571.6	76.6	625.7	619.2	6.47	96.720	
1,900.0	1,897.4	1,882.2	1,880.9	3.6	3.4	-132.89	-573.2	80.9	632.6	625.8	6.84	92.496	
2,000.0	1,997.2	1,981.6	1,980.2	3.8	3.6	-133.65	-574.8	85.2	639.6	632.4	7.21	88.732	
2,100.0	2,097.0	2,081.0	2,079.5	4.0	3.8	-134.39	-576.3	89.6	646.7	639.1	7.58	85.358	
2,200.0	2,196.8	2,180.4	2,178.8	4.2	4.0	-135.12	-577.9	93.9	653.9	646.0	7.94	82.320	
2,300.0	2,296.6	2,279.8	2,278.1	4.4	4.2	-135.83	-579.5	98.2	661.2	652.9	8.31	79.571	
2,400.0	2,396.4	2,379.2	2,377.3	4.6	4.4	-136.52	-581.1	102.6	668.6	660.0	8.68	77.073	
2,500.0	2,496.2	2,478.6	2,476.6	4.9	4.6	-137.20	-582.7	106.9	676.2	667.1	9.04	74.794	
2,600.0	2,596.0	2,578.0	2,575.9	5.1	4.7	-137.86	-584.3	111.2	683.8	674.4	9.40	72.709	
2,700.0	2,695.8	2,677.4	2,675.2	5.3	4.9	-138.51	-585.9	115.5	691.5	681.7	9.77	70.794	
2,800.0	2,795.6	2,776.8	2,774.5	5.5	5.1	-139.14	-587.5	119.9	699.2	689.1	10.13	69.031	
2,900.0	2,895.4	2,876.2	2,873.8	5.7	5.3	-139.77	-589.1	124.2	707.1	696.6	10.49	67.402	
3,000.0	2,995.2	2,975.6	2,973.1	5.9	5.5	-140.37	-590.7	128.5	715.0	704.2	10.85	65.894	
3,100.0	3,095.0	3,075.0	3,072.4	6.1	5.7	-140.97	-592.2	132.9	723.1	711.9	11.21	64.494	
3,200.0	3,194.8	3,174.4	3,171.7	6.3	5.9	-141.55	-593.8	137.2	731.2	719.6	11.57	63.191	
3,300.0	3,294.6	3,273.8	3,271.0	6.5	6.1	-142.11	-595.4	141.5	739.3	727.4	11.93	61.977	
3,400.0	3,394.4	3,373.2	3,370.3	6.7	6.3	-142.67	-597.0	145.8	747.6	735.3	12.29	60.842	
3,500.0	3,494.2	3,472.6	3,469.6	6.9	6.5	-143.21	-598.6	150.2	755.9	743.2	12.64	59.781	
3,600.0	3,594.0	3,572.0	3,568.9	7.1	6.7	-143.75	-600.2	154.5	764.3	751.3	13.00	58.785	
3,700.0	3,693.8	3,671.4	3,668.1	7.3	6.8	-144.27	-601.8	158.8	772.7	759.4	13.36	57.850	
3,800.0	3,793.6	3,770.8	3,767.4	7.5	7.0	-144.77	-603.4	163.2	781.2	767.5	13.71	56.970	
3,900.0	3,893.4	3,870.2	3,866.7	7.7	7.2	-145.27	-605.0	167.5	789.8	775.7	14.07	56.141	
4,000.0	3,993.2	3,969.6	3,966.0	7.9	7.4	-145.76	-606.6	171.8	798.4	784.0	14.42	55.359	
4,100.0	4,093.0	4,069.0	4,065.3	8.2	7.6	-146.24	-608.2	176.2	807.1	792.3	14.78	54.620	
4,200.0	4,192.8	4,168.4	4,164.6	8.4	7.8	-146.70	-609.7	180.5	815.8	800.7	15.13	53.920	
4,300.0	4,292.6	4,267.8	4,263.9	8.6	8.0	-147.16	-611.3	184.8	824.6	809.1	15.48	53.258	
4,400.0	4,392.4	4,367.1	4,363.2	8.8	8.2	-147.61	-612.9	189.1	833.4	817.6	15.84	52.630	
4,500.0	4,492.2	4,466.5	4,462.5	9.0	8.4	-148.05	-614.5	193.5	842.3	826.1	16.19	52.034	
4,600.0	4,592.0	4,565.9	4,561.8	9.2	8.6	-148.47	-616.1	197.8	851.3	834.7	16.54	51.467	
4,700.0	4,691.8	4,665.3	4,661.1	9.4	8.8	-148.89	-617.7	202.1	860.3	843.4	16.89	50.927	
4,800.0	4,791.6	4,764.7	4,760.4	9.6	8.9	-149.31	-619.3	206.5	869.3	852.0	17.24	50.413	
4,900.0	4,891.4	4,864.1	4,859.6	9.8	9.1	-149.71	-620.9	210.8	878.3	860.8	17.59	49.923	
5,000.0	4,991.2	4,963.5	4,958.9	10.0	9.3	-150.10	-622.5	215.1	887.5	869.5	17.94	49.456	
5,100.0	5,090.9	5,062.9	5,058.2	10.2	9.5	-150.49	-624.1	219.4	896.6	878.3	18.29	49.009	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - Grant Salisbury 2F-14H-C268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-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
5,200.0	5,190.7	5,162.3	5,157.5	10.4	9.7	-150.87	-625.6	223.8	905.8	887.2	18.64	48.582	
5,300.0	5,290.5	5,261.7	5,256.8	10.6	9.9	-151.24	-627.2	228.1	915.0	896.0	18.99	48.174	
5,400.0	5,390.3	5,361.1	5,356.1	10.8	10.1	-151.60	-628.8	232.4	924.3	905.0	19.34	47.783	
5,500.0	5,490.1	5,460.5	5,455.4	11.0	10.3	-151.96	-630.4	236.8	933.6	913.9	19.69	47.408	
5,600.0	5,589.9	5,559.9	5,554.7	11.3	10.5	-152.31	-632.0	241.1	943.0	922.9	20.04	47.049	
5,700.0	5,689.7	5,659.3	5,654.0	11.5	10.7	-152.65	-633.6	245.4	952.3	931.9	20.39	46.704	
5,800.0	5,789.5	5,758.7	5,753.3	11.7	10.9	-152.99	-635.2	249.8	961.7	941.0	20.74	46.372	
5,900.0	5,889.3	5,858.1	5,852.6	11.9	11.0	-153.32	-636.8	254.1	971.2	950.1	21.09	46.054	
6,000.0	5,989.1	5,957.5	5,951.9	12.1	11.2	-153.64	-638.4	258.4	980.7	959.2	21.44	45.748	
6,100.0	6,088.9	6,056.9	6,051.2	12.3	11.4	-153.96	-640.0	262.7	990.2	968.4	21.78	45.453	
6,200.0	6,188.7	6,156.3	6,150.4	12.5	11.6	-154.27	-641.6	267.1	999.7	977.6	22.13	45.170	
6,300.0	6,288.5	6,255.7	6,249.7	12.7	11.8	-154.57	-643.1	271.4	1,009.3	986.8	22.48	44.896	
6,400.0	6,388.3	6,355.1	6,349.0	12.9	12.0	-154.87	-644.7	275.7	1,018.8	996.0	22.83	44.633	
6,500.0	6,488.1	7,862.1	7,269.0	13.1	19.7	153.00	181.8	315.8	1,012.4	981.6	30.86	32.803	
6,600.0	6,587.9	7,865.2	7,269.0	13.3	19.8	152.75	184.9	315.8	941.4	910.4	31.08	30.292	
6,700.0	6,687.7	7,868.3	7,269.0	13.5	19.8	152.49	187.9	315.8	876.1	844.8	31.29	27.996	
6,800.0	6,787.5	7,871.3	7,269.0	13.7	19.8	152.23	191.0	315.8	817.8	786.3	31.51	25.955	
6,900.0	6,887.3	7,870.6	7,269.0	13.9	19.8	-126.55	190.2	315.8	768.2	736.7	31.52	24.373	
7,000.0	6,985.5	7,853.4	7,269.0	14.0	19.6	-108.50	173.1	315.8	729.8	698.6	31.22	23.379	
7,100.0	7,079.2	7,819.4	7,269.0	14.1	19.2	-103.78	139.1	315.8	704.4	673.7	30.77	22.896	
7,200.0	7,165.6	7,769.7	7,269.0	14.2	18.6	-99.50	89.3	315.8	691.9	661.6	30.28	22.847	SF
7,268.9	7,219.5	7,727.0	7,269.0	14.3	18.0	-96.16	46.6	315.8	689.7	659.7	29.96	23.015	
7,300.0	7,242.1	7,705.6	7,269.0	14.3	17.8	-94.57	25.3	315.8	690.0	660.2	29.80	23.154	
7,400.0	7,306.2	7,629.3	7,269.0	14.6	16.9	-89.35	-51.1	315.8	695.5	666.1	29.33	23.711	
7,500.0	7,356.2	7,550.0	7,266.5	15.0	16.1	-84.65	-130.3	315.7	704.4	675.5	28.89	24.383	
7,600.0	7,390.4	7,472.4	7,254.2	15.5	15.4	-80.34	-206.8	315.2	715.2	686.7	28.55	25.053	
7,700.0	7,407.8	7,400.0	7,233.4	16.3	14.8	-76.57	-276.1	314.3	726.7	698.4	28.31	25.667	
7,800.0	7,410.0	7,330.3	7,205.3	17.2	14.3	-73.76	-339.9	313.1	738.7	710.3	28.40	26.015	
7,900.0	7,410.0	7,268.0	7,173.9	18.2	14.0	-71.45	-393.6	311.7	755.0	726.3	28.78	26.234	
8,000.0	7,410.0	7,213.5	7,141.7	19.3	13.7	-69.19	-437.5	310.3	775.6	746.3	29.25	26.514	
8,100.0	7,410.0	7,166.4	7,110.6	20.4	13.5	-67.10	-472.9	308.9	800.8	771.0	29.83	26.843	
8,200.0	7,410.0	7,125.7	7,081.6	21.7	13.4	-65.24	-501.3	307.7	831.3	800.8	30.51	27.249	
8,300.0	7,410.0	7,100.0	7,062.2	23.0	13.3	-64.02	-518.1	306.8	867.6	836.2	31.41	27.619	
8,400.0	7,410.0	7,050.0	7,022.4	24.3	13.2	-61.35	-548.4	305.1	910.9	878.8	32.06	28.409	
8,500.0	7,410.0	7,033.9	7,009.0	25.7	13.2	-60.47	-557.3	304.5	960.8	927.6	33.14	28.990	
8,600.0	7,410.0	7,000.0	6,980.1	27.2	13.1	-58.63	-575.0	303.2	1,017.0	983.1	33.94	29.963	
8,700.0	7,410.0	7,000.0	6,980.1	28.7	13.1	-58.63	-575.0	303.2	1,078.4	1,043.2	35.26	30.583	
8,800.0	7,410.0	6,972.4	6,955.9	30.2	13.1	-57.14	-588.1	302.2	1,144.4	1,108.3	36.13	31.677	
8,900.0	7,410.0	6,950.0	6,935.7	31.7	13.0	-55.93	-597.8	301.3	1,214.6	1,177.5	37.05	32.782	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - HSR-BEAR 13-14A (EXISTING) - EXISTING - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 547-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
10,400.0	7,410.0	7,700.9	7,446.8	56.4	23.0	90.87	-4,028.8	-857.4	1,206.8	1,129.1	77.71	15.529	
10,500.0	7,410.0	7,700.7	7,446.6	58.1	23.0	90.89	-4,028.8	-857.4	1,126.7	1,047.0	79.70	14.137	
10,600.0	7,410.0	7,700.5	7,446.4	59.8	23.0	90.90	-4,028.8	-857.4	1,048.4	966.7	81.65	12.839	
10,700.0	7,410.0	7,700.3	7,446.2	61.5	23.0	90.90	-4,028.8	-857.4	972.4	888.9	83.50	11.645	
10,800.0	7,410.0	7,700.0	7,446.0	63.2	23.0	90.88	-4,028.8	-857.4	900.7	815.4	85.22	10.569	
10,900.0	7,410.0	7,699.8	7,445.7	64.9	23.0	90.85	-4,028.8	-857.4	834.8	747.9	86.93	9.603	
11,000.0	7,410.0	7,699.5	7,445.5	66.6	23.0	90.83	-4,028.8	-857.4	776.2	687.6	88.65	8.756	
11,100.0	7,410.0	7,699.3	7,445.2	68.4	23.0	90.81	-4,028.8	-857.4	726.8	636.4	90.37	8.042	
11,200.0	7,410.0	7,699.1	7,445.0	70.1	23.0	90.79	-4,028.8	-857.4	688.3	596.2	92.14	7.470	
11,300.0	7,410.0	7,698.8	7,444.7	71.8	23.0	90.77	-4,028.8	-857.4	661.7	567.8	93.91	7.046	
11,400.0	7,410.0	7,698.5	7,444.5	73.5	23.0	90.75	-4,028.8	-857.4	649.5	553.9	95.64	6.791	
11,430.0	7,410.0	7,698.5	7,444.4	74.1	23.0	90.74	-4,028.8	-857.4	648.8	552.7	96.16	6.748	CC, ES
11,500.0	7,410.0	7,698.3	7,444.2	75.3	23.0	90.73	-4,028.8	-857.4	652.6	555.2	97.37	6.702	SF
11,600.0	7,410.0	7,698.0	7,444.0	77.0	23.0	90.70	-4,028.8	-857.4	670.7	571.6	99.10	6.768	
11,700.0	7,410.0	7,697.8	7,443.7	78.7	23.0	90.68	-4,028.8	-857.4	702.8	601.9	100.83	6.970	
11,800.0	7,410.0	7,697.5	7,443.4	80.5	23.0	90.66	-4,028.8	-857.4	746.9	644.3	102.56	7.282	
11,900.0	7,410.0	7,697.2	7,443.2	82.2	23.0	90.63	-4,028.8	-857.4	801.1	696.9	104.29	7.682	
12,000.0	7,410.0	7,697.0	7,442.9	83.9	23.0	90.61	-4,028.8	-857.4	863.6	757.6	106.03	8.145	
12,100.0	7,410.0	7,696.7	7,442.7	85.7	23.0	90.59	-4,028.8	-857.4	932.6	824.9	107.76	8.654	
12,200.0	7,410.0	7,696.5	7,442.4	87.4	23.0	90.56	-4,028.8	-857.4	1,006.9	897.4	109.50	9.195	
12,300.0	7,410.0	7,696.2	7,442.1	89.1	23.0	90.54	-4,028.8	-857.4	1,085.3	974.0	111.24	9.756	
12,400.0	7,410.0	7,695.9	7,441.9	90.9	23.0	90.52	-4,028.8	-857.4	1,167.0	1,054.0	112.97	10.329	
12,500.0	7,410.0	7,695.7	7,441.6	92.6	23.0	90.49	-4,028.8	-857.4	1,251.3	1,136.6	114.71	10.908	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - NELSON 23-23C (EXISTING) - EXISTING - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 7658-MWD

Offset Well Error: 0.0 ft

Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
14,090.8	7,410.0	7,426.0	7,426.0	120.3	13.0	-90.00	-7,837.5	145.1	1,211.9	1,078.6	133.27	9.093	CC, ES, SF

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - OLANDER 1 (EXISTING) - EXISTING - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 8035-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	7,410.0	7,417.0	7,417.0	36.4	12.9	90.00	-3,013.3	-387.8	1,191.5	1,143.0	48.52	24.556	
9,300.0	7,410.0	7,417.0	7,417.0	38.1	12.9	90.00	-3,013.3	-387.8	1,093.0	1,042.8	50.17	21.786	
9,400.0	7,410.0	7,417.0	7,417.0	39.7	12.9	90.00	-3,013.3	-387.8	994.8	942.9	51.83	19.194	
9,500.0	7,410.0	7,417.0	7,417.0	41.3	12.9	90.00	-3,013.3	-387.8	896.9	843.4	53.49	16.767	
9,600.0	7,410.0	7,417.0	7,417.0	43.0	12.9	90.00	-3,013.3	-387.8	799.7	744.5	55.17	14.495	
9,700.0	7,410.0	7,417.0	7,417.0	44.6	12.9	90.00	-3,013.3	-387.8	703.1	646.3	56.85	12.368	
9,800.0	7,410.0	7,417.0	7,417.0	46.3	12.9	90.00	-3,013.3	-387.8	607.7	549.2	58.53	10.382	
9,900.0	7,410.0	7,417.0	7,417.0	47.9	12.9	90.00	-3,013.3	-387.8	514.0	453.8	60.23	8.535	
10,000.0	7,410.0	7,417.0	7,417.0	49.6	12.9	90.00	-3,013.3	-387.8	423.3	361.4	61.92	6.836	
10,100.0	7,410.0	7,417.0	7,417.0	51.3	12.9	90.00	-3,013.3	-387.8	337.8	274.2	63.63	5.309	
10,200.0	7,410.0	7,417.0	7,417.0	53.0	12.9	90.00	-3,013.3	-387.8	262.8	197.4	65.33	4.022	
10,300.0	7,410.0	7,417.0	7,417.0	54.7	12.9	90.00	-3,013.3	-387.8	209.4	142.3	67.13	3.120	
10,382.0	7,410.0	7,417.0	7,417.0	56.1	12.9	90.00	-3,013.3	-387.8	193.6	124.9	68.67	2.819	CC, ES
10,400.0	7,410.0	7,417.0	7,417.0	56.4	12.9	90.00	-3,013.3	-387.8	194.4	125.4	69.00	2.817	SF
10,500.0	7,410.0	7,417.0	7,417.0	58.1	12.9	90.00	-3,013.3	-387.8	225.2	154.3	70.84	3.178	
10,600.0	7,410.0	7,417.0	7,417.0	59.8	12.9	90.00	-3,013.3	-387.8	287.4	214.7	72.65	3.956	
10,700.0	7,410.0	7,417.0	7,417.0	61.5	12.9	90.00	-3,013.3	-387.8	365.4	291.0	74.40	4.911	
10,800.0	7,410.0	7,417.0	7,417.0	63.2	12.9	90.00	-3,013.3	-387.8	451.9	375.7	76.12	5.936	
10,900.0	7,410.0	7,417.0	7,417.0	64.9	12.9	90.00	-3,013.3	-387.8	543.0	465.2	77.83	6.977	
11,000.0	7,410.0	7,417.0	7,417.0	66.6	12.9	90.00	-3,013.3	-387.8	636.8	557.3	79.55	8.005	
11,100.0	7,410.0	7,417.0	7,417.0	68.4	12.9	90.00	-3,013.3	-387.8	732.3	651.0	81.28	9.010	
11,200.0	7,410.0	7,417.0	7,417.0	70.1	12.9	90.00	-3,013.3	-387.8	828.8	745.8	83.01	9.984	
11,300.0	7,410.0	7,417.0	7,417.0	71.8	12.9	90.00	-3,013.3	-387.8	925.8	841.1	84.75	10.924	
11,400.0	7,410.0	7,417.0	7,417.0	73.5	12.9	90.00	-3,013.3	-387.8	1,023.4	936.9	86.47	11.834	
11,500.0	7,410.0	7,417.0	7,417.0	75.3	12.9	90.00	-3,013.3	-387.8	1,121.3	1,033.1	88.20	12.713	
11,600.0	7,410.0	7,417.0	7,417.0	77.0	12.9	90.00	-3,013.3	-387.8	1,219.7	1,129.7	89.93	13.562	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - OLANDER 2 (EXISTING) - EXISTING - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 8028-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	-149.25	-387.2	-230.4	450.6				
100.0	100.0	93.0	93.0	0.2	0.2	-149.25	-387.2	-230.4	450.6	450.3	0.31	1,433.309	
200.0	200.0	193.0	193.0	0.3	0.3	-149.25	-387.2	-230.4	450.6	449.9	0.66	679.163	
300.0	300.0	293.0	293.0	0.5	0.5	-149.25	-387.2	-230.4	450.6	449.6	1.01	445.015	
400.0	400.0	393.0	393.0	0.7	0.7	-149.25	-387.2	-230.4	450.6	449.2	1.36	330.926	
500.0	500.0	493.0	493.0	0.8	0.9	-149.25	-387.2	-230.4	450.6	448.9	1.71	263.398	
600.0	600.0	593.0	593.0	1.0	1.0	-88.43	-387.2	-230.4	450.5	448.5	2.06	218.545	
700.0	699.8	692.8	692.8	1.2	1.2	-89.09	-387.2	-230.4	450.4	448.0	2.42	186.063	
800.0	799.6	792.6	792.6	1.4	1.4	-89.90	-387.2	-230.4	450.4	447.6	2.79	161.646	
812.9	812.5	805.5	805.5	1.4	1.4	-90.00	-387.2	-230.4	450.4	447.5	2.83	158.936	
900.0	899.4	892.4	892.4	1.6	1.6	-90.70	-387.2	-230.4	450.4	447.2	3.16	142.741	
1,000.0	999.2	992.2	992.2	1.8	1.7	-91.51	-387.2	-230.4	450.5	447.0	3.53	127.727	
1,100.0	1,099.0	1,092.0	1,092.0	2.0	1.9	-92.32	-387.2	-230.4	450.7	446.8	3.90	115.547	
1,200.0	1,198.8	1,191.8	1,191.8	2.2	2.1	-93.12	-387.2	-230.4	451.0	446.7	4.28	105.487	
1,300.0	1,298.6	1,291.6	1,291.6	2.4	2.3	-93.92	-387.2	-230.4	451.4	446.8	4.65	97.049	
1,400.0	1,398.4	1,391.4	1,391.4	2.6	2.4	-94.73	-387.2	-230.4	451.9	446.9	5.03	89.879	
1,500.0	1,498.2	1,491.2	1,491.2	2.8	2.6	-95.53	-387.2	-230.4	452.5	447.1	5.40	83.718	
1,600.0	1,598.0	1,591.0	1,591.0	3.0	2.8	-96.32	-387.2	-230.4	453.1	447.3	5.78	78.372	
1,700.0	1,697.8	1,690.8	1,690.8	3.2	3.0	-97.12	-387.2	-230.4	453.9	447.7	6.16	73.693	
1,800.0	1,797.6	1,790.6	1,790.6	3.4	3.1	-97.91	-387.2	-230.4	454.7	448.2	6.54	69.567	
1,900.0	1,897.4	1,890.4	1,890.4	3.6	3.3	-98.70	-387.2	-230.4	455.6	448.7	6.91	65.905	
2,000.0	1,997.2	1,990.2	1,990.2	3.8	3.5	-99.49	-387.2	-230.4	456.6	449.3	7.29	62.634	
2,100.0	2,097.0	2,090.0	2,090.0	4.0	3.6	-100.27	-387.2	-230.4	457.7	450.0	7.67	59.698	
2,200.0	2,196.8	2,189.8	2,189.8	4.2	3.8	-101.05	-387.2	-230.4	458.9	450.9	8.04	57.049	
2,300.0	2,296.6	2,289.6	2,289.6	4.4	4.0	-101.83	-387.2	-230.4	460.2	451.7	8.42	54.650	
2,400.0	2,396.4	2,389.4	2,389.4	4.6	4.2	-102.60	-387.2	-230.4	461.5	452.7	8.80	52.467	
2,500.0	2,496.2	2,489.2	2,489.2	4.9	4.3	-103.36	-387.2	-230.4	462.9	453.8	9.17	50.474	
2,600.0	2,596.0	2,589.0	2,589.0	5.1	4.5	-104.13	-387.2	-230.4	464.4	454.9	9.55	48.648	
2,700.0	2,695.8	2,688.8	2,688.8	5.3	4.7	-104.88	-387.2	-230.4	466.0	456.1	9.92	46.971	
2,800.0	2,795.6	2,788.6	2,788.6	5.5	4.9	-105.63	-387.2	-230.4	467.7	457.4	10.30	45.426	
2,900.0	2,895.4	2,888.4	2,888.4	5.7	5.0	-106.38	-387.2	-230.4	469.5	458.8	10.67	43.999	
3,000.0	2,995.2	2,988.2	2,988.2	5.9	5.2	-107.12	-387.2	-230.4	471.3	460.3	11.04	42.678	
3,100.0	3,095.0	3,088.0	3,088.0	6.1	5.4	-107.85	-387.2	-230.4	473.2	461.8	11.42	41.452	
3,200.0	3,194.8	3,187.8	3,187.8	6.3	5.6	-108.58	-387.2	-230.4	475.2	463.4	11.79	40.311	
3,300.0	3,294.6	3,287.6	3,287.6	6.5	5.7	-109.30	-387.2	-230.4	477.3	465.1	12.16	39.249	
3,400.0	3,394.4	3,387.4	3,387.4	6.7	5.9	-110.02	-387.2	-230.4	479.4	466.9	12.53	38.258	
3,500.0	3,494.2	3,487.2	3,487.2	6.9	6.1	-110.73	-387.2	-230.4	481.6	468.7	12.90	37.330	
3,600.0	3,594.0	3,587.0	3,587.0	7.1	6.3	-111.43	-387.2	-230.4	483.9	470.7	13.27	36.462	
3,700.0	3,693.8	3,686.8	3,686.8	7.3	6.4	-112.12	-387.2	-230.4	486.3	472.6	13.64	35.648	
3,800.0	3,793.6	3,786.6	3,786.6	7.5	6.6	-112.81	-387.2	-230.4	488.7	474.7	14.01	34.883	
3,900.0	3,893.4	3,886.4	3,886.4	7.7	6.8	-113.49	-387.2	-230.4	491.2	476.8	14.38	34.164	
4,000.0	3,993.2	3,986.2	3,986.2	7.9	7.0	-114.17	-387.2	-230.4	493.8	479.0	14.75	33.487	
4,100.0	4,093.0	4,086.0	4,086.0	8.2	7.1	-114.84	-387.2	-230.4	496.4	481.3	15.11	32.848	
4,200.0	4,192.8	4,185.8	4,185.8	8.4	7.3	-115.50	-387.2	-230.4	499.1	483.7	15.48	32.246	
4,300.0	4,292.6	4,285.6	4,285.6	8.6	7.5	-116.15	-387.2	-230.4	501.9	486.1	15.84	31.677	
4,400.0	4,392.4	4,385.4	4,385.4	8.8	7.7	-116.80	-387.2	-230.4	504.7	488.5	16.21	31.138	
4,500.0	4,492.2	4,485.2	4,485.2	9.0	7.8	-117.44	-387.2	-230.4	507.6	491.1	16.57	30.628	
4,600.0	4,592.0	4,585.0	4,585.0	9.2	8.0	-118.07	-387.2	-230.4	510.6	493.7	16.94	30.145	
4,700.0	4,691.8	4,684.8	4,684.8	9.4	8.2	-118.69	-387.2	-230.4	513.6	496.3	17.30	29.687	
4,800.0	4,791.6	4,784.6	4,784.6	9.6	8.4	-119.31	-387.2	-230.4	516.7	499.1	17.66	29.252	
4,900.0	4,891.4	4,884.4	4,884.4	9.8	8.5	-119.92	-387.2	-230.4	519.9	501.8	18.03	28.839	
5,000.0	4,991.2	4,984.2	4,984.2	10.0	8.7	-120.52	-387.2	-230.4	523.1	504.7	18.39	28.446	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - OLANDER 2 (EXISTING) - EXISTING - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 8028-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	5,090.9	5,083.9	5,083.9	10.2	8.9	-121.12	-387.2	-230.4	526.3	507.6	18.75	28.072	
5,200.0	5,190.7	5,183.7	5,183.7	10.4	9.0	-121.71	-387.2	-230.4	529.6	510.5	19.11	27.716	
5,300.0	5,290.5	5,283.5	5,283.5	10.6	9.2	-122.29	-387.2	-230.4	533.0	513.6	19.47	27.377	
5,400.0	5,390.3	5,383.3	5,383.3	10.8	9.4	-122.86	-387.2	-230.4	536.4	516.6	19.83	27.053	
5,500.0	5,490.1	5,483.1	5,483.1	11.0	9.6	-123.42	-387.2	-230.4	539.9	519.7	20.19	26.745	
5,600.0	5,589.9	5,582.9	5,582.9	11.3	9.7	-123.98	-387.2	-230.4	543.5	522.9	20.55	26.450	
5,700.0	5,689.7	5,682.7	5,682.7	11.5	9.9	-124.53	-387.2	-230.4	547.0	526.1	20.90	26.168	
5,800.0	5,789.5	5,782.5	5,782.5	11.7	10.1	-125.08	-387.2	-230.4	550.7	529.4	21.26	25.899	
5,900.0	5,889.3	5,882.3	5,882.3	11.9	10.3	-125.62	-387.2	-230.4	554.4	532.7	21.62	25.642	
6,000.0	5,989.1	5,982.1	5,982.1	12.1	10.4	-126.14	-387.2	-230.4	558.1	536.1	21.98	25.396	
6,100.0	6,088.9	6,081.9	6,081.9	12.3	10.6	-126.67	-387.2	-230.4	561.9	539.5	22.33	25.160	
6,200.0	6,188.7	6,181.7	6,181.7	12.5	10.8	-127.18	-387.2	-230.4	565.7	543.0	22.69	24.934	
6,300.0	6,288.5	6,281.5	6,281.5	12.7	11.0	-127.69	-387.2	-230.4	569.5	546.5	23.04	24.718	
6,400.0	6,388.3	6,381.3	6,381.3	12.9	11.1	-128.19	-387.2	-230.4	573.5	550.1	23.40	24.510	
6,500.0	6,488.1	6,481.1	6,481.1	13.1	11.3	-128.69	-387.2	-230.4	577.4	553.7	23.75	24.311	
6,600.0	6,587.9	6,580.9	6,580.9	13.3	11.5	-129.18	-387.2	-230.4	581.4	557.3	24.10	24.120	
6,700.0	6,687.7	6,680.7	6,680.7	13.5	11.7	-129.66	-387.2	-230.4	585.5	561.0	24.46	23.937	
6,800.0	6,787.5	6,780.5	6,780.5	13.7	11.8	-130.13	-387.2	-230.4	589.5	564.7	24.81	23.761	
6,900.0	6,887.3	6,880.3	6,880.3	13.9	12.0	-45.91	-387.2	-230.4	589.9	564.8	25.10	23.505	
7,000.0	6,985.5	6,978.5	6,978.5	14.0	12.2	-26.39	-387.2	-230.4	574.4	549.4	24.93	23.039	
7,100.0	7,079.2	7,072.2	7,072.2	14.1	12.3	-24.03	-387.2	-230.4	542.7	518.3	24.32	22.313	
7,200.0	7,165.6	7,158.6	7,158.6	14.2	12.5	-25.97	-387.2	-230.4	496.1	472.7	23.43	21.171	
7,300.0	7,242.1	7,235.1	7,235.1	14.3	12.6	-31.46	-387.2	-230.4	436.7	414.1	22.64	19.285	
7,400.0	7,306.2	7,299.2	7,299.2	14.6	12.7	-41.69	-387.2	-230.4	367.4	344.7	22.70	16.185	
7,500.0	7,356.2	7,349.2	7,349.2	15.0	12.8	-57.85	-387.2	-230.4	292.7	268.3	24.33	12.031	
7,600.0	7,390.4	7,383.4	7,383.4	15.5	12.9	-76.36	-387.2	-230.4	220.7	194.2	26.49	8.332	
7,700.0	7,407.8	7,400.8	7,400.8	16.3	12.9	-88.30	-387.2	-230.4	169.0	141.3	27.73	6.095	
7,754.7	7,411.3	7,404.3	7,404.3	16.7	12.9	-90.00	-387.2	-230.4	160.0	131.7	28.27	5.660	CC, ES, SF
7,800.0	7,410.0	7,403.0	7,403.0	17.2	12.9	-90.00	-387.2	-230.4	166.2	137.5	28.70	5.790	
7,900.0	7,410.0	7,403.0	7,403.0	18.2	12.9	-90.00	-387.2	-230.4	215.7	185.9	29.75	7.250	
8,000.0	7,410.0	7,403.0	7,403.0	19.3	12.9	-90.00	-387.2	-230.4	291.0	260.2	30.83	9.439	
8,100.0	7,410.0	7,403.0	7,403.0	20.4	12.9	-90.00	-387.2	-230.4	376.8	344.8	31.97	11.785	
8,200.0	7,410.0	7,403.0	7,403.0	21.7	12.9	-90.00	-387.2	-230.4	467.3	434.1	33.17	14.087	
8,300.0	7,410.0	7,403.0	7,403.0	23.0	12.9	-90.00	-387.2	-230.4	560.3	525.8	34.49	16.246	
8,400.0	7,410.0	7,403.0	7,403.0	24.3	12.9	-90.00	-387.2	-230.4	655.2	619.3	35.92	18.238	
8,500.0	7,410.0	7,403.0	7,403.0	25.7	12.9	-90.00	-387.2	-230.4	751.5	714.1	37.41	20.089	
8,600.0	7,410.0	7,403.0	7,403.0	27.2	12.9	-90.00	-387.2	-230.4	848.6	809.7	38.92	21.802	
8,700.0	7,410.0	7,403.0	7,403.0	28.7	12.9	-90.00	-387.2	-230.4	946.3	905.9	40.47	23.384	
8,800.0	7,410.0	7,403.0	7,403.0	30.2	12.9	-90.00	-387.2	-230.4	1,044.5	1,002.4	42.04	24.846	
8,900.0	7,410.0	7,403.0	7,403.0	31.7	12.9	-90.00	-387.2	-230.4	1,143.0	1,099.3	43.63	26.197	
9,000.0	7,410.0	7,403.0	7,403.0	33.3	12.9	-90.00	-387.2	-230.4	1,241.7	1,196.4	45.24	27.448	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - OLANDER U 14-11 (EXISTING) - EXISTING - NO SURVE

Offset Site Error: 0.0 ft

Survey Program: 7625-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
8,900.0	7,410.0	7,406.0	7,406.0	31.7	12.9	-90.00	-2,519.4	438.4	1,250.2	1,206.5	43.63	28.651	
9,000.0	7,410.0	7,406.0	7,406.0	33.3	12.9	-90.00	-2,519.4	438.4	1,167.0	1,121.8	45.24	25.794	
9,100.0	7,410.0	7,406.0	7,406.0	34.9	12.9	-90.00	-2,519.4	438.4	1,086.7	1,039.8	46.87	23.187	
9,200.0	7,410.0	7,406.0	7,406.0	36.4	12.9	-90.00	-2,519.4	438.4	1,009.8	961.3	48.50	20.821	
9,300.0	7,410.0	7,406.0	7,406.0	38.1	12.9	-90.00	-2,519.4	438.4	937.4	887.3	50.15	18.692	
9,400.0	7,410.0	7,406.0	7,406.0	39.7	12.9	-90.00	-2,519.4	438.4	870.5	818.6	51.81	16.802	
9,500.0	7,410.0	7,406.0	7,406.0	41.3	12.9	-90.00	-2,519.4	438.4	810.3	756.9	53.47	15.154	
9,600.0	7,410.0	7,406.0	7,406.0	43.0	12.9	-90.00	-2,519.4	438.4	758.7	703.5	55.15	13.757	
9,700.0	7,410.0	7,406.0	7,406.0	44.6	12.9	-90.00	-2,519.4	438.4	717.3	660.5	56.83	12.622	
9,800.0	7,410.0	7,406.0	7,406.0	46.3	12.9	-90.00	-2,519.4	438.4	688.1	629.6	58.52	11.759	
9,900.0	7,410.0	7,406.0	7,406.0	47.9	12.9	-90.00	-2,519.4	438.4	672.6	612.4	60.21	11.172	
9,955.2	7,410.0	7,406.0	7,406.0	48.9	12.9	-90.00	-2,519.4	438.4	670.4	609.2	61.15	10.963	CC, ES
10,000.0	7,410.0	7,406.0	7,406.0	49.6	12.9	-90.00	-2,519.4	438.4	671.9	610.0	61.90	10.853	
10,100.0	7,410.0	7,406.0	7,406.0	51.3	12.9	-90.00	-2,519.4	438.4	685.8	622.2	63.61	10.782	SF
10,200.0	7,410.0	7,406.0	7,406.0	53.0	12.9	-90.00	-2,519.4	438.4	713.6	648.3	65.31	10.927	
10,300.0	7,410.0	7,406.0	7,406.0	54.7	12.9	-90.00	-2,519.4	438.4	754.1	687.0	67.11	11.236	
10,400.0	7,410.0	7,406.0	7,406.0	56.4	12.9	-90.00	-2,519.4	438.4	806.9	737.9	68.98	11.697	
10,500.0	7,410.0	7,406.0	7,406.0	58.1	12.9	-90.00	-2,519.4	438.4	870.0	799.2	70.82	12.285	
10,600.0	7,410.0	7,406.0	7,406.0	59.8	12.9	-90.00	-2,519.4	438.4	941.4	868.7	72.63	12.962	
10,700.0	7,410.0	7,406.0	7,406.0	61.5	12.9	-90.00	-2,519.4	438.4	1,019.0	944.6	74.38	13.700	
10,800.0	7,410.0	7,406.0	7,406.0	63.2	12.9	-90.00	-2,519.4	438.4	1,100.6	1,024.5	76.10	14.463	
10,900.0	7,410.0	7,406.0	7,406.0	64.9	12.9	-90.00	-2,519.4	438.4	1,185.0	1,107.2	77.82	15.229	
11,000.0	7,410.0	7,406.0	7,406.0	66.6	12.9	-90.00	-2,519.4	438.4	1,271.7	1,192.2	79.54	15.989	

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Grant Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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) - OLANDER U 14-14 (EXISTING) - EXISTING - NO SURVE

Offset Site Error: 0.0 ft

Survey Program: 7650-MWD

Offset Well Error: 0.0 ft

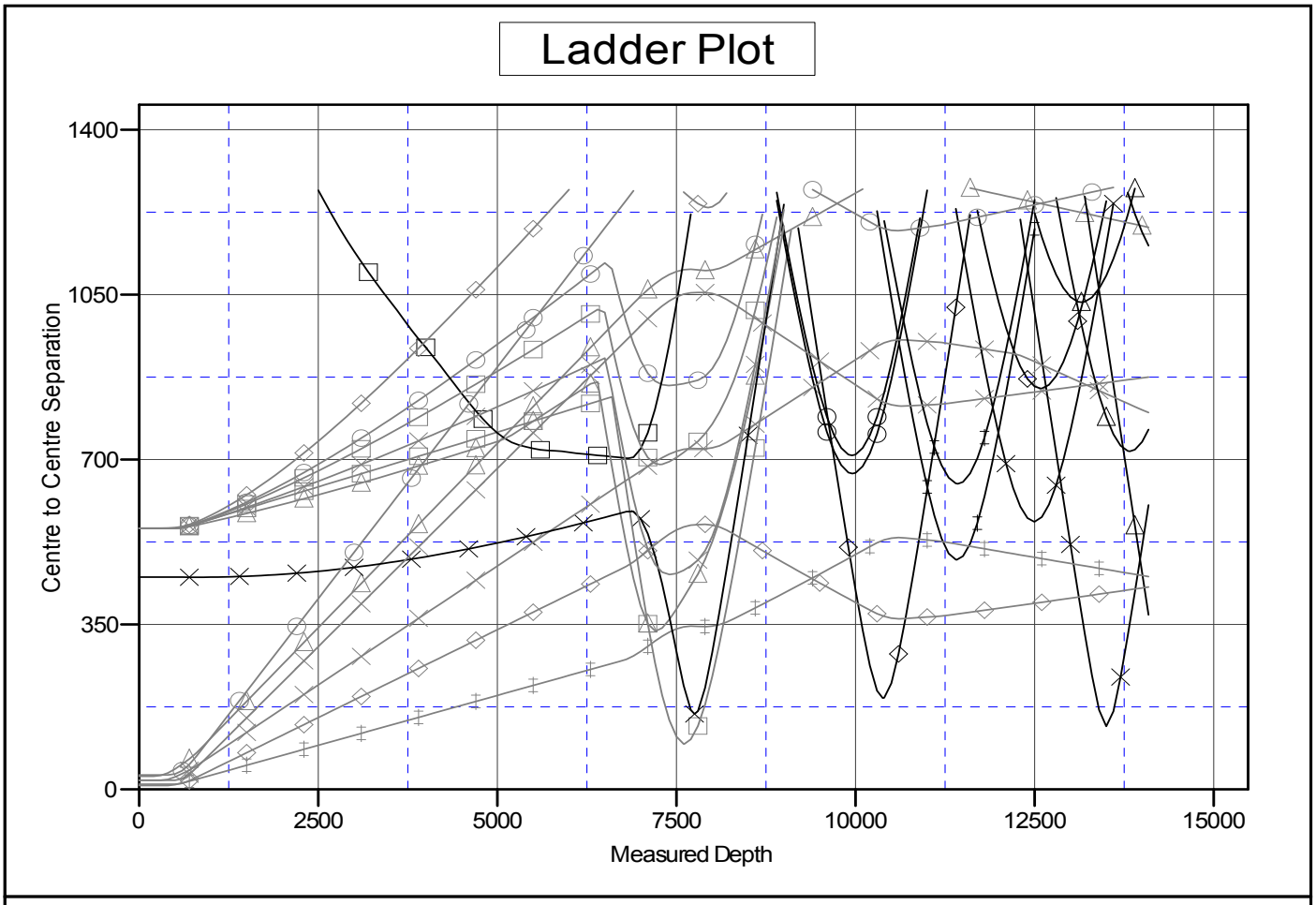
Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,300.0	7,410.0	7,411.0	7,411.0	54.7	12.9	-90.00	-4,051.9	278.8	1,227.7	1,160.6	67.12	18.291	
10,400.0	7,410.0	7,411.0	7,411.0	56.4	12.9	-90.00	-4,051.9	278.8	1,133.9	1,064.9	68.99	16.435	
10,500.0	7,410.0	7,411.0	7,411.0	58.1	12.9	-90.00	-4,051.9	278.8	1,042.3	971.5	70.83	14.715	
10,600.0	7,410.0	7,411.0	7,411.0	59.8	12.9	-90.00	-4,051.9	278.8	953.6	881.0	72.64	13.129	
10,700.0	7,410.0	7,411.0	7,411.0	61.5	12.9	-90.00	-4,051.9	278.8	868.7	794.3	74.39	11.678	
10,800.0	7,410.0	7,411.0	7,411.0	63.2	12.9	-90.00	-4,051.9	278.8	787.7	711.6	76.11	10.350	
10,900.0	7,410.0	7,411.0	7,411.0	64.9	12.9	-90.00	-4,051.9	278.8	711.5	633.7	77.82	9.143	
11,000.0	7,410.0	7,411.0	7,411.0	66.6	12.9	-90.00	-4,051.9	278.8	642.0	562.4	79.54	8.071	
11,100.0	7,410.0	7,411.0	7,411.0	68.4	12.9	-90.00	-4,051.9	278.8	581.3	500.1	81.27	7.153	
11,200.0	7,410.0	7,411.0	7,411.0	70.1	12.9	-90.00	-4,051.9	278.8	532.8	449.8	83.00	6.419	
11,300.0	7,410.0	7,411.0	7,411.0	71.8	12.9	-90.00	-4,051.9	278.8	500.8	416.1	84.74	5.910	
11,400.0	7,410.0	7,411.0	7,411.0	73.5	12.9	-90.00	-4,051.9	278.8	487.7	401.3	86.46	5.641	
11,414.6	7,410.0	7,411.0	7,411.0	73.8	12.9	-90.00	-4,051.9	278.8	487.5	400.8	86.72	5.622	CC, ES
11,500.0	7,410.0	7,411.0	7,411.0	75.3	12.9	-90.00	-4,051.9	278.8	494.9	406.8	88.19	5.612	SF
11,600.0	7,410.0	7,411.0	7,411.0	77.0	12.9	-90.00	-4,051.9	278.8	521.6	431.7	89.92	5.800	
11,700.0	7,410.0	7,411.0	7,411.0	78.7	12.9	-90.00	-4,051.9	278.8	564.9	473.3	91.65	6.164	
11,800.0	7,410.0	7,411.0	7,411.0	80.5	12.9	-90.00	-4,051.9	278.8	621.5	528.1	93.38	6.655	
11,900.0	7,410.0	7,411.0	7,411.0	82.2	12.9	-90.00	-4,051.9	278.8	688.0	592.8	95.12	7.233	
12,000.0	7,410.0	7,411.0	7,411.0	83.9	12.9	-90.00	-4,051.9	278.8	761.8	665.0	96.85	7.866	
12,100.0	7,410.0	7,411.0	7,411.0	85.7	12.9	-90.00	-4,051.9	278.8	841.1	742.5	98.59	8.532	
12,200.0	7,410.0	7,411.0	7,411.0	87.4	12.9	-90.00	-4,051.9	278.8	924.4	824.1	100.32	9.214	
12,300.0	7,410.0	7,411.0	7,411.0	89.1	12.9	-90.00	-4,051.9	278.8	1,010.7	908.7	102.06	9.904	
12,400.0	7,410.0	7,411.0	7,411.0	90.9	12.9	-90.00	-4,051.9	278.8	1,099.4	995.6	103.79	10.592	
12,500.0	7,410.0	7,411.0	7,411.0	92.6	12.9	-90.00	-4,051.9	278.8	1,189.9	1,084.3	105.53	11.275	

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 Elmquist 2D-14H-C268
Project:	DJ Wattenberg	**TVD Reference:**	KB @ 4894.0ft
Reference Site:	S14-T2N-R68W (Grant Elmquist/Salisbury)	**MD Reference:**	KB @ 4894.0ft
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Grant Elmquist 2D-14H-C268	**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 KB @ 4894.0ft
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Grant Elmquist 2D-14H-C268
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.34°



L E G E N D

3 (EXISTING), EXISTING, SURVEYS V0	ELMQUIST 21-23 (EXISTING), EXISTING, SURVEYS V0	Grant Salisbury 2A-14H-C268, Hz, Plan #
-14H-C268, Hz, Plan #1 V0	ELMQUIST 2-4-23 (EXISTING), EXISTING, SURVEYS V0	ELMQUIST 12-23 (EXISTING), EXISTIN
(EXISTING), EXISTING, GYRO V0	OLANDER U 14-14 (EXISTING), EXISTING, NO SURVEYS V0	Grant Elmquist 2C-14H-C268, Hz, Plan #
-14H-C268, Hz, Plan #1 V0	DEL CAMINO 11-14 (EXISTING), EXISTING, NO SURVEYS V0	Grant Salisbury 2F-14H-C268, Hz, Plan #
STING), EXISTING, NO SURVEYS V0	GRANT 2-8-11 (EXISTING), EXISTING, SURVEYS V0	OLANDER 2 (EXISTING), EXISTING, N
STING), EXISTING, GYRO V0	OLANDER U 14-11 (EXISTING), EXISTING, NO SURVEYS V0	Grant Salisbury 2C-14H-C268, Hz, Plan #
(EXISTING), EXISTING, NO SURVEYS V0	Grant Elmquist 2B-14H-C268, Hz, Plan #2 V0	Grant Elmquist 2E-14H-C268, Hz, Plan #
-14H-C268, Hz, Plan #2 V0	Grant Salisbury 2E-14H-C268, Hz, Plan #1 V0	Grant Elmquist 2F-14H-C268, Hz, Plan #
3 (EXISTING), EXISTING, SURVEYS V0	HSR-BEAR 13-14A (EXISTING), EXISTING, SURVEYS V0	Grant Elmquist 2G-14H-C268, Hz, Plan #