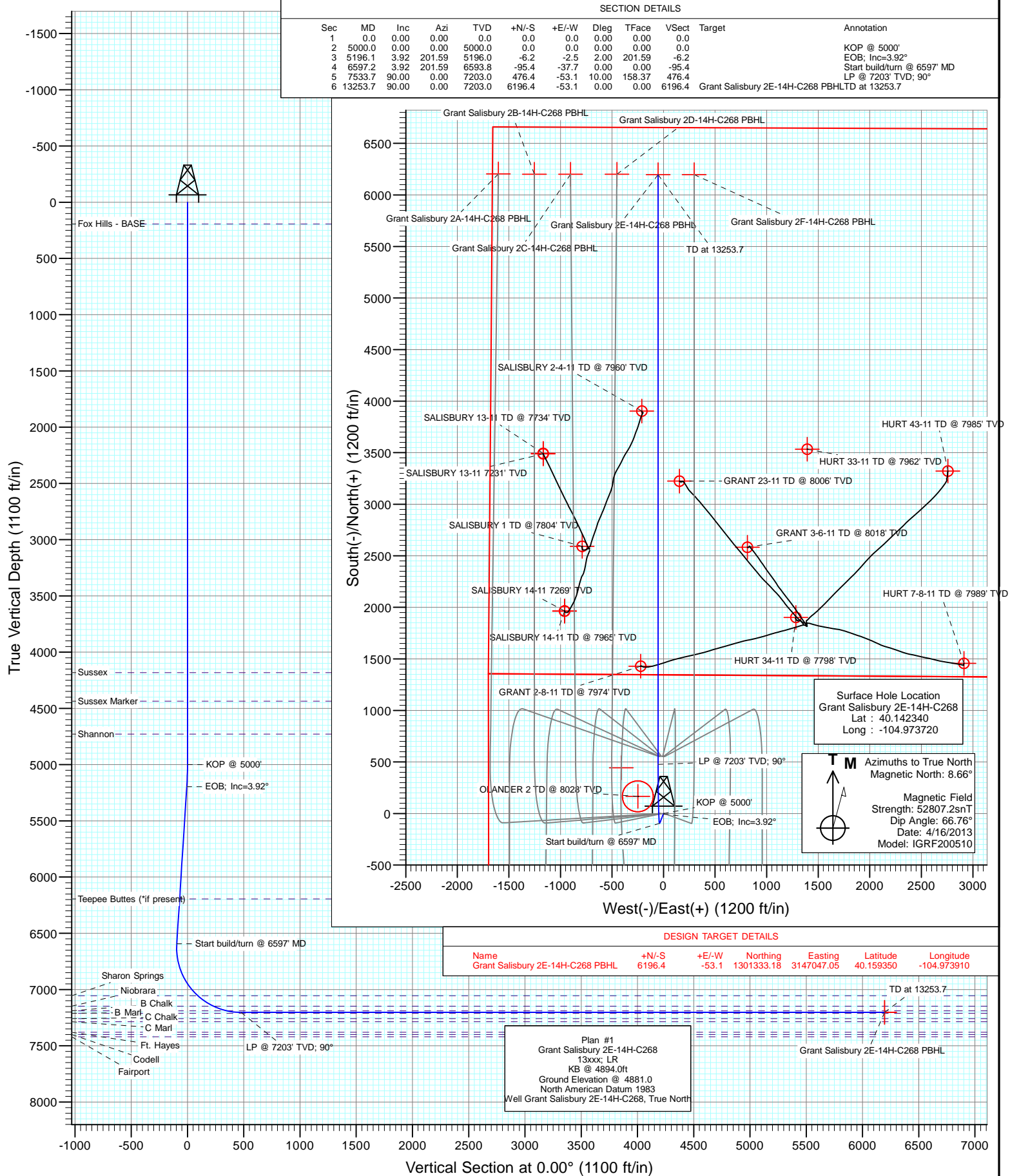




Project: DJ Wattenberg
Site: S14-T2N-R68W (Grant Elmquist/Salisbury)
Well: Grant Salisbury 2E-14H-C268
Wellbore: Hz
Design: Plan #1



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Grant Salisbury 2E-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 Salisbury 2E-14H-C268	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

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

Site		S14-T2N-R68W (Grant Elmquist/Salisbury)			
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 Salisbury 2E-14H-C268					
Well Position	+N/-S	0.0 ft	Northing:	1,295,137.17 ft	Latitude:	40.142340
	+E/-W	0.0 ft	Easting:	3,147,136.93 ft	Longitude:	-104.973720
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	52,807

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

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,196.1	3.92	201.59	5,196.0	-6.2	-2.5	2.00	2.00	0.00	201.59	
6,597.2	3.92	201.59	6,593.8	-95.4	-37.7	0.00	0.00	0.00	0.00	
7,533.7	90.00	0.00	7,203.0	476.4	-53.1	10.00	9.19	16.92	158.37	
13,253.7	90.00	0.00	7,203.0	6,196.4	-53.1	0.00	0.00	0.00	0.00	Grant Salisbury 2E-14

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Grant Salisbury 2E-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 Salisbury 2E-14H-C268	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
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	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	
4,182.0	0.00	0.00	4,182.0	0.0	0.0	0.0	0.00	0.00	Sussex
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	
4,436.0	0.00	0.00	4,436.0	0.0	0.0	0.0	0.00	0.00	Sussex Marker
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	
4,729.0	0.00	0.00	4,729.0	0.0	0.0	0.0	0.00	0.00	Shannon

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Grant Salisbury 2E-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 Salisbury 2E-14H-C268	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	KOP @ 5000'
5,100.0	2.00	201.59	5,100.0	-1.6	-0.6	-1.6	2.00	2.00	
5,196.1	3.92	201.59	5,196.0	-6.2	-2.5	-6.2	2.00	2.00	EOB; Inc=3.92°
5,200.0	3.92	201.59	5,199.8	-6.5	-2.6	-6.5	0.00	0.00	
5,300.0	3.92	201.59	5,299.6	-12.8	-5.1	-12.8	0.00	0.00	
5,400.0	3.92	201.59	5,399.4	-19.2	-7.6	-19.2	0.00	0.00	
5,500.0	3.92	201.59	5,499.1	-25.6	-10.1	-25.6	0.00	0.00	
5,600.0	3.92	201.59	5,598.9	-31.9	-12.6	-31.9	0.00	0.00	
5,700.0	3.92	201.59	5,698.7	-38.3	-15.2	-38.3	0.00	0.00	
5,800.0	3.92	201.59	5,798.4	-44.7	-17.7	-44.7	0.00	0.00	
5,900.0	3.92	201.59	5,898.2	-51.0	-20.2	-51.0	0.00	0.00	
6,000.0	3.92	201.59	5,998.0	-57.4	-22.7	-57.4	0.00	0.00	
6,100.0	3.92	201.59	6,097.7	-63.7	-25.2	-63.7	0.00	0.00	
6,196.5	3.92	201.59	6,194.0	-69.9	-27.6	-69.9	0.00	0.00	Teepee Buttes (*if present)
6,200.0	3.92	201.59	6,197.5	-70.1	-27.7	-70.1	0.00	0.00	
6,300.0	3.92	201.59	6,297.3	-76.5	-30.3	-76.5	0.00	0.00	
6,400.0	3.92	201.59	6,397.0	-82.8	-32.8	-82.8	0.00	0.00	
6,500.0	3.92	201.59	6,496.8	-89.2	-35.3	-89.2	0.00	0.00	
6,597.2	3.92	201.59	6,593.8	-95.4	-37.7	-95.4	0.00	0.00	Start build/turn @ 6597' MD
6,600.0	3.67	203.19	6,596.6	-95.5	-37.8	-95.5	10.00	-9.24	
6,700.0	6.79	347.76	6,696.4	-92.7	-40.3	-92.7	10.00	3.12	
6,800.0	16.69	355.17	6,794.2	-72.6	-42.8	-72.6	10.00	9.91	
6,900.0	26.67	357.12	6,887.0	-35.7	-45.1	-35.7	10.00	9.98	
7,000.0	36.65	358.06	6,972.0	16.6	-47.3	16.6	10.00	9.99	
7,100.0	46.65	358.64	7,046.6	83.0	-49.2	83.0	10.00	9.99	
7,112.4	47.89	358.69	7,055.0	92.1	-49.4	92.1	10.00	9.99	Sharon Springs
7,200.0	56.64	359.05	7,108.6	161.3	-50.7	161.3	10.00	9.99	
7,280.6	64.69	359.32	7,148.0	231.4	-51.7	231.4	10.00	10.00	Niobrara
7,300.0	66.64	359.38	7,156.0	249.2	-51.9	249.2	10.00	10.00	
7,400.0	76.63	359.66	7,187.5	343.9	-52.7	343.9	10.00	10.00	
7,402.3	76.86	359.66	7,188.0	346.2	-52.7	346.2	10.00	10.00	B Chalk
7,500.0	86.63	359.91	7,202.0	442.8	-53.1	442.8	10.00	10.00	
7,533.7	90.00	0.00	7,203.0	476.4	-53.1	476.4	10.00	10.00	LP @ 7203' TVD; 90°
7,600.0	90.00	0.00	7,203.0	542.7	-53.1	542.7	0.00	0.00	
7,700.0	90.00	0.00	7,203.0	642.7	-53.1	642.7	0.00	0.00	
7,800.0	90.00	0.00	7,203.0	742.7	-53.1	742.7	0.00	0.00	
7,900.0	90.00	0.00	7,203.0	842.7	-53.1	842.7	0.00	0.00	
8,000.0	90.00	0.00	7,203.0	942.7	-53.1	942.7	0.00	0.00	
8,100.0	90.00	0.00	7,203.0	1,042.7	-53.1	1,042.7	0.00	0.00	
8,200.0	90.00	0.00	7,203.0	1,142.7	-53.1	1,142.7	0.00	0.00	
8,300.0	90.00	0.00	7,203.0	1,242.7	-53.1	1,242.7	0.00	0.00	
8,400.0	90.00	0.00	7,203.0	1,342.7	-53.1	1,342.7	0.00	0.00	
8,500.0	90.00	0.00	7,203.0	1,442.7	-53.1	1,442.7	0.00	0.00	
8,600.0	90.00	0.00	7,203.0	1,542.7	-53.1	1,542.7	0.00	0.00	
8,700.0	90.00	0.00	7,203.0	1,642.7	-53.1	1,642.7	0.00	0.00	
8,800.0	90.00	0.00	7,203.0	1,742.7	-53.1	1,742.7	0.00	0.00	
8,900.0	90.00	0.00	7,203.0	1,842.7	-53.1	1,842.7	0.00	0.00	
9,000.0	90.00	0.00	7,203.0	1,942.7	-53.1	1,942.7	0.00	0.00	
9,100.0	90.00	0.00	7,203.0	2,042.7	-53.1	2,042.7	0.00	0.00	
9,200.0	90.00	0.00	7,203.0	2,142.7	-53.1	2,142.7	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Grant Salisbury 2E-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 Salisbury 2E-14H-C268	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
9,300.0	90.00	0.00	7,203.0	2,242.7	-53.1	2,242.7	0.00	0.00	
9,400.0	90.00	0.00	7,203.0	2,342.7	-53.1	2,342.7	0.00	0.00	
9,500.0	90.00	0.00	7,203.0	2,442.7	-53.1	2,442.7	0.00	0.00	
9,600.0	90.00	0.00	7,203.0	2,542.7	-53.1	2,542.7	0.00	0.00	
9,700.0	90.00	0.00	7,203.0	2,642.7	-53.1	2,642.7	0.00	0.00	
9,800.0	90.00	0.00	7,203.0	2,742.7	-53.1	2,742.7	0.00	0.00	
9,900.0	90.00	0.00	7,203.0	2,842.7	-53.1	2,842.7	0.00	0.00	
10,000.0	90.00	0.00	7,203.0	2,942.7	-53.1	2,942.7	0.00	0.00	
10,100.0	90.00	0.00	7,203.0	3,042.7	-53.1	3,042.7	0.00	0.00	
10,200.0	90.00	0.00	7,203.0	3,142.7	-53.1	3,142.7	0.00	0.00	
10,300.0	90.00	0.00	7,203.0	3,242.7	-53.1	3,242.7	0.00	0.00	
10,400.0	90.00	0.00	7,203.0	3,342.7	-53.1	3,342.7	0.00	0.00	
10,500.0	90.00	0.00	7,203.0	3,442.7	-53.1	3,442.7	0.00	0.00	
10,600.0	90.00	0.00	7,203.0	3,542.7	-53.1	3,542.7	0.00	0.00	
10,700.0	90.00	0.00	7,203.0	3,642.7	-53.1	3,642.7	0.00	0.00	
10,800.0	90.00	0.00	7,203.0	3,742.7	-53.1	3,742.7	0.00	0.00	
10,900.0	90.00	0.00	7,203.0	3,842.7	-53.1	3,842.7	0.00	0.00	
11,000.0	90.00	0.00	7,203.0	3,942.7	-53.1	3,942.7	0.00	0.00	
11,100.0	90.00	0.00	7,203.0	4,042.7	-53.1	4,042.7	0.00	0.00	
11,200.0	90.00	0.00	7,203.0	4,142.7	-53.1	4,142.7	0.00	0.00	
11,300.0	90.00	0.00	7,203.0	4,242.7	-53.1	4,242.7	0.00	0.00	
11,400.0	90.00	0.00	7,203.0	4,342.7	-53.1	4,342.7	0.00	0.00	
11,500.0	90.00	0.00	7,203.0	4,442.7	-53.1	4,442.7	0.00	0.00	
11,600.0	90.00	0.00	7,203.0	4,542.7	-53.1	4,542.7	0.00	0.00	
11,700.0	90.00	0.00	7,203.0	4,642.7	-53.1	4,642.7	0.00	0.00	
11,800.0	90.00	0.00	7,203.0	4,742.7	-53.1	4,742.7	0.00	0.00	
11,900.0	90.00	0.00	7,203.0	4,842.7	-53.1	4,842.7	0.00	0.00	
12,000.0	90.00	0.00	7,203.0	4,942.7	-53.1	4,942.7	0.00	0.00	
12,100.0	90.00	0.00	7,203.0	5,042.7	-53.1	5,042.7	0.00	0.00	
12,200.0	90.00	0.00	7,203.0	5,142.7	-53.1	5,142.7	0.00	0.00	
12,300.0	90.00	0.00	7,203.0	5,242.7	-53.1	5,242.7	0.00	0.00	
12,400.0	90.00	0.00	7,203.0	5,342.7	-53.1	5,342.7	0.00	0.00	
12,500.0	90.00	0.00	7,203.0	5,442.7	-53.1	5,442.7	0.00	0.00	
12,600.0	90.00	0.00	7,203.0	5,542.7	-53.1	5,542.7	0.00	0.00	
12,700.0	90.00	0.00	7,203.0	5,642.7	-53.1	5,642.7	0.00	0.00	
12,800.0	90.00	0.00	7,203.0	5,742.7	-53.1	5,742.7	0.00	0.00	
12,900.0	90.00	0.00	7,203.0	5,842.7	-53.1	5,842.7	0.00	0.00	
13,000.0	90.00	0.00	7,203.0	5,942.7	-53.1	5,942.7	0.00	0.00	
13,100.0	90.00	0.00	7,203.0	6,042.7	-53.1	6,042.7	0.00	0.00	
13,200.0	90.00	0.00	7,203.0	6,142.7	-53.1	6,142.7	0.00	0.00	
13,253.7	90.00	0.00	7,203.0	6,196.4	-53.1	6,196.4	0.00	0.00	TD at 13253.7 - Grant Salisbury 2E-14H-C268 I

Targets									
Target Name									
- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- Shape									
Grant Salisbury 2E-14H- - plan hits target center - Point	0.00	0.00	7,203.0	6,196.4	-53.1	1,301,333.18	3,147,047.05	40.159350	-104.973910

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Grant Salisbury 2E-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 Salisbury 2E-14H-C268	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
194.0	194.0	Fox Hills - BASE				
4,182.0	4,182.0	Sussex				
4,436.0	4,436.0	Sussex Marker				
4,729.0	4,729.0	Shannon				
6,196.5	6,194.0	Teepee Buttes (*if present)				
7,112.4	7,055.0	Sharon Springs				
7,280.6	7,148.0	Niobrara				
7,402.3	7,188.0	B Chalk				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
5,000.0	5,000.0	0.0	0.0	KOP @ 5000'	
5,196.1	5,196.0	-6.2	-2.5	EOB; Inc=3.92°	
6,597.2	6,593.8	-95.4	-37.7	Start build/turn @ 6597' MD	
7,533.7	7,203.0	476.4	-53.1	LP @ 7203' TVD; 90°	
13,253.7	7,203.0	6,196.4	-53.1	TD at 13253.7	

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S14-T2N-R68W (Grant Elmquist/Salisbury)

Grant Salisbury 2E-14H-C268

Hz

Plan #1

Anticollision Report

08 May, 2013

Cathedral Energy Services

Anticollision Report

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

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

Survey Tool Program	Date	5/8/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	13,253.7	Plan #1 (Hz)	MWD	Geolink MWD

Cathedral Energy Services

Anticollision Report

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

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance		Separation Factor	Warning
			Between Centres (ft)	Between Ellipses (ft)		
S14-T2N-R68W (Grant Elmquist/Salisbury)						
BERGER 32-23 (EXISTING) - EXISTING - NO SURVEY						Out of range
DEL CAMINO 11-14 (EXISTING) - EXISTING - NO SURV						Out of range
ELMQUIST 0-0-23 (EXISTING) - EXISTING - SURVEYS						Out of range
ELMQUIST 1 (EXISTING) - EXISTING - GYRO						Out of range
ELMQUIST 11-23 (EXISTING) - EXISTING - GYRO						Out of range
ELMQUIST 12-23 (EXISTING) - EXISTING - NO SURVE						Out of range
ELMQUIST 21-23 (EXISTING) - EXISTING - SURVEYS						Out of range
ELMQUIST 2-4-23 (EXISTING) - EXISTING - SURVEYS						Out of range
ELMQUIST 4-2-23 (EXISTING) - EXISTING - SURVEYS						Out of range
ELMQUIST 4-4-23 (EXISTING) - EXISTING - SURVEYS						Out of range
GRANT 23-11 (EXISTING) - EXISTING - SURVEYS	10,273.4	7,508.4	218.4	131.4	2.511	CC, ES, SF
GRANT 2-8-11 (EXISTING) - EXISTING - SURVEYS	8,488.6	7,458.7	165.0	120.8	3.736	CC, ES
GRANT 2-8-11 (EXISTING) - EXISTING - SURVEYS	8,500.0	7,458.7	165.4	121.0	3.729	SF
GRANT 3-6-11 (EXISTING) - EXISTING - SURVEYS						Out of range
Grant Elmquist 2A-14H-C268 - Hz - Plan #1						Out of range
Grant Elmquist 2B-14H-C268 - Hz - Plan #1						Out of range
Grant Elmquist 2C-14H-C268 - Hz - Plan #1						Out of range
Grant Elmquist 2D-14H-C268 - Hz - Plan #1	7,960.3	7,231.2	336.3	301.1	9.562	CC, ES
Grant Elmquist 2D-14H-C268 - Hz - Plan #1	8,000.0	7,209.1	337.8	302.1	9.469	SF
Grant Elmquist 2E-14H-C268 - Hz - Plan #1	7,408.3	7,639.1	165.8	137.5	5.854	CC, ES
Grant Elmquist 2E-14H-C268 - Hz - Plan #1	7,700.0	7,355.7	171.6	141.4	5.686	SF
Grant Elmquist 2F-14H-C268 - Hz - Plan #1						Out of range
Grant Elmquist 2G-14H-C268 - Hz - Plan #1						Out of range
Grant Salisbury 2A-14H-C268 - Hz - Plan #1	200.0	200.0	39.1	38.5	59.961	CC, ES
Grant Salisbury 2A-14H-C268 - Hz - Plan #1	500.0	494.9	54.6	52.9	32.118	SF
Grant Salisbury 2B-14H-C268 - Hz - Plan #1	300.0	300.0	30.8	29.8	30.697	CC, ES
Grant Salisbury 2B-14H-C268 - Hz - Plan #1	500.0	497.6	37.6	35.9	22.169	SF
Grant Salisbury 2C-14H-C268 - Hz - Plan #1	400.0	400.0	19.6	18.2	14.487	CC, ES
Grant Salisbury 2C-14H-C268 - Hz - Plan #1	500.0	499.3	21.3	19.6	12.533	SF
Grant Salisbury 2D-14H-C268 - Hz - Plan #1	400.0	400.0	11.2	9.8	8.278	CC, ES
Grant Salisbury 2D-14H-C268 - Hz - Plan #1	13,253.7	13,475.3	450.1	251.9	2.271	SF
Grant Salisbury 2F-14H-C268 - Hz - Plan #1	600.0	600.0	8.4	6.3	4.093	CC, ES
Grant Salisbury 2F-14H-C268 - Hz - Plan #1	13,253.7	13,323.1	355.6	137.3	1.629	SF
HSR-BEAR 13-14A (EXISTING) - EXISTING - SURVEYS						Out of range
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
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						Out of range
OLANDER 1 (EXISTING) - EXISTING - NO SURVEYS						Out of range
OLANDER 2 (EXISTING) - EXISTING - NO SURVEYS	7,210.0	7,107.0	199.1	173.7	7.838	CC, ES, SF
OLANDER U 14-11 (EXISTING) - EXISTING - NO SURV						Out of range
OLANDER U 14-14 (EXISTING) - EXISTING - NO SURV						Out of range
OLSON 1 (EXISTING) - PLAN ONLY - PLAN #1						Out of range
SALISBURY 1 (EXISTING) - EXISTING - GYRO						Out of range
SALISBURY 13-11 (EXISTING) - EXISTING - SURVEYS						Out of range
SALISBURY 14-11 (EXISTING) - EXISTING - SURVEYS						Out of range
SALISBURY 2-4-11 (EXISTING) - EXISTING - SURVEYS	10,951.6	7,389.5	158.0	60.7	1.624	CC, ES, SF

CC - Min centre to center distance or convergent 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 Salisbury 2E-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 Salisbury 2E-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 #1	Offset TVD Reference:	Offset Datum

Offset Design S14-T2N-R68W (Grant Elmquist/Salisbury) - GRANT 23-11 (EXISTING) - EXISTING - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 42-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
9,900.0	7,203.0	7,506.8	7,193.4	52.9	35.3	90.64	3,216.2	165.3	432.6	352.0	80.61	5.367		
10,000.0	7,203.0	7,507.2	7,193.8	54.6	35.3	90.75	3,216.2	165.3	350.0	267.6	82.32	4.251		
10,100.0	7,203.0	7,507.7	7,194.2	56.3	35.3	90.86	3,216.2	165.3	278.9	194.9	84.03	3.319		
10,200.0	7,203.0	7,508.1	7,194.6	58.1	35.3	90.97	3,216.2	165.3	230.4	144.7	85.74	2.688		
10,273.4	7,203.0	7,508.4	7,194.9	59.3	35.3	91.05	3,216.2	165.3	218.4	131.4	87.00	2.511 CC, ES, SF		
10,300.0	7,203.0	7,508.5	7,195.0	59.8	35.3	91.08	3,216.2	165.3	220.0	132.6	87.46	2.516		
10,400.0	7,203.0	7,508.9	7,195.4	61.5	35.3	91.19	3,216.2	165.3	252.5	163.3	89.18	2.831		
10,500.0	7,203.0	7,509.3	7,195.9	63.2	35.3	91.30	3,216.2	165.3	314.7	223.8	90.89	3.462		
10,600.0	7,203.0	7,509.8	7,196.3	64.9	35.3	91.42	3,216.2	165.3	392.9	300.3	92.61	4.242		
10,700.0	7,203.0	7,510.2	7,196.7	66.6	35.3	91.53	3,216.2	165.3	479.2	384.9	94.33	5.080		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant Salisbury 2E-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 Salisbury 2E-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 #1	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		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,100.0	7,203.0	7,458.7	7,188.0	23.4	32.9	-88.99	1,431.4	-218.0	422.2	384.1	38.13	11.074		
8,200.0	7,203.0	7,458.7	7,188.0	24.9	32.9	-88.99	1,431.4	-218.0	332.5	292.8	39.64	8.387		
8,300.0	7,203.0	7,458.7	7,188.0	26.4	32.9	-88.99	1,431.4	-218.0	250.6	209.4	41.18	6.085		
8,400.0	7,203.0	7,458.7	7,188.0	28.0	32.9	-89.00	1,431.4	-218.0	187.3	144.5	42.75	4.381		
8,488.6	7,203.0	7,458.7	7,188.0	29.4	32.9	-89.00	1,431.4	-218.0	165.0	120.8	44.16	3.736 CC, ES		
8,500.0	7,203.0	7,458.7	7,188.0	29.6	32.9	-89.00	1,431.4	-218.0	165.4	121.0	44.34	3.729 SF		
8,600.0	7,203.0	7,458.7	7,188.0	31.2	32.9	-89.00	1,431.4	-218.0	199.0	153.1	45.94	4.332		
8,700.0	7,203.0	7,458.8	7,188.0	32.8	32.9	-89.01	1,431.4	-218.0	268.1	220.5	47.56	5.637		
8,800.0	7,203.0	7,458.8	7,188.0	34.4	32.9	-89.01	1,431.4	-218.0	352.4	303.2	49.20	7.162		
8,900.0	7,203.0	7,458.8	7,188.1	36.1	32.9	-89.01	1,431.4	-218.0	443.2	392.4	50.84	8.717		

Cathedral Energy Services

Anticollision Report

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

Offset Design													S14-T2N-R68W (Grant Elmquist/Salisbury) - Grant Elmquist 2D-14H-C268 - Hz - Plan #1		Offset Site Error:		0.0 ft
Survey Program: 0-MWD															Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor					
7,200.0	7,108.6	8,046.0	7,410.0	13.0	17.2	-124.30	162.5	-414.1	472.1	446.8	25.33	18.636					
7,300.0	7,156.0	7,953.0	7,410.0	13.6	16.5	-122.40	255.5	-413.1	441.6	416.1	25.41	17.378					
7,400.0	7,187.5	7,858.2	7,410.0	14.4	15.8	-120.89	350.2	-411.4	422.2	396.4	25.76	16.387					
7,500.0	7,202.0	7,755.9	7,409.9	15.4	15.3	-120.14	452.5	-409.6	412.8	386.6	26.23	15.740					
7,600.0	7,203.0	7,595.5	7,385.2	16.5	14.9	-117.35	610.4	-405.4	402.4	375.1	27.27	14.759					
7,700.0	7,203.0	7,458.0	7,330.0	17.8	14.9	-110.10	735.8	-400.1	381.0	351.5	29.53	12.903					
7,800.0	7,203.0	7,350.7	7,267.1	19.1	15.1	-100.61	822.4	-395.0	356.8	324.7	32.10	11.116					
7,900.0	7,203.0	7,269.9	7,209.6	20.5	15.3	-91.12	879.0	-390.7	339.6	305.4	34.21	9.928					
7,960.3	7,203.0	7,231.2	7,179.4	21.3	15.3	-85.98	903.1	-388.5	336.3	301.1	35.17	9.562	CC, ES				
8,000.0	7,203.0	7,209.1	7,161.5	21.9	15.4	-82.91	915.9	-387.3	337.8	302.1	35.68	9.469	SF				
8,100.0	7,203.0	7,162.7	7,122.2	23.4	15.5	-76.30	940.6	-384.6	356.2	319.5	36.70	9.704					
8,200.0	7,203.0	7,126.5	7,090.3	24.9	15.6	-71.11	957.5	-382.5	394.3	356.8	37.50	10.515					
8,300.0	7,203.0	7,100.0	7,066.3	26.4	15.6	-67.37	968.6	-380.9	448.7	410.4	38.29	11.719					

Cathedral Energy Services

Anticollision Report

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

Offset Design S14-T2N-R68W (Grant Elmquist/Salisbury) - Grant Elmquist 2E-14H-C268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
6,800.0	6,794.2	8,063.6	7,200.0	11.9	18.2	130.71	-73.9	109.0	433.3	405.5	27.77	15.602		
6,900.0	6,887.0	8,026.8	7,200.0	12.1	17.7	133.95	-37.1	109.3	349.1	322.3	26.76	13.046		
7,000.0	6,972.0	7,974.5	7,200.0	12.2	17.1	132.04	15.3	109.8	276.9	250.8	26.14	10.594		
7,100.0	7,046.6	7,908.1	7,200.0	12.5	16.4	125.83	81.6	110.4	221.3	195.2	26.07	8.488		
7,200.0	7,108.6	7,829.8	7,200.0	13.0	15.6	115.93	159.9	111.1	185.8	159.1	26.71	6.958		
7,300.0	7,156.0	7,742.0	7,200.0	13.6	14.8	104.28	247.7	111.8	169.5	141.9	27.63	6.137		
7,400.0	7,187.5	7,647.2	7,200.0	14.4	14.1	94.41	342.5	112.6	165.8	137.6	28.28	5.864		
7,408.3	7,189.3	7,639.1	7,200.0	14.5	14.1	93.78	350.6	112.7	165.8	137.5	28.33	5.854 CC, ES		
7,500.0	7,202.0	7,548.4	7,200.0	15.4	13.5	89.34	441.3	113.5	166.6	137.9	28.75	5.794		
7,600.0	7,203.0	7,449.3	7,191.8	16.5	13.2	86.18	539.9	114.2	167.7	138.2	29.47	5.690		
7,700.0	7,203.0	7,355.7	7,168.6	17.8	13.0	78.41	630.5	114.6	171.6	141.4	30.18	5.686 SF		
7,800.0	7,203.0	7,271.5	7,135.4	19.1	13.1	68.04	707.8	114.6	184.2	153.9	30.30	6.078		
7,900.0	7,203.0	7,200.0	7,098.5	20.5	13.2	58.05	769.0	114.4	210.8	181.0	29.76	7.082		
8,000.0	7,203.0	7,136.3	7,059.5	21.9	13.3	49.37	819.3	114.1	252.6	223.8	28.81	8.766		
8,100.0	7,203.0	7,084.0	7,023.4	23.4	13.5	42.90	857.2	113.8	307.5	279.5	27.96	10.997		
8,200.0	7,203.0	7,040.0	6,990.6	24.9	13.6	38.09	886.3	113.4	372.3	345.0	27.30	13.635		
8,300.0	7,203.0	7,000.0	6,958.8	26.4	13.8	34.22	910.6	113.0	444.5	417.7	26.77	16.605		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant Salisbury 2E-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 Salisbury 2E-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 #1	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		Offset		Semi Major Axis			Distance				Total	Separation	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-39.1	39.1					
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-39.1	39.1	38.8	0.30	128.881		
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-39.1	39.1	38.5	0.65	59.961 CC, ES		
300.0	300.0	298.6	298.6	0.5	0.5	-90.14	-0.1	-40.8	40.9	39.9	1.00	40.867		
400.0	400.0	397.0	396.8	0.7	0.7	-90.50	-0.4	-45.9	46.0	44.7	1.35	34.127		
500.0	500.0	494.9	494.4	0.8	0.9	-90.95	-0.9	-54.3	54.6	52.9	1.70	32.118 SF		
600.0	600.0	592.2	590.9	1.0	1.2	-91.39	-1.6	-65.9	66.5	64.5	2.05	32.382		
700.0	700.0	688.5	686.1	1.2	1.5	-91.76	-2.5	-80.6	81.8	79.4	2.42	33.877		
800.0	800.0	783.7	779.7	1.4	1.8	-92.06	-3.5	-98.3	100.4	97.7	2.78	36.081		
900.0	900.0	877.8	871.5	1.5	2.2	-92.29	-4.8	-118.8	122.3	119.1	3.16	38.717		
1,000.0	1,000.0	975.1	966.1	1.7	2.6	-92.47	-6.1	-141.4	145.6	142.0	3.54	41.073		
1,100.0	1,100.0	1,072.3	1,060.7	1.9	3.0	-92.60	-7.5	-164.1	168.9	164.9	3.93	42.938		
1,200.0	1,200.0	1,169.6	1,155.2	2.1	3.5	-92.70	-8.8	-186.7	192.2	187.8	4.32	44.446		
1,300.0	1,300.0	1,266.8	1,249.8	2.2	3.9	-92.78	-10.2	-209.3	215.5	210.8	4.72	45.690		
1,400.0	1,400.0	1,364.1	1,344.4	2.4	4.3	-92.84	-11.5	-231.9	238.8	233.7	5.11	46.732		
1,500.0	1,500.0	1,461.3	1,438.9	2.6	4.8	-92.89	-12.9	-254.5	262.1	256.6	5.50	47.617		
1,600.0	1,600.0	1,558.5	1,533.5	2.8	5.2	-92.93	-14.2	-277.2	285.4	279.5	5.90	48.378		
1,700.0	1,700.0	1,655.8	1,628.1	2.9	5.6	-92.97	-15.6	-299.8	308.7	302.4	6.29	49.040		
1,800.0	1,800.0	1,753.0	1,722.6	3.1	6.1	-93.00	-16.9	-322.4	332.0	325.3	6.69	49.619		
1,900.0	1,900.0	1,850.3	1,817.2	3.3	6.5	-93.03	-18.2	-345.0	355.3	348.2	7.09	50.131		
2,000.0	2,000.0	1,947.5	1,911.8	3.5	7.0	-93.05	-19.6	-367.6	378.6	371.1	7.48	50.587		
2,100.0	2,100.0	2,044.8	2,006.3	3.6	7.4	-93.07	-20.9	-390.3	401.9	394.0	7.88	50.995		
2,200.0	2,200.0	2,142.0	2,100.9	3.8	7.8	-93.09	-22.3	-412.9	425.2	416.9	8.28	51.363		
2,300.0	2,300.0	2,239.3	2,195.5	4.0	8.3	-93.11	-23.6	-435.5	448.5	439.8	8.68	51.696		
2,400.0	2,400.0	2,336.5	2,290.1	4.2	8.7	-93.12	-25.0	-458.1	471.8	462.7	9.07	51.998		
2,500.0	2,500.0	2,433.8	2,384.6	4.3	9.1	-93.14	-26.3	-480.8	495.1	485.6	9.47	52.275		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant Salisbury 2E-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 Salisbury 2E-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 #1	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		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-30.8	30.8					
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-30.8	30.8	30.4	0.30	101.264		
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-30.8	30.8	30.1	0.65	47.112		
300.0	300.0	300.0	300.0	0.5	0.5	-90.00	0.0	-30.8	30.8	29.8	1.00	30.697 CC, ES		
400.0	400.0	398.9	398.9	0.7	0.7	-90.25	-0.1	-32.5	32.5	31.1	1.35	24.068		
500.0	500.0	497.6	497.4	0.8	0.9	-90.86	-0.6	-37.5	37.6	35.9	1.70	22.169 SF		
600.0	600.0	595.8	595.2	1.0	1.1	-91.57	-1.3	-46.0	46.2	44.2	2.05	22.567		
700.0	700.0	693.3	692.0	1.2	1.3	-92.22	-2.2	-57.6	58.2	55.8	2.40	24.229		
800.0	800.0	789.9	787.5	1.4	1.6	-92.74	-3.5	-72.4	73.5	70.8	2.76	26.632		
900.0	900.0	887.4	883.5	1.5	1.9	-93.13	-4.9	-89.8	91.4	88.3	3.13	29.237		
1,000.0	1,000.0	985.8	980.2	1.7	2.3	-93.40	-6.4	-107.5	109.5	106.0	3.50	31.304		
1,100.0	1,100.0	1,084.1	1,076.9	1.9	2.6	-93.59	-7.9	-125.2	127.6	123.7	3.87	32.959		
1,200.0	1,200.0	1,182.5	1,173.7	2.1	3.0	-93.73	-9.3	-142.9	145.6	141.4	4.24	34.311		
1,300.0	1,300.0	1,280.9	1,270.4	2.2	3.3	-93.84	-10.8	-160.7	163.7	159.1	4.62	35.436		
1,400.0	1,400.0	1,379.2	1,367.1	2.4	3.7	-93.93	-12.3	-178.4	181.8	176.8	5.00	36.385		
1,500.0	1,500.0	1,477.6	1,463.9	2.6	4.0	-94.01	-13.7	-196.1	199.9	194.5	5.37	37.196		
1,600.0	1,600.0	1,575.9	1,560.6	2.8	4.4	-94.07	-15.2	-213.8	217.9	212.2	5.75	37.898		
1,700.0	1,700.0	1,674.3	1,657.4	2.9	4.7	-94.12	-16.7	-231.5	236.0	229.9	6.13	38.511		
1,800.0	1,800.0	1,772.6	1,754.1	3.1	5.1	-94.17	-18.2	-249.2	254.1	247.6	6.51	39.050		
1,900.0	1,900.0	1,871.0	1,850.8	3.3	5.4	-94.20	-19.6	-266.9	272.1	265.3	6.88	39.528		
2,000.0	2,000.0	1,969.3	1,947.6	3.5	5.8	-94.24	-21.1	-284.7	290.2	283.0	7.26	39.955		
2,100.0	2,100.0	2,067.7	2,044.3	3.6	6.1	-94.27	-22.6	-302.4	308.3	300.6	7.64	40.339		
2,200.0	2,200.0	2,166.0	2,141.0	3.8	6.5	-94.30	-24.0	-320.1	326.4	318.3	8.02	40.685		
2,300.0	2,300.0	2,264.4	2,237.8	4.0	6.8	-94.32	-25.5	-337.8	344.4	336.0	8.40	40.999		
2,400.0	2,400.0	2,362.7	2,334.5	4.2	7.2	-94.34	-27.0	-355.5	362.5	353.7	8.78	41.286		
2,500.0	2,500.0	2,461.1	2,431.2	4.3	7.6	-94.36	-28.5	-373.2	380.6	371.4	9.16	41.548		
2,600.0	2,600.0	2,559.4	2,528.0	4.5	7.9	-94.38	-29.9	-390.9	398.6	389.1	9.54	41.789		
2,700.0	2,700.0	2,657.8	2,624.7	4.7	8.3	-94.39	-31.4	-408.7	416.7	406.8	9.92	42.011		
2,800.0	2,800.0	2,756.2	2,721.4	4.9	8.6	-94.41	-32.9	-426.4	434.8	424.5	10.30	42.217		
2,900.0	2,900.0	2,854.5	2,818.2	5.0	9.0	-94.42	-34.3	-444.1	452.9	442.2	10.68	42.407		
3,000.0	3,000.0	2,952.9	2,914.9	5.2	9.4	-94.43	-35.8	-461.8	470.9	459.9	11.06	42.584		
3,100.0	3,100.0	3,051.2	3,011.6	5.4	9.7	-94.45	-37.3	-479.5	489.0	477.6	11.44	42.750		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant Salisbury 2E-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 Salisbury 2E-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 #1	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		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-19.6	19.6					
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-19.6	19.6	19.3	0.30	64.441		
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	14.487 CC, ES		
500.0	500.0	499.3	499.3	0.8	0.9	-90.56	-0.2	-21.3	21.3	19.6	1.70	12.533 SF		
600.0	600.0	598.3	598.2	1.0	1.0	-91.80	-0.8	-26.4	26.5	24.4	2.05	12.923		
700.0	700.0	696.9	696.4	1.2	1.2	-93.05	-1.9	-34.8	35.1	32.7	2.40	14.625		
800.0	800.0	795.4	794.2	1.4	1.5	-94.01	-3.3	-46.3	46.8	44.1	2.75	17.015		
900.0	900.0	894.7	892.7	1.5	1.7	-94.62	-4.7	-58.5	59.2	56.1	3.11	19.037		
1,000.0	1,000.0	993.9	991.2	1.7	2.0	-95.02	-6.2	-70.7	71.5	68.1	3.47	20.634		
1,100.0	1,100.0	1,093.1	1,089.6	1.9	2.2	-95.30	-7.7	-82.9	83.9	80.1	3.83	21.925		
1,200.0	1,200.0	1,192.4	1,188.1	2.1	2.5	-95.51	-9.2	-95.1	96.3	92.1	4.19	22.991		
1,300.0	1,300.0	1,291.6	1,286.6	2.2	2.8	-95.67	-10.7	-107.3	108.6	104.1	4.55	23.884		
1,400.0	1,400.0	1,390.8	1,385.0	2.4	3.0	-95.80	-12.1	-119.5	121.0	116.1	4.91	24.644		
1,500.0	1,500.0	1,490.1	1,483.5	2.6	3.3	-95.90	-13.6	-131.7	133.4	128.1	5.27	25.297		
1,600.0	1,600.0	1,589.3	1,582.0	2.8	3.6	-95.99	-15.1	-143.9	145.8	140.1	5.64	25.865		
1,700.0	1,700.0	1,688.5	1,680.4	2.9	3.9	-96.06	-16.6	-156.0	158.1	152.1	6.00	26.363		
1,800.0	1,800.0	1,787.7	1,778.9	3.1	4.1	-96.13	-18.1	-168.2	170.5	164.1	6.36	26.804		
1,900.0	1,900.0	1,887.0	1,877.4	3.3	4.4	-96.18	-19.5	-180.4	182.9	176.2	6.72	27.196		
2,000.0	2,000.0	1,986.2	1,975.8	3.5	4.7	-96.23	-21.0	-192.6	195.3	188.2	7.09	27.548		
2,100.0	2,100.0	2,085.4	2,074.3	3.6	5.0	-96.27	-22.5	-204.8	207.6	200.2	7.45	27.865		
2,200.0	2,200.0	2,184.7	2,172.8	3.8	5.2	-96.31	-24.0	-217.0	220.0	212.2	7.81	28.151		
2,300.0	2,300.0	2,283.9	2,271.2	4.0	5.5	-96.34	-25.5	-229.2	232.4	224.2	8.18	28.413		
2,400.0	2,400.0	2,383.1	2,369.7	4.2	5.8	-96.37	-26.9	-241.4	244.7	236.2	8.54	28.651		
2,500.0	2,500.0	2,482.4	2,468.2	4.3	6.0	-96.40	-28.4	-253.6	257.1	248.2	8.91	28.870		
2,600.0	2,600.0	2,581.6	2,566.7	4.5	6.3	-96.42	-29.9	-265.7	269.5	260.2	9.27	29.071		
2,700.0	2,700.0	2,680.8	2,665.1	4.7	6.6	-96.44	-31.4	-277.9	281.9	272.2	9.63	29.258		
2,800.0	2,800.0	2,780.1	2,763.6	4.9	6.9	-96.46	-32.9	-290.1	294.2	284.2	10.00	29.430		
2,900.0	2,900.0	2,879.3	2,862.1	5.0	7.1	-96.48	-34.3	-302.3	306.6	296.2	10.36	29.590		
3,000.0	3,000.0	2,978.5	2,960.5	5.2	7.4	-96.50	-35.8	-314.5	319.0	308.3	10.73	29.739		
3,100.0	3,100.0	3,077.8	3,059.0	5.4	7.7	-96.52	-37.3	-326.7	331.4	320.3	11.09	29.879		
3,200.0	3,200.0	3,177.0	3,157.5	5.6	8.0	-96.53	-38.8	-338.9	343.7	332.3	11.45	30.009		
3,300.0	3,300.0	3,276.2	3,255.9	5.7	8.3	-96.54	-40.3	-351.1	356.1	344.3	11.82	30.131		
3,400.0	3,400.0	3,375.5	3,354.4	5.9	8.5	-96.56	-41.7	-363.2	368.5	356.3	12.18	30.246		
3,500.0	3,500.0	3,474.7	3,452.9	6.1	8.8	-96.57	-43.2	-375.4	380.8	368.3	12.55	30.354		
3,600.0	3,600.0	3,573.9	3,551.3	6.3	9.1	-96.58	-44.7	-387.6	393.2	380.3	12.91	30.456		
3,700.0	3,700.0	3,673.1	3,649.8	6.4	9.4	-96.59	-46.2	-399.8	405.6	392.3	13.28	30.552		
3,800.0	3,800.0	3,772.4	3,748.3	6.6	9.6	-96.60	-47.7	-412.0	418.0	404.3	13.64	30.644		
3,900.0	3,900.0	3,871.6	3,846.8	6.8	9.9	-96.61	-49.2	-424.2	430.3	416.3	14.00	30.730		
4,000.0	4,000.0	3,970.8	3,945.2	7.0	10.2	-96.62	-50.6	-436.4	442.7	428.3	14.37	30.812		
4,100.0	4,100.0	4,070.1	4,043.7	7.1	10.5	-96.63	-52.1	-448.6	455.1	440.4	14.73	30.890		
4,200.0	4,200.0	4,169.3	4,142.2	7.3	10.7	-96.63	-53.6	-460.8	467.5	452.4	15.10	30.964		
4,300.0	4,300.0	4,268.5	4,240.6	7.5	11.0	-96.64	-55.1	-472.9	479.8	464.4	15.46	31.034		
4,400.0	4,400.0	4,367.8	4,339.1	7.7	11.3	-96.65	-56.6	-485.1	492.2	476.4	15.83	31.102		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant Salisbury 2E-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 Salisbury 2E-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 #1	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		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	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	36.823		
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-11.2	11.2	10.5	0.65	17.132		
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	CC, ES	
500.0	500.0	499.6	499.6	0.8	0.9	-91.54	-0.3	-12.9	12.9	11.2	1.70	7.586		
600.0	600.0	598.9	598.8	1.0	1.0	-94.40	-1.4	-17.9	18.0	16.0	2.05	8.808		
700.0	700.0	698.6	698.2	1.2	1.2	-96.46	-2.8	-25.1	25.3	22.9	2.40	10.547		
800.0	800.0	798.3	797.6	1.4	1.4	-97.60	-4.3	-32.2	32.6	29.8	2.75	11.852		
900.0	900.0	898.0	897.1	1.5	1.6	-98.32	-5.8	-39.4	39.9	36.8	3.10	12.860		
1,000.0	1,000.0	997.8	996.5	1.7	1.9	-98.82	-7.2	-46.5	47.2	43.8	3.46	13.663		
1,100.0	1,100.0	1,097.5	1,096.0	1.9	2.1	-99.19	-8.7	-53.7	54.5	50.7	3.81	14.316		
1,200.0	1,200.0	1,197.2	1,195.5	2.1	2.3	-99.47	-10.1	-60.8	61.8	57.7	4.16	14.858		
1,300.0	1,300.0	1,297.0	1,294.9	2.2	2.5	-99.69	-11.6	-68.0	69.2	64.6	4.52	15.315		
1,400.0	1,400.0	1,396.7	1,394.4	2.4	2.7	-99.87	-13.1	-75.1	76.5	71.6	4.87	15.705		
1,500.0	1,500.0	1,496.4	1,493.9	2.6	2.9	-100.01	-14.5	-82.3	83.8	78.6	5.22	16.042		
1,600.0	1,600.0	1,596.2	1,593.3	2.8	3.1	-100.14	-16.0	-89.5	91.1	85.5	5.58	16.336		
1,700.0	1,700.0	1,695.9	1,692.8	2.9	3.3	-100.24	-17.5	-96.6	98.4	92.5	5.93	16.595		
1,800.0	1,800.0	1,795.6	1,792.3	3.1	3.6	-100.33	-18.9	-103.8	105.8	99.5	6.29	16.824		
1,900.0	1,900.0	1,895.4	1,891.7	3.3	3.8	-100.41	-20.4	-110.9	113.1	106.4	6.64	17.029		
2,000.0	2,000.0	1,995.1	1,991.2	3.5	4.0	-100.48	-21.8	-118.1	120.4	113.4	6.99	17.213		
2,100.0	2,100.0	2,094.8	2,090.7	3.6	4.2	-100.54	-23.3	-125.2	127.7	120.4	7.35	17.379		
2,200.0	2,200.0	2,194.6	2,190.1	3.8	4.4	-100.59	-24.8	-132.4	135.0	127.3	7.70	17.530		
2,300.0	2,300.0	2,294.3	2,289.6	4.0	4.6	-100.64	-26.2	-139.5	142.4	134.3	8.06	17.668		
2,400.0	2,400.0	2,394.0	2,389.0	4.2	4.8	-100.69	-27.7	-146.7	149.7	141.3	8.41	17.793		
2,500.0	2,500.0	2,493.8	2,488.5	4.3	5.1	-100.73	-29.1	-153.8	157.0	148.2	8.77	17.909		
2,600.0	2,600.0	2,593.5	2,588.0	4.5	5.3	-100.76	-30.6	-161.0	164.3	155.2	9.12	18.016		
2,700.0	2,700.0	2,693.2	2,687.4	4.7	5.5	-100.80	-32.1	-168.1	171.6	162.2	9.47	18.114		
2,800.0	2,800.0	2,792.9	2,786.9	4.9	5.7	-100.83	-33.5	-175.3	179.0	169.1	9.83	18.206		
2,900.0	2,900.0	2,892.7	2,886.4	5.0	5.9	-100.86	-35.0	-182.4	186.3	176.1	10.18	18.291		
3,000.0	3,000.0	2,992.4	2,985.8	5.2	6.1	-100.88	-36.5	-189.6	193.6	183.1	10.54	18.370		
3,100.0	3,100.0	3,092.1	3,085.3	5.4	6.3	-100.91	-37.9	-196.8	200.9	190.0	10.89	18.445		
3,200.0	3,200.0	3,191.9	3,184.8	5.6	6.6	-100.93	-39.4	-203.9	208.2	197.0	11.25	18.514		
3,300.0	3,300.0	3,291.6	3,284.2	5.7	6.8	-100.95	-40.8	-211.1	215.6	204.0	11.60	18.579		
3,400.0	3,400.0	3,391.3	3,383.7	5.9	7.0	-100.97	-42.3	-218.2	222.9	210.9	11.96	18.641		
3,500.0	3,500.0	3,491.1	3,483.1	6.1	7.2	-100.99	-43.8	-225.4	230.2	217.9	12.31	18.699		
3,600.0	3,600.0	3,590.8	3,582.6	6.3	7.4	-101.01	-45.2	-232.5	237.5	224.9	12.67	18.753		
3,700.0	3,700.0	3,690.5	3,682.1	6.4	7.6	-101.02	-46.7	-239.7	244.8	231.8	13.02	18.805		
3,800.0	3,800.0	3,790.3	3,781.5	6.6	7.9	-101.04	-48.1	-246.8	252.2	238.8	13.37	18.854		
3,900.0	3,900.0	3,890.0	3,881.0	6.8	8.1	-101.05	-49.6	-254.0	259.5	245.7	13.73	18.900		
4,000.0	4,000.0	3,989.7	3,980.5	7.0	8.3	-101.06	-51.1	-261.1	266.8	252.7	14.08	18.944		
4,100.0	4,100.0	4,089.5	4,079.9	7.1	8.5	-101.08	-52.5	-268.3	274.1	259.7	14.44	18.986		
4,200.0	4,200.0	4,189.2	4,179.4	7.3	8.7	-101.09	-54.0	-275.4	281.4	266.6	14.79	19.025		
4,300.0	4,300.0	4,288.9	4,278.9	7.5	8.9	-101.10	-55.5	-282.6	288.8	273.6	15.15	19.063		
4,400.0	4,400.0	4,388.7	4,378.3	7.7	9.2	-101.11	-56.9	-289.7	296.1	280.6	15.50	19.100		
4,500.0	4,500.0	4,488.4	4,477.8	7.8	9.4	-101.12	-58.4	-296.9	303.4	287.5	15.86	19.134		
4,600.0	4,600.0	4,588.1	4,577.3	8.0	9.6	-101.13	-59.8	-304.1	310.7	294.5	16.21	19.167		
4,700.0	4,700.0	4,687.8	4,676.7	8.2	9.8	-101.14	-61.3	-311.2	318.0	301.5	16.57	19.199		
4,800.0	4,800.0	4,787.6	4,776.2	8.4	10.0	-101.15	-62.8	-318.4	325.4	308.4	16.92	19.229		
4,900.0	4,900.0	4,887.3	4,875.6	8.5	10.2	-101.16	-64.2	-325.5	332.7	315.4	17.27	19.258		
5,000.0	5,000.0	4,987.0	4,975.1	8.7	10.4	-101.17	-65.7	-332.7	340.0	322.4	17.63	19.286		
5,100.0	5,100.0	5,086.8	5,074.6	8.9	10.7	57.37	-67.1	-339.8	346.4	328.7	17.73	19.535		

CC - Min centre to center distance or convergent 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 Salisbury 2E-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 Salisbury 2E-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 #1	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				Offset		Semi Major Axis			Distance				Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,199.8	5,186.6	5,174.2	9.1	10.9	58.00	-68.6	-347.0	350.9	332.8	18.08	19.405		
5,300.0	5,299.6	5,286.4	5,273.7	9.2	11.1	58.91	-70.1	-354.1	354.7	336.2	18.44	19.237		
5,400.0	5,399.4	5,386.2	5,373.2	9.4	11.3	59.81	-71.5	-361.3	358.5	339.7	18.79	19.078		
5,500.0	5,499.1	5,485.9	5,472.7	9.6	11.5	60.68	-73.0	-368.5	362.4	343.3	19.15	18.927		
5,600.0	5,598.9	5,585.7	5,572.2	9.8	11.7	61.53	-74.5	-375.6	366.4	346.9	19.51	18.783		
5,700.0	5,698.7	5,685.5	5,671.7	10.0	12.0	62.37	-75.9	-382.8	370.5	350.6	19.87	18.647		
5,800.0	5,798.4	5,785.3	5,771.2	10.1	12.2	63.19	-77.4	-389.9	374.7	354.4	20.23	18.518		
5,900.0	5,898.2	5,885.0	5,870.7	10.3	12.4	63.98	-78.8	-397.1	378.9	358.3	20.60	18.394		
6,000.0	5,998.0	5,984.8	5,970.2	10.5	12.6	64.77	-80.3	-404.2	383.2	362.3	20.97	18.277		
6,100.0	6,097.7	6,084.6	6,069.7	10.7	12.8	65.53	-81.8	-411.4	387.6	366.3	21.34	18.166		
6,200.0	6,197.5	6,184.3	6,169.2	10.9	13.0	66.28	-83.2	-418.5	392.1	370.3	21.71	18.060		
6,300.0	6,297.3	6,284.1	6,268.7	11.1	13.3	67.01	-84.7	-425.7	396.6	374.5	22.08	17.959		
6,400.0	6,397.0	6,383.9	6,368.2	11.3	13.5	67.72	-86.1	-432.9	401.1	378.7	22.46	17.862		
6,500.0	6,496.8	6,483.7	6,467.7	11.5	13.7	68.42	-87.6	-440.0	405.8	382.9	22.83	17.770		
6,600.0	6,596.6	6,583.4	6,567.2	11.6	13.9	67.51	-89.1	-447.2	410.5	387.3	23.21	17.683		
6,700.0	6,696.4	6,683.1	6,666.6	11.8	14.1	-77.07	-90.5	-454.3	415.1	391.5	23.54	17.632		
6,800.0	6,794.2	6,780.5	6,763.8	11.9	14.3	-86.73	-92.0	-461.3	420.1	396.3	23.79	17.657		
6,900.0	6,887.0	6,875.8	6,858.8	12.1	14.5	-92.58	-92.6	-468.1	427.7	403.7	24.01	17.816		
7,000.0	6,972.0	6,981.9	6,963.6	12.2	14.7	-97.93	-79.0	-475.5	438.9	414.6	24.26	18.092		
7,100.0	7,046.6	7,098.7	7,073.9	12.5	14.9	-102.71	-42.0	-483.1	452.4	427.8	24.59	18.400		
7,200.0	7,108.6	7,228.2	7,184.6	13.0	15.2	-106.96	24.2	-490.5	466.9	441.8	25.08	18.619		
7,300.0	7,156.0	7,372.0	7,286.7	13.6	15.6	-110.56	124.8	-497.0	480.2	454.4	25.84	18.584		
7,400.0	7,187.5	7,529.8	7,366.3	14.4	16.5	-113.21	260.4	-501.5	490.2	463.2	27.04	18.129		
7,500.0	7,202.0	7,697.9	7,407.1	15.4	17.8	-114.59	422.8	-503.0	494.9	466.1	28.82	17.172		
7,600.0	7,203.0	7,821.8	7,410.0	16.5	19.0	-114.75	546.7	-502.1	494.5	463.5	30.94	15.980		
7,700.0	7,203.0	7,921.8	7,410.0	17.8	20.0	-114.79	646.7	-501.3	493.7	460.5	33.17	14.885		
7,800.0	7,203.0	8,021.8	7,410.0	19.1	21.2	-114.83	746.6	-500.4	492.9	457.3	35.53	13.870		
7,900.0	7,203.0	8,121.8	7,410.0	20.5	22.5	-114.88	846.6	-499.5	492.1	454.1	38.02	12.943		
8,000.0	7,203.0	8,221.8	7,410.0	21.9	23.8	-114.92	946.6	-498.6	491.3	450.7	40.60	12.101		
8,100.0	7,203.0	8,321.8	7,410.0	23.4	25.2	-114.96	1,046.6	-497.8	490.5	447.2	43.26	11.339		
8,200.0	7,203.0	8,421.8	7,410.0	24.9	26.6	-115.01	1,146.6	-496.9	489.7	443.7	45.98	10.650		
8,300.0	7,203.0	8,521.8	7,410.0	26.4	28.0	-115.05	1,246.6	-496.0	488.9	440.2	48.75	10.028		
8,400.0	7,203.0	8,621.8	7,410.0	28.0	29.5	-115.09	1,346.6	-495.1	488.1	436.6	51.57	9.465		
8,500.0	7,203.0	8,721.8	7,410.0	29.6	31.0	-115.14	1,446.6	-494.3	487.3	432.9	54.43	8.954		
8,600.0	7,203.0	8,821.8	7,410.0	31.2	32.6	-115.18	1,546.6	-493.4	486.5	429.2	57.31	8.489		
8,700.0	7,203.0	8,921.8	7,410.0	32.8	34.1	-115.22	1,646.6	-492.5	485.8	425.5	60.22	8.066		
8,800.0	7,203.0	9,021.8	7,410.0	34.4	35.7	-115.27	1,746.6	-491.7	485.0	421.8	63.16	7.679		
8,900.0	7,203.0	9,121.8	7,410.0	36.1	37.3	-115.31	1,846.6	-490.8	484.2	418.1	66.11	7.324		
9,000.0	7,203.0	9,221.8	7,410.0	37.7	38.9	-115.36	1,946.6	-489.9	483.4	414.3	69.08	6.998		
9,100.0	7,203.0	9,321.8	7,410.0	39.4	40.5	-115.40	2,046.5	-489.0	482.6	410.5	72.06	6.698		
9,200.0	7,203.0	9,421.8	7,410.0	41.1	42.1	-115.44	2,146.5	-488.2	481.8	406.8	75.05	6.420		
9,300.0	7,203.0	9,521.8	7,410.0	42.7	43.8	-115.49	2,246.5	-487.3	481.0	403.0	78.05	6.163		
9,400.0	7,203.0	9,621.8	7,410.0	44.4	45.4	-115.53	2,346.5	-486.4	480.2	399.2	81.06	5.924		
9,500.0	7,203.0	9,721.7	7,410.0	46.1	47.1	-115.58	2,446.5	-485.5	479.4	395.4	84.08	5.702		
9,600.0	7,203.0	9,821.7	7,410.0	47.8	48.7	-115.62	2,546.5	-484.7	478.7	391.6	87.11	5.495		
9,700.0	7,203.0	9,921.7	7,410.0	49.5	50.4	-115.67	2,646.5	-483.8	477.9	387.7	90.14	5.302		
9,800.0	7,203.0	10,021.7	7,410.0	51.2	52.1	-115.72	2,746.5	-482.9	477.1	383.9	93.17	5.121		
9,900.0	7,203.0	10,121.7	7,410.0	52.9	53.8	-115.76	2,846.5	-482.1	476.3	380.1	96.21	4.951		
10,000.0	7,203.0	10,221.7	7,410.0	54.6	55.4	-115.81	2,946.5	-481.2	475.5	376.3	99.25	4.791		
10,100.0	7,203.0	10,321.7	7,410.0	56.3	57.1	-115.85	3,046.5	-480.3	474.7	372.4	102.30	4.641		
10,200.0	7,203.0	10,421.7	7,410.0	58.1	58.8	-115.90	3,146.5	-479.4	473.9	368.6	105.34	4.499		
10,300.0	7,203.0	10,521.7	7,410.0	59.8	60.5	-115.94	3,246.5	-478.6	473.2	364.8	108.39	4.365		

CC - Min centre to center distance or convergent 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 Salisbury 2E-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 Salisbury 2E-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 #1	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		Offset		Semi Major Axis			Distance				Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
10,400.0	7,203.0	10,621.7	7,410.0	61.5	62.2	-115.99	3,346.4	-477.7	472.4	360.9	111.44	4.239	
10,500.0	7,203.0	10,721.7	7,410.0	63.2	63.9	-116.04	3,446.4	-476.8	471.6	357.1	114.49	4.119	
10,600.0	7,203.0	10,821.7	7,410.0	64.9	65.6	-116.08	3,546.4	-475.9	470.8	353.3	117.55	4.005	
10,700.0	7,203.0	10,921.7	7,410.0	66.6	67.3	-116.13	3,646.4	-475.1	470.0	349.4	120.60	3.897	
10,800.0	7,203.0	11,021.7	7,410.0	68.4	69.0	-116.18	3,746.4	-474.2	469.2	345.6	123.65	3.795	
10,900.0	7,203.0	11,121.7	7,410.0	70.1	70.8	-116.22	3,846.4	-473.3	468.5	341.8	126.71	3.697	
11,000.0	7,203.0	11,221.7	7,410.0	71.8	72.5	-116.27	3,946.4	-472.5	467.7	337.9	129.76	3.604	
11,100.0	7,203.0	11,321.7	7,410.0	73.6	74.2	-116.32	4,046.4	-471.6	466.9	334.1	132.81	3.515	
11,200.0	7,203.0	11,421.7	7,410.0	75.3	75.9	-116.37	4,146.4	-470.7	466.1	330.2	135.86	3.431	
11,300.0	7,203.0	11,521.7	7,410.0	77.0	77.6	-116.41	4,246.4	-469.8	465.3	326.4	138.91	3.350	
11,400.0	7,203.0	11,621.7	7,410.0	78.8	79.3	-116.46	4,346.4	-469.0	464.5	322.6	141.96	3.272	
11,500.0	7,203.0	11,721.7	7,410.0	80.5	81.1	-116.51	4,446.4	-468.1	463.8	318.8	145.01	3.198	
11,600.0	7,203.0	11,821.7	7,410.0	82.2	82.8	-116.56	4,546.4	-467.2	463.0	314.9	148.06	3.127	
11,700.0	7,203.0	11,921.7	7,410.0	84.0	84.5	-116.61	4,646.3	-466.3	462.2	311.1	151.11	3.059	
11,800.0	7,203.0	12,021.7	7,410.0	85.7	86.2	-116.66	4,746.3	-465.5	461.4	307.3	154.15	2.993	
11,900.0	7,203.0	12,121.7	7,410.0	87.4	88.0	-116.70	4,846.3	-464.6	460.6	303.5	157.19	2.930	
12,000.0	7,203.0	12,221.7	7,410.0	89.2	89.7	-116.75	4,946.3	-463.7	459.9	299.6	160.24	2.870	
12,100.0	7,203.0	12,321.6	7,410.0	90.9	91.4	-116.80	5,046.3	-462.9	459.1	295.8	163.28	2.812	
12,200.0	7,203.0	12,421.6	7,410.0	92.6	93.1	-116.85	5,146.3	-462.0	458.3	292.0	166.31	2.756	
12,300.0	7,203.0	12,521.6	7,410.0	94.4	94.9	-116.90	5,246.3	-461.1	457.5	288.2	169.35	2.702	
12,400.0	7,203.0	12,621.6	7,410.0	96.1	96.6	-116.95	5,346.3	-460.2	456.8	284.4	172.38	2.650	
12,500.0	7,203.0	12,721.6	7,410.0	97.9	98.3	-117.00	5,446.3	-459.4	456.0	280.6	175.42	2.599	
12,600.0	7,203.0	12,821.6	7,410.0	99.6	100.1	-117.05	5,546.3	-458.5	455.2	276.7	178.45	2.551	
12,700.0	7,203.0	12,921.6	7,410.0	101.3	101.8	-117.10	5,646.3	-457.6	454.4	272.9	181.47	2.504	
12,800.0	7,203.0	13,021.6	7,410.0	103.1	103.5	-117.15	5,746.3	-456.7	453.6	269.1	184.50	2.459	
12,900.0	7,203.0	13,121.6	7,410.0	104.8	105.3	-117.20	5,846.3	-455.9	452.9	265.3	187.52	2.415	
13,000.0	7,203.0	13,221.6	7,410.0	106.6	107.0	-117.25	5,946.2	-455.0	452.1	261.5	190.54	2.373	
13,100.0	7,203.0	13,321.6	7,410.0	108.3	108.7	-117.30	6,046.2	-454.1	451.3	257.8	193.56	2.332	
13,200.0	7,203.0	13,421.6	7,410.0	110.1	110.5	-117.35	6,146.2	-453.3	450.5	254.0	196.58	2.292	
13,253.7	7,203.0	13,475.3	7,410.0	111.0	111.4	-117.38	6,199.9	-452.8	450.1	251.9	198.19	2.271 SF	

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant Salisbury 2E-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 Salisbury 2E-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 #1	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		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	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	12.849			
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	6.209			
500.0	500.0	500.0	500.0	0.8	0.8	90.00	0.0	8.4	8.4	6.7	1.70	4.934			
600.0	600.0	600.0	600.0	1.0	1.0	90.00	0.0	8.4	8.4	6.3	2.05	4.093 CC, ES			
700.0	700.0	699.7	699.7	1.2	1.2	93.42	-0.6	10.0	10.0	7.6	2.40	4.186			
800.0	800.0	799.5	799.3	1.4	1.4	98.54	-2.1	14.2	14.4	11.6	2.75	5.222			
900.0	900.0	899.4	899.1	1.5	1.6	101.37	-3.7	18.5	18.9	15.8	3.10	6.105			
1,000.0	1,000.0	999.3	998.9	1.7	1.7	103.10	-5.3	22.9	23.5	20.1	3.45	6.817			
1,100.0	1,100.0	1,099.1	1,098.7	1.9	1.9	104.26	-6.9	27.2	28.1	24.3	3.80	7.400			
1,200.0	1,200.0	1,199.0	1,198.5	2.1	2.1	105.10	-8.5	31.6	32.7	28.6	4.15	7.887			
1,300.0	1,300.0	1,298.9	1,298.3	2.2	2.3	105.73	-10.1	35.9	37.4	32.9	4.50	8.299			
1,400.0	1,400.0	1,398.8	1,398.1	2.4	2.5	106.22	-11.7	40.3	42.0	37.1	4.85	8.652			
1,500.0	1,500.0	1,498.7	1,497.8	2.6	2.7	106.61	-13.3	44.6	46.6	41.4	5.21	8.958			
1,600.0	1,600.0	1,598.6	1,597.6	2.8	2.9	106.93	-14.9	49.0	51.3	45.7	5.56	9.225			
1,700.0	1,700.0	1,698.5	1,697.4	2.9	3.1	107.20	-16.5	53.3	55.9	50.0	5.91	9.461			
1,800.0	1,800.0	1,798.4	1,797.2	3.1	3.3	107.43	-18.1	57.7	60.5	54.3	6.26	9.671			
1,900.0	1,900.0	1,898.3	1,897.0	3.3	3.4	107.63	-19.7	62.0	65.2	58.6	6.61	9.858			
2,000.0	2,000.0	1,998.2	1,996.8	3.5	3.6	107.79	-21.3	66.4	69.8	62.8	6.96	10.027			
2,100.0	2,100.0	2,098.1	2,096.5	3.6	3.8	107.94	-22.9	70.7	74.4	67.1	7.31	10.179			
2,200.0	2,200.0	2,198.0	2,196.3	3.8	4.0	108.07	-24.5	75.1	79.1	71.4	7.66	10.317			
2,300.0	2,300.0	2,297.9	2,296.1	4.0	4.2	108.19	-26.1	79.4	83.7	75.7	8.02	10.444			
2,400.0	2,400.0	2,397.7	2,395.9	4.2	4.4	108.29	-27.7	83.8	88.3	80.0	8.37	10.560			
2,500.0	2,500.0	2,497.6	2,495.7	4.3	4.6	108.39	-29.3	88.1	93.0	84.3	8.72	10.666			
2,600.0	2,600.0	2,597.5	2,595.5	4.5	4.8	108.47	-30.9	92.5	97.6	88.6	9.07	10.764			
2,700.0	2,700.0	2,697.4	2,695.3	4.7	5.0	108.55	-32.5	96.8	102.3	92.8	9.42	10.855			
2,800.0	2,800.0	2,797.3	2,795.0	4.9	5.2	108.62	-34.1	101.2	106.9	97.1	9.77	10.940			
2,900.0	2,900.0	2,897.2	2,894.8	5.0	5.4	108.68	-35.7	105.5	111.5	101.4	10.12	11.018			
3,000.0	3,000.0	2,997.1	2,994.6	5.2	5.6	108.74	-37.3	109.9	116.2	105.7	10.47	11.092			
3,100.0	3,100.0	3,097.0	3,094.4	5.4	5.7	108.80	-38.9	114.2	120.8	110.0	10.83	11.160			
3,200.0	3,200.0	3,196.9	3,194.2	5.6	5.9	108.85	-40.5	118.6	125.5	114.3	11.18	11.225			
3,300.0	3,300.0	3,296.8	3,294.0	5.7	6.1	108.90	-42.1	123.0	130.1	118.6	11.53	11.285			
3,400.0	3,400.0	3,396.7	3,393.7	5.9	6.3	108.94	-43.7	127.3	134.7	122.9	11.88	11.342			
3,500.0	3,500.0	3,496.6	3,493.5	6.1	6.5	108.98	-45.3	131.7	139.4	127.1	12.23	11.395			
3,600.0	3,600.0	3,596.5	3,593.3	6.3	6.7	109.02	-46.9	136.0	144.0	131.4	12.58	11.446			
3,700.0	3,700.0	3,696.3	3,693.1	6.4	6.9	109.06	-48.5	140.4	148.7	135.7	12.93	11.494			
3,800.0	3,800.0	3,796.2	3,792.9	6.6	7.1	109.09	-50.1	144.7	153.3	140.0	13.28	11.539			
3,900.0	3,900.0	3,896.1	3,892.7	6.8	7.3	109.12	-51.7	149.1	157.9	144.3	13.64	11.582			
4,000.0	4,000.0	3,996.0	3,992.5	7.0	7.5	109.15	-53.3	153.4	162.6	148.6	13.99	11.623			
4,100.0	4,100.0	4,095.9	4,092.2	7.1	7.7	109.18	-54.9	157.8	167.2	152.9	14.34	11.661			
4,200.0	4,200.0	4,195.8	4,192.0	7.3	7.9	109.21	-56.5	162.1	171.8	157.2	14.69	11.698			
4,300.0	4,300.0	4,295.7	4,291.8	7.5	8.0	109.23	-58.1	166.5	176.5	161.4	15.04	11.733			
4,400.0	4,400.0	4,395.6	4,391.6	7.7	8.2	109.26	-59.7	170.8	181.1	165.7	15.39	11.767			
4,500.0	4,500.0	4,495.5	4,491.4	7.8	8.4	109.28	-61.3	175.2	185.8	170.0	15.74	11.799			
4,600.0	4,600.0	4,595.4	4,591.2	8.0	8.6	109.30	-62.9	179.5	190.4	174.3	16.10	11.830			
4,700.0	4,700.0	4,695.3	4,691.0	8.2	8.8	109.32	-64.5	183.9	195.0	178.6	16.45	11.859			
4,800.0	4,800.0	4,795.2	4,790.7	8.4	9.0	109.34	-66.1	188.2	199.7	182.9	16.80	11.888			
4,900.0	4,900.0	4,895.1	4,890.5	8.5	9.2	109.36	-67.7	192.6	204.3	187.2	17.15	11.915			
5,000.0	5,000.0	4,994.9	4,990.3	8.7	9.4	109.38	-69.3	196.9	209.0	191.5	17.50	11.940			
5,100.0	5,100.0	5,094.8	5,090.1	8.9	9.6	-92.57	-70.9	201.3	213.7	195.9	17.75	12.042			

CC - Min centre to center distance or convergent 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 Salisbury 2E-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 Salisbury 2E-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 #1	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: O-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,199.8	5,194.6	5,189.7	9.1	9.8	-93.82	-72.5	205.6	218.6	200.5	18.10	12.081		
5,300.0	5,299.6	5,294.2	5,289.2	9.2	10.0	-95.51	-74.1	209.9	223.8	205.4	18.45	12.132		
5,400.0	5,399.4	5,393.9	5,388.8	9.4	10.2	-97.12	-75.6	214.3	229.2	210.4	18.80	12.188		
5,500.0	5,499.1	5,493.5	5,488.3	9.6	10.3	-98.66	-77.2	218.6	234.8	215.6	19.16	12.251		
5,600.0	5,598.9	5,593.2	5,587.9	9.8	10.5	-100.13	-78.8	223.0	240.5	221.0	19.52	12.318		
5,700.0	5,698.7	5,692.8	5,687.4	10.0	10.7	-101.53	-80.4	227.3	246.4	226.5	19.89	12.388		
5,800.0	5,798.4	5,792.5	5,787.0	10.1	10.9	-102.86	-82.0	231.7	252.4	232.1	20.25	12.462		
5,900.0	5,898.2	5,892.1	5,886.5	10.3	11.1	-104.13	-83.6	236.0	258.5	237.9	20.62	12.539		
6,000.0	5,998.0	5,991.8	5,986.0	10.5	11.3	-105.34	-85.2	240.3	264.8	243.8	20.98	12.618		
6,100.0	6,097.7	6,091.4	6,085.6	10.7	11.5	-106.50	-86.8	244.7	271.1	249.8	21.35	12.699		
6,200.0	6,197.5	6,191.1	6,185.1	10.9	11.7	-107.60	-88.4	249.0	277.6	255.9	21.72	12.782		
6,300.0	6,297.3	6,290.7	6,284.7	11.1	11.9	-108.65	-90.0	253.4	284.2	262.1	22.09	12.865		
6,400.0	6,397.0	6,390.4	6,384.2	11.3	12.1	-109.65	-91.6	257.7	290.9	268.4	22.46	12.949		
6,500.0	6,496.8	6,490.0	6,483.8	11.5	12.3	-110.61	-93.2	262.0	297.6	274.8	22.83	13.034		
6,600.0	6,596.6	6,589.7	6,583.3	11.6	12.5	-113.14	-94.8	266.4	304.5	281.3	23.21	13.119		
6,700.0	6,696.4	6,689.2	6,682.7	11.8	12.6	102.54	-96.4	270.7	311.4	287.8	23.54	13.228		
6,800.0	6,794.2	6,789.8	6,783.0	11.9	12.8	97.05	-90.0	275.1	318.5	294.8	23.79	13.391		
6,900.0	6,887.0	6,893.1	6,883.0	12.1	13.0	96.92	-65.3	279.4	325.9	301.9	24.02	13.570		
7,000.0	6,972.0	6,999.1	6,979.4	12.2	13.1	97.64	-21.7	283.6	333.2	308.9	24.32	13.701		
7,100.0	7,046.6	7,107.8	7,068.1	12.5	13.4	98.52	40.6	287.5	340.0	315.2	24.81	13.704		
7,200.0	7,108.6	7,219.0	7,145.2	13.0	13.7	99.35	120.5	290.9	346.0	320.4	25.61	13.511		
7,300.0	7,156.0	7,332.5	7,206.3	13.6	14.3	100.01	215.8	293.5	350.7	323.9	26.79	13.090		
7,400.0	7,187.5	7,447.6	7,248.1	14.4	15.2	100.47	322.9	295.4	353.9	325.5	28.41	12.460		
7,500.0	7,202.0	7,563.8	7,267.7	15.4	16.2	100.68	437.2	296.2	355.5	325.0	30.43	11.682		
7,600.0	7,203.0	7,669.4	7,269.0	16.5	17.4	100.70	542.7	296.3	355.6	322.9	32.68	10.878		
7,700.0	7,203.0	7,769.4	7,269.0	17.8	18.6	100.70	642.7	296.3	355.6	320.5	35.10	10.130		
7,800.0	7,203.0	7,869.4	7,269.0	19.1	19.8	100.70	742.7	296.3	355.6	317.9	37.67	9.438		
7,900.0	7,203.0	7,969.4	7,269.0	20.5	21.2	100.70	842.7	296.3	355.6	315.2	40.38	8.805		
8,000.0	7,203.0	8,069.4	7,269.0	21.9	22.5	100.70	942.7	296.3	355.6	312.4	43.19	8.232		
8,100.0	7,203.0	8,169.4	7,269.0	23.4	24.0	100.70	1,042.7	296.3	355.6	309.5	46.09	7.714		
8,200.0	7,203.0	8,269.4	7,269.0	24.9	25.5	100.70	1,142.7	296.3	355.6	306.5	49.06	7.247		
8,300.0	7,203.0	8,369.4	7,269.0	26.4	27.0	100.70	1,242.7	296.3	355.6	303.5	52.09	6.826		
8,400.0	7,203.0	8,469.4	7,269.0	28.0	28.5	100.70	1,342.7	296.3	355.6	300.4	55.17	6.445		
8,500.0	7,203.0	8,569.4	7,269.0	29.6	30.1	100.70	1,442.7	296.3	355.6	297.3	58.28	6.100		
8,600.0	7,203.0	8,669.4	7,269.0	31.2	31.6	100.70	1,542.7	296.3	355.6	294.1	61.44	5.787		
8,700.0	7,203.0	8,769.4	7,269.0	32.8	33.2	100.70	1,642.7	296.3	355.6	290.9	64.62	5.502		
8,800.0	7,203.0	8,869.4	7,269.0	34.4	34.9	100.70	1,742.7	296.3	355.6	287.7	67.83	5.242		
8,900.0	7,203.0	8,969.4	7,269.0	36.1	36.5	100.70	1,842.7	296.3	355.6	284.5	71.07	5.003		
9,000.0	7,203.0	9,069.4	7,269.0	37.7	38.1	100.70	1,942.7	296.3	355.6	281.2	74.32	4.784		
9,100.0	7,203.0	9,169.4	7,269.0	39.4	39.8	100.70	2,042.7	296.3	355.6	278.0	77.59	4.583		
9,200.0	7,203.0	9,269.4	7,269.0	41.1	41.4	100.70	2,142.7	296.3	355.6	274.7	80.87	4.397		
9,300.0	7,203.0	9,369.4	7,269.0	42.7	43.1	100.70	2,242.7	296.3	355.6	271.4	84.17	4.224		
9,400.0	7,203.0	9,469.4	7,269.0	44.4	44.8	100.70	2,342.7	296.3	355.6	268.1	87.48	4.065		
9,500.0	7,203.0	9,569.4	7,269.0	46.1	46.4	100.70	2,442.7	296.3	355.6	264.8	90.80	3.916		
9,600.0	7,203.0	9,669.4	7,269.0	47.8	48.1	100.70	2,542.7	296.3	355.6	261.4	94.12	3.778		
9,700.0	7,203.0	9,769.4	7,269.0	49.5	49.8	100.70	2,642.7	296.3	355.6	258.1	97.46	3.648		
9,800.0	7,203.0	9,869.4	7,269.0	51.2	51.5	100.70	2,742.7	296.3	355.6	254.8	100.80	3.527		
9,900.0	7,203.0	9,969.4	7,269.0	52.9	53.2	100.70	2,842.7	296.3	355.6	251.4	104.15	3.414		
10,000.0	7,203.0	10,069.4	7,269.0	54.6	54.9	100.70	2,942.7	296.3	355.6	248.0	107.51	3.307		
10,100.0	7,203.0	10,169.4	7,269.0	56.3	56.6	100.70	3,042.7	296.3	355.6	244.7	110.87	3.207		
10,200.0	7,203.0	10,269.4	7,269.0	58.1	58.3	100.70	3,142.7	296.3	355.6	241.3	114.24	3.112		
10,300.0	7,203.0	10,369.4	7,269.0	59.8	60.0	100.70	3,242.7	296.3	355.6	237.9	117.61	3.023		

CC - Min centre to center distance or convergent 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 Salisbury 2E-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 Salisbury 2E-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 #1	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		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
10,400.0	7,203.0	10,469.4	7,269.0	61.5	61.7	100.70	3,342.7	296.3	355.6	234.6	120.99	2.939		
10,500.0	7,203.0	10,569.4	7,269.0	63.2	63.5	100.70	3,442.7	296.3	355.6	231.2	124.37	2.859		
10,600.0	7,203.0	10,669.4	7,269.0	64.9	65.2	100.70	3,542.7	296.3	355.6	227.8	127.75	2.783		
10,700.0	7,203.0	10,769.4	7,269.0	66.6	66.9	100.70	3,642.7	296.3	355.6	224.4	131.14	2.711		
10,800.0	7,203.0	10,869.4	7,269.0	68.4	68.6	100.70	3,742.7	296.3	355.6	221.0	134.53	2.643		
10,900.0	7,203.0	10,969.4	7,269.0	70.1	70.3	100.70	3,842.7	296.3	355.6	217.6	137.93	2.578		
11,000.0	7,203.0	11,069.4	7,269.0	71.8	72.1	100.70	3,942.7	296.3	355.6	214.2	141.32	2.516		
11,100.0	7,203.0	11,169.4	7,269.0	73.6	73.8	100.70	4,042.7	296.3	355.6	210.8	144.72	2.457		
11,200.0	7,203.0	11,269.4	7,269.0	75.3	75.5	100.70	4,142.7	296.3	355.6	207.4	148.12	2.400		
11,300.0	7,203.0	11,369.4	7,269.0	77.0	77.2	100.70	4,242.7	296.3	355.6	204.0	151.52	2.347		
11,400.0	7,203.0	11,469.4	7,269.0	78.8	79.0	100.70	4,342.7	296.3	355.6	200.6	154.93	2.295		
11,500.0	7,203.0	11,569.4	7,269.0	80.5	80.7	100.70	4,442.7	296.3	355.6	197.2	158.33	2.246		
11,600.0	7,203.0	11,669.4	7,269.0	82.2	82.4	100.70	4,542.7	296.3	355.6	193.8	161.74	2.198		
11,700.0	7,203.0	11,769.4	7,269.0	84.0	84.1	100.70	4,642.7	296.3	355.6	190.4	165.15	2.153		
11,800.0	7,203.0	11,869.4	7,269.0	85.7	85.9	100.70	4,742.7	296.3	355.6	187.0	168.56	2.109		
11,900.0	7,203.0	11,969.4	7,269.0	87.4	87.6	100.70	4,842.7	296.3	355.6	183.6	171.98	2.067		
12,000.0	7,203.0	12,069.4	7,269.0	89.2	89.3	100.70	4,942.7	296.3	355.6	180.2	175.39	2.027		
12,100.0	7,203.0	12,169.4	7,269.0	90.9	91.1	100.70	5,042.7	296.3	355.6	176.7	178.81	1.988		
12,200.0	7,203.0	12,269.4	7,269.0	92.6	92.8	100.70	5,142.7	296.3	355.6	173.3	182.22	1.951		
12,300.0	7,203.0	12,369.4	7,269.0	94.4	94.6	100.70	5,242.7	296.3	355.6	169.9	185.64	1.915		
12,400.0	7,203.0	12,469.4	7,269.0	96.1	96.3	100.70	5,342.7	296.3	355.6	166.5	189.06	1.881		
12,500.0	7,203.0	12,569.4	7,269.0	97.9	98.0	100.70	5,442.7	296.3	355.6	163.1	192.48	1.847		
12,600.0	7,203.0	12,669.4	7,269.0	99.6	99.8	100.70	5,542.7	296.3	355.6	159.7	195.90	1.815		
12,700.0	7,203.0	12,769.4	7,269.0	101.3	101.5	100.70	5,642.7	296.3	355.6	156.2	199.33	1.784		
12,800.0	7,203.0	12,869.4	7,269.0	103.1	103.2	100.70	5,742.7	296.3	355.6	152.8	202.75	1.754		
12,900.0	7,203.0	12,969.4	7,269.0	104.8	105.0	100.70	5,842.7	296.3	355.6	149.4	206.17	1.725		
13,000.0	7,203.0	13,069.4	7,269.0	106.6	106.7	100.70	5,942.7	296.3	355.6	146.0	209.60	1.696		
13,100.0	7,203.0	13,169.4	7,269.0	108.3	108.5	100.70	6,042.7	296.3	355.6	142.5	213.02	1.669		
13,200.0	7,203.0	13,269.4	7,269.0	110.1	110.2	100.70	6,142.7	296.3	355.6	139.1	216.45	1.643		
13,253.7	7,203.0	13,323.1	7,269.0	111.0	111.1	100.70	6,196.4	296.3	355.6	137.3	218.29	1.629 SF		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant Salisbury 2E-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 Salisbury 2E-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 #1	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		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-56.33	166.5	-249.9	300.4					
100.0	100.0	93.0	93.0	0.2	0.2	-56.33	166.5	-249.9	300.3	300.0	0.31	955.290		
200.0	200.0	193.0	193.0	0.3	0.3	-56.33	166.5	-249.9	300.3	299.6	0.66	452.658		
300.0	300.0	293.0	293.0	0.5	0.5	-56.33	166.5	-249.9	300.3	299.3	1.01	296.600		
400.0	400.0	393.0	393.0	0.7	0.7	-56.33	166.5	-249.9	300.3	298.9	1.36	220.560		
500.0	500.0	493.0	493.0	0.8	0.9	-56.33	166.5	-249.9	300.3	298.6	1.71	175.553		
600.0	600.0	593.0	593.0	1.0	1.0	-56.33	166.5	-249.9	300.3	298.2	2.06	145.801		
700.0	700.0	693.0	693.0	1.2	1.2	-56.33	166.5	-249.9	300.3	297.9	2.41	124.672		
800.0	800.0	793.0	793.0	1.4	1.4	-56.33	166.5	-249.9	300.3	297.5	2.76	108.892		
900.0	900.0	893.0	893.0	1.5	1.6	-56.33	166.5	-249.9	300.3	297.2	3.11	96.658		
1,000.0	1,000.0	993.0	993.0	1.7	1.7	-56.33	166.5	-249.9	300.3	296.8	3.46	86.895		
1,100.0	1,100.0	1,093.0	1,093.0	1.9	1.9	-56.33	166.5	-249.9	300.3	296.5	3.80	78.923		
1,200.0	1,200.0	1,193.0	1,193.0	2.1	2.1	-56.33	166.5	-249.9	300.3	296.1	4.15	72.291		
1,300.0	1,300.0	1,293.0	1,293.0	2.2	2.3	-56.33	166.5	-249.9	300.3	295.8	4.50	66.688		
1,400.0	1,400.0	1,393.0	1,393.0	2.4	2.4	-56.33	166.5	-249.9	300.3	295.5	4.85	61.890		
1,500.0	1,500.0	1,493.0	1,493.0	2.6	2.6	-56.33	166.5	-249.9	300.3	295.1	5.20	57.737		
1,600.0	1,600.0	1,593.0	1,593.0	2.8	2.8	-56.33	166.5	-249.9	300.3	294.8	5.55	54.106		
1,700.0	1,700.0	1,693.0	1,693.0	2.9	3.0	-56.33	166.5	-249.9	300.3	294.4	5.90	50.904		
1,800.0	1,800.0	1,793.0	1,793.0	3.1	3.1	-56.33	166.5	-249.9	300.3	294.1	6.25	48.060		
1,900.0	1,900.0	1,893.0	1,893.0	3.3	3.3	-56.33	166.5	-249.9	300.3	293.7	6.60	45.518		
2,000.0	2,000.0	1,993.0	1,993.0	3.5	3.5	-56.33	166.5	-249.9	300.3	293.4	6.95	43.230		
2,100.0	2,100.0	2,093.0	2,093.0	3.6	3.7	-56.33	166.5	-249.9	300.3	293.0	7.30	41.162		
2,200.0	2,200.0	2,193.0	2,193.0	3.8	3.8	-56.33	166.5	-249.9	300.3	292.7	7.64	39.282		
2,300.0	2,300.0	2,293.0	2,293.0	4.0	4.0	-56.33	166.5	-249.9	300.3	292.3	7.99	37.567		
2,400.0	2,400.0	2,393.0	2,393.0	4.2	4.2	-56.33	166.5	-249.9	300.3	292.0	8.34	35.995		
2,500.0	2,500.0	2,493.0	2,493.0	4.3	4.4	-56.33	166.5	-249.9	300.3	291.6	8.69	34.550		
2,600.0	2,600.0	2,593.0	2,593.0	4.5	4.5	-56.33	166.5	-249.9	300.3	291.3	9.04	33.216		
2,700.0	2,700.0	2,693.0	2,693.0	4.7	4.7	-56.33	166.5	-249.9	300.3	290.9	9.39	31.981		
2,800.0	2,800.0	2,793.0	2,793.0	4.9	4.9	-56.33	166.5	-249.9	300.3	290.6	9.74	30.835		
2,900.0	2,900.0	2,893.0	2,893.0	5.0	5.0	-56.33	166.5	-249.9	300.3	290.2	10.09	29.768		
3,000.0	3,000.0	2,993.0	2,993.0	5.2	5.2	-56.33	166.5	-249.9	300.3	289.9	10.44	28.772		
3,100.0	3,100.0	3,093.0	3,093.0	5.4	5.4	-56.33	166.5	-249.9	300.3	289.5	10.79	27.841		
3,200.0	3,200.0	3,193.0	3,193.0	5.6	5.6	-56.33	166.5	-249.9	300.3	289.2	11.14	26.968		
3,300.0	3,300.0	3,293.0	3,293.0	5.7	5.7	-56.33	166.5	-249.9	300.3	288.8	11.48	26.149		
3,400.0	3,400.0	3,393.0	3,393.0	5.9	5.9	-56.33	166.5	-249.9	300.3	288.5	11.83	25.377		
3,500.0	3,500.0	3,493.0	3,493.0	6.1	6.1	-56.33	166.5	-249.9	300.3	288.1	12.18	24.650		
3,600.0	3,600.0	3,593.0	3,593.0	6.3	6.3	-56.33	166.5	-249.9	300.3	287.8	12.53	23.964		
3,700.0	3,700.0	3,693.0	3,693.0	6.4	6.4	-56.33	166.5	-249.9	300.3	287.4	12.88	23.314		
3,800.0	3,800.0	3,793.0	3,793.0	6.6	6.6	-56.33	166.5	-249.9	300.3	287.1	13.23	22.699		
3,900.0	3,900.0	3,893.0	3,893.0	6.8	6.8	-56.33	166.5	-249.9	300.3	286.7	13.58	22.116		
4,000.0	4,000.0	3,993.0	3,993.0	7.0	7.0	-56.33	166.5	-249.9	300.3	286.4	13.93	21.561		
4,100.0	4,100.0	4,093.0	4,093.0	7.1	7.1	-56.33	166.5	-249.9	300.3	286.0	14.28	21.034		
4,200.0	4,200.0	4,193.0	4,193.0	7.3	7.3	-56.33	166.5	-249.9	300.3	285.7	14.63	20.532		
4,300.0	4,300.0	4,293.0	4,293.0	7.5	7.5	-56.33	166.5	-249.9	300.3	285.3	14.98	20.054		
4,400.0	4,400.0	4,393.0	4,393.0	7.7	7.7	-56.33	166.5	-249.9	300.3	285.0	15.32	19.597		
4,500.0	4,500.0	4,493.0	4,493.0	7.8	7.8	-56.33	166.5	-249.9	300.3	284.6	15.67	19.160		
4,600.0	4,600.0	4,593.0	4,593.0	8.0	8.0	-56.33	166.5	-249.9	300.3	284.3	16.02	18.743		
4,700.0	4,700.0	4,693.0	4,693.0	8.2	8.2	-56.33	166.5	-249.9	300.3	283.9	16.37	18.343		
4,800.0	4,800.0	4,793.0	4,793.0	8.4	8.4	-56.33	166.5	-249.9	300.3	283.6	16.72	17.960		
4,900.0	4,900.0	4,893.0	4,893.0	8.5	8.5	-56.33	166.5	-249.9	300.3	283.2	17.07	17.593		
5,000.0	5,000.0	4,993.0	4,993.0	8.7	8.7	-56.33	166.5	-249.9	300.3	282.9	17.42	17.240		
5,100.0	5,100.0	5,093.0	5,093.0	8.9	8.9	102.40	166.5	-249.9	300.7	282.9	17.77	16.923		

CC - Min centre to center distance or convergent 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 Salisbury 2E-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 Salisbury 2E-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 #1	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		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,199.8	5,192.8	5,192.8	9.1	9.1	103.34	166.5	-249.9	301.8	283.7	18.12	16.661		
5,300.0	5,299.6	5,292.6	5,292.6	9.2	9.2	104.60	166.5	-249.9	303.5	285.0	18.47	16.434		
5,400.0	5,399.4	5,392.4	5,392.4	9.4	9.4	105.84	166.5	-249.9	305.3	286.5	18.82	16.222		
5,500.0	5,499.1	5,492.1	5,492.1	9.6	9.6	107.06	166.5	-249.9	307.2	288.1	19.17	16.024		
5,600.0	5,598.9	5,591.9	5,591.9	9.8	9.8	108.27	166.5	-249.9	309.3	289.8	19.53	15.839		
5,700.0	5,698.7	5,691.7	5,691.7	10.0	9.9	109.46	166.5	-249.9	311.5	291.6	19.88	15.668		
5,800.0	5,798.4	5,791.4	5,791.4	10.1	10.1	110.64	166.5	-249.9	313.9	293.6	20.24	15.508		
5,900.0	5,898.2	5,891.2	5,891.2	10.3	10.3	111.79	166.5	-249.9	316.4	295.8	20.60	15.360		
6,000.0	5,998.0	5,991.0	5,991.0	10.5	10.5	112.93	166.5	-249.9	319.0	298.0	20.95	15.223		
6,100.0	6,097.7	6,090.7	6,090.7	10.7	10.6	114.05	166.5	-249.9	321.7	300.4	21.31	15.096		
6,200.0	6,197.5	6,190.5	6,190.5	10.9	10.8	115.15	166.5	-249.9	324.6	302.9	21.67	14.978		
6,300.0	6,297.3	6,290.3	6,290.3	11.1	11.0	116.24	166.5	-249.9	327.5	305.5	22.03	14.869		
6,400.0	6,397.0	6,390.0	6,390.0	11.3	11.2	117.30	166.5	-249.9	330.6	308.2	22.39	14.769		
6,500.0	6,496.8	6,489.8	6,489.8	11.5	11.3	118.34	166.5	-249.9	333.8	311.1	22.74	14.677		
6,600.0	6,596.6	6,589.6	6,589.6	11.6	11.5	117.77	166.5	-249.9	337.1	314.0	23.11	14.591		
6,700.0	6,696.4	6,689.4	6,689.4	11.8	11.7	-26.89	166.5	-249.9	333.3	310.0	23.36	14.270		
6,800.0	6,794.2	6,787.2	6,787.2	11.9	11.8	-37.27	166.5	-249.9	316.3	293.0	23.34	13.551		
6,900.0	6,887.0	6,880.0	6,880.0	12.1	12.0	-45.70	166.5	-249.9	287.8	264.6	23.26	12.376		
7,000.0	6,972.0	6,965.0	6,965.0	12.2	12.2	-57.53	166.5	-249.9	252.0	228.5	23.52	10.717		
7,100.0	7,046.6	7,039.6	7,039.6	12.5	12.3	-73.05	166.5	-249.9	217.4	193.1	24.39	8.915		
7,200.0	7,108.6	7,101.6	7,101.6	13.0	12.4	-88.66	166.5	-249.9	199.3	174.0	25.33	7.869		
7,210.0	7,114.0	7,107.0	7,107.0	13.0	12.4	-90.00	166.5	-249.9	199.1	173.7	25.40	7.838	CC, ES, SF	
7,300.0	7,156.0	7,149.0	7,149.0	13.6	12.5	-99.12	166.5	-249.9	214.6	188.7	25.87	8.296		
7,400.0	7,187.5	7,180.5	7,180.5	14.4	12.5	-101.61	166.5	-249.9	265.3	238.7	26.58	9.983		
7,500.0	7,202.0	7,195.0	7,195.0	15.4	12.6	-94.70	166.5	-249.9	339.2	311.4	27.88	12.168		
7,600.0	7,203.0	7,196.0	7,196.0	16.5	12.6	-90.00	166.5	-249.9	424.6	395.6	29.08	14.604		

Cathedral Energy Services

Anticollision Report

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

Offset Design S14-T2N-R68W (Grant Elmquist/Salisbury) - SALISBURY 2-4-11 (EXISTING) - EXISTING - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 104-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
10,500.0	7,203.0	7,386.0	7,180.9	63.2	27.8	-88.52	3,894.3	-211.1	478.4	389.0	89.47	5.347		
10,600.0	7,203.0	7,386.8	7,181.7	64.9	27.8	-88.80	3,894.3	-211.1	385.5	294.3	91.21	4.226		
10,700.0	7,203.0	7,387.6	7,182.4	66.6	27.8	-89.07	3,894.4	-211.1	297.1	204.2	92.94	3.197		
10,800.0	7,203.0	7,388.3	7,183.2	68.4	27.8	-89.35	3,894.4	-211.1	219.0	124.3	94.67	2.313		
10,900.0	7,203.0	7,389.1	7,184.0	70.1	27.8	-89.62	3,894.4	-211.1	166.2	69.8	96.40	1.724		
10,951.6	7,203.0	7,389.5	7,184.3	71.0	27.8	-89.76	3,894.4	-211.1	158.0	60.7	97.30	1.624	CC, ES, SF	
11,000.0	7,203.0	7,389.8	7,184.7	71.8	27.8	-89.90	3,894.4	-211.1	165.2	67.1	98.14	1.683		
11,100.0	7,203.0	7,390.6	7,185.5	73.6	27.8	-90.17	3,894.4	-211.1	216.7	116.9	99.87	2.170		
11,200.0	7,203.0	7,391.4	7,186.2	75.3	27.8	-90.45	3,894.4	-211.1	294.3	192.7	101.60	2.897		
11,300.0	7,203.0	7,392.1	7,187.0	77.0	27.8	-90.73	3,894.4	-211.1	382.5	279.2	103.33	3.702		
11,400.0	7,203.0	7,392.9	7,187.8	78.8	27.8	-91.00	3,894.4	-211.1	475.4	370.3	105.05	4.525		

Cathedral Energy Services

Anticollision Report

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

Reference Depths are relative to KB @ 4894.0ft

Offset Depths are relative to Offset Datum

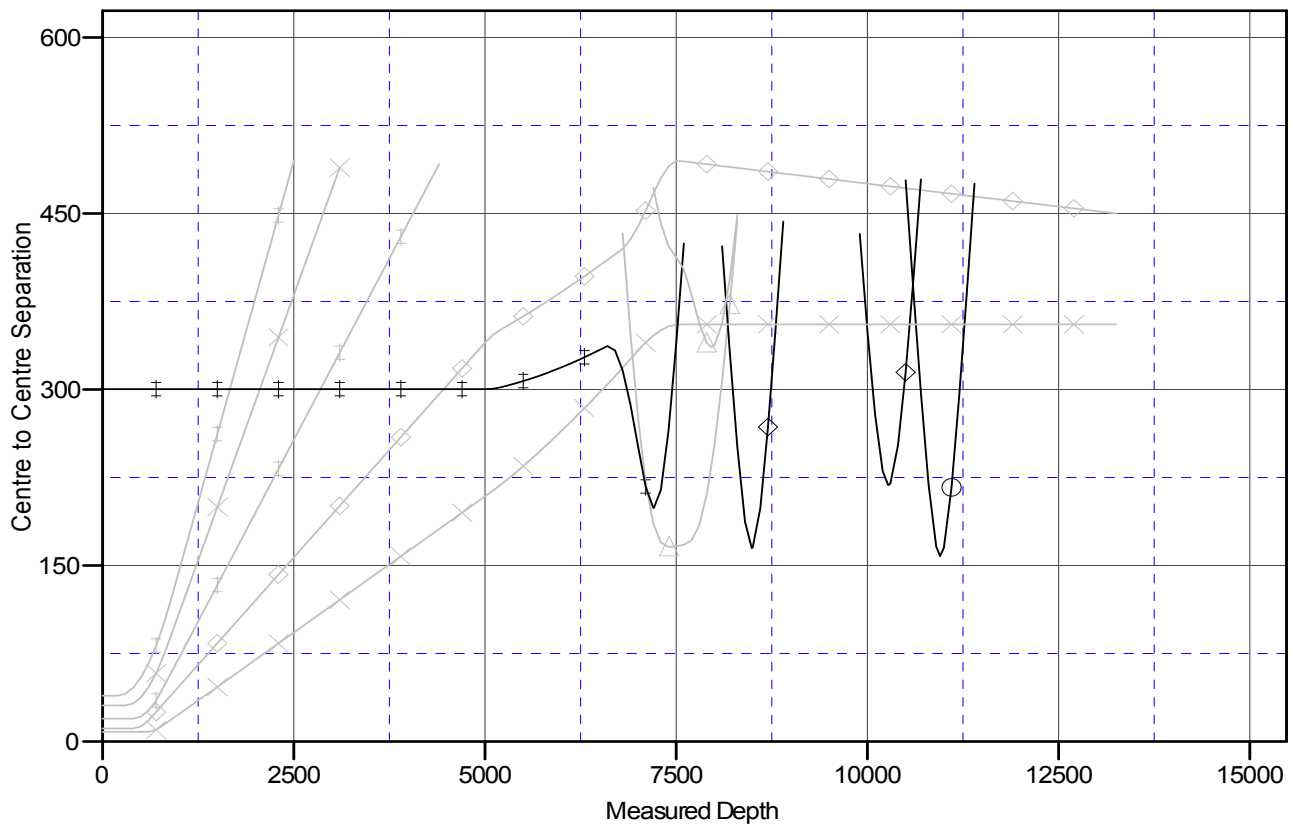
Central Meridian is -105.500000 °

Coordinates are relative to: Grant Salisbury 2E-14H-C268

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.34°

Ladder Plot



LEGEND

bury2D-14H-C268, Hz, Plan #1 V0	GRANT 23-11 (EXISTING), EXISTING, SURVEYS V0	GrantSalisbury2A-14H-C268, Hz, Plan #1 V0
Y2-4-11 (EXISTING), EXISTING, SURVEYS V0	GRANT 2-8-11 (EXISTING), EXISTING, SURVEYS V0	OLANDER 2 (EXISTING), EXISTING, NO
bury2B-14H-C268, Hz, Plan #1 V0	GrantSalisbury2F-14H-C268, Hz, Plan #1 V0	GrantElmquist2D-14H-C268, Hz, Plan #1 V0
just2E-14H-C268, Hz, Plan #1 V0	GrantSalisbury2C-14H-C268, Hz, Plan #1 V0	