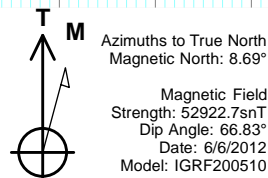
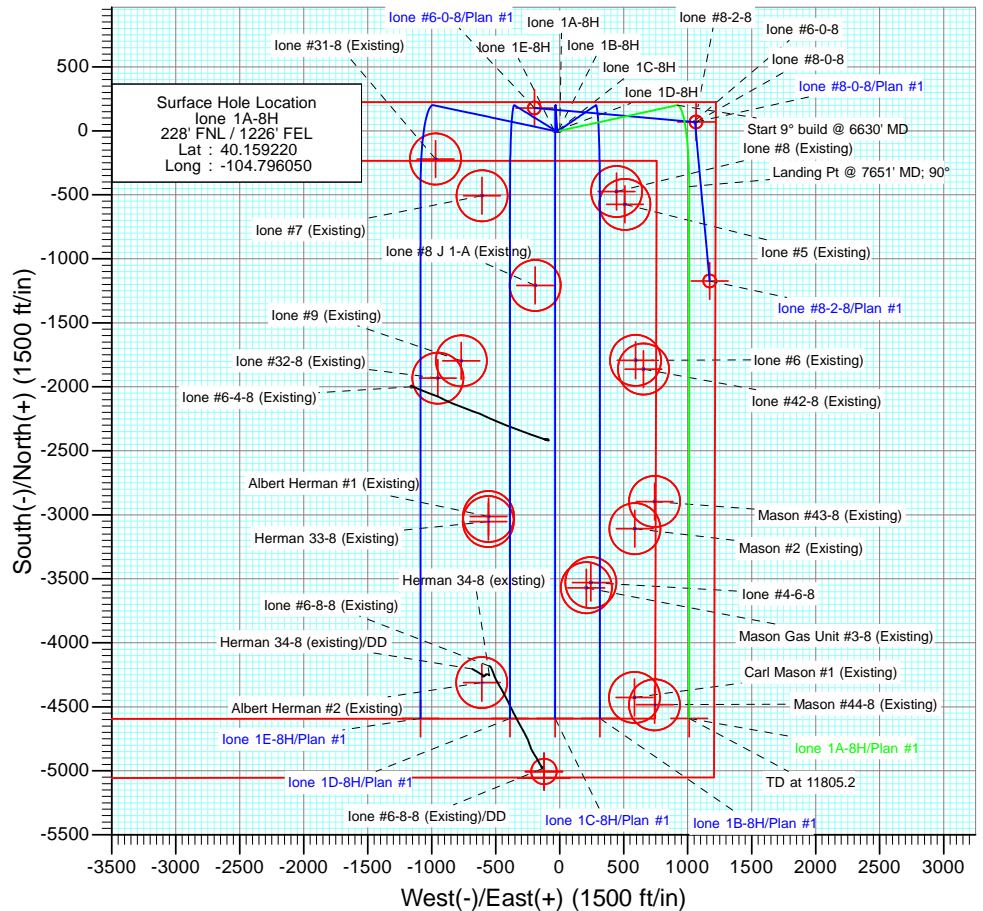


SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	485.9	8.58	77.66	484.9	4.6	20.9	3.00	77.66	-4.6	
4	6630.9	8.58	77.66	6561.1	200.4	916.2	0.00	0.00	-200.4	
5	7651.2	90.00	180.00	7211.0	-435.9	1012.0	9.00	102.20	435.9	
6	11805.2	90.00	180.00	7211.0	-4589.9	1012.0	0.00	0.00	4589.9	Ione 1A-8H PBHL



FORMATION TOP DETAILS			
TVDPath	MDPath	Formation	
4394.0	4439.3	Sussex	
4680.0	4728.5	Sussex Marker	
4985.0	5037.0	Shannon	
7044.0	7176.7	Sharon Springs	
7133.0	7331.0	Niobrara	
7182.0	7457.3	B Chalk	

Type	Target	Azimuth	Origin	N/S	E/W	From
User	No Target (Freehand)	180.00	Type	0.0	0.0	TVD
		Slot				0.0
Ione 1A-8H PBHL						
		TVD	+N/-S	+E/-W	Latitude	Longitude
		7211.0	-4589.9	1012.0	40.146620	-104.792430

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well lone 1A-8H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 4917.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 4917.0ft (Original Well Elev)
Site:	S8-T2N-R66W (lone)	North Reference:	True
Well:	lone 1A-8H	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		S8-T2N-R66W (lone)			
Site Position:		Northing:	1,297,444.41 ft	Latitude:	40.147740
From:	Lat/Long	Easting:	3,196,240.52 ft	Longitude:	-104.798020
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.45 °

Well	lone 1A-8H					
Well Position	+N/-S	0.0 ft	Northing:	1,301,630.59 ft	Latitude:	40.159220
	+E/-W	0.0 ft	Easting:	3,196,758.01 ft	Longitude:	-104.796050
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,904.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	6/6/2012	8.68	66.83	52,923

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	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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
485.9	8.58	77.66	484.9	4.6	20.9	3.00	3.00	0.00	77.66	
6,630.9	8.58	77.66	6,561.1	200.4	916.2	0.00	0.00	0.00	0.00	
7,651.2	90.00	180.00	7,211.0	-435.9	1,012.0	9.00	7.98	10.03	102.20	
11,805.2	90.00	180.00	7,211.0	-4,589.9	1,012.0	0.00	0.00	0.00	0.00	lone 1A-8H PBHL

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well lone 1A-8H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 4917.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 4917.0ft (Original Well Elev)
Site:	S8-T2N-R66W (lone)	North Reference:	True
Well:	lone 1A-8H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	KOP @ 200'
300.0	3.00	77.66	300.0	0.6	2.6	-0.6	3.00	3.00	
400.0	6.00	77.66	399.6	2.2	10.2	-2.2	3.00	3.00	
485.9	8.58	77.66	484.9	4.6	20.9	-4.6	3.00	3.00	EOB; Inc=8.28°
500.0	8.58	77.66	498.8	5.0	22.9	-5.0	0.00	0.00	
600.0	8.58	77.66	597.7	8.2	37.5	-8.2	0.00	0.00	
700.0	8.58	77.66	696.5	11.4	52.1	-11.4	0.00	0.00	
800.0	8.58	77.66	795.4	14.6	66.6	-14.6	0.00	0.00	
900.0	8.58	77.66	894.3	17.8	81.2	-17.8	0.00	0.00	
1,000.0	8.58	77.66	993.2	20.9	95.8	-20.9	0.00	0.00	
1,100.0	8.58	77.66	1,092.1	24.1	110.3	-24.1	0.00	0.00	
1,200.0	8.58	77.66	1,190.9	27.3	124.9	-27.3	0.00	0.00	
1,300.0	8.58	77.66	1,289.8	30.5	139.5	-30.5	0.00	0.00	
1,400.0	8.58	77.66	1,388.7	33.7	154.1	-33.7	0.00	0.00	
1,500.0	8.58	77.66	1,487.6	36.9	168.6	-36.9	0.00	0.00	
1,600.0	8.58	77.66	1,586.5	40.1	183.2	-40.1	0.00	0.00	
1,700.0	8.58	77.66	1,685.4	43.3	197.8	-43.3	0.00	0.00	
1,800.0	8.58	77.66	1,784.2	46.4	212.3	-46.4	0.00	0.00	
1,900.0	8.58	77.66	1,883.1	49.6	226.9	-49.6	0.00	0.00	
2,000.0	8.58	77.66	1,982.0	52.8	241.5	-52.8	0.00	0.00	
2,100.0	8.58	77.66	2,080.9	56.0	256.0	-56.0	0.00	0.00	
2,200.0	8.58	77.66	2,179.8	59.2	270.6	-59.2	0.00	0.00	
2,300.0	8.58	77.66	2,278.6	62.4	285.2	-62.4	0.00	0.00	
2,400.0	8.58	77.66	2,377.5	65.6	299.8	-65.6	0.00	0.00	
2,500.0	8.58	77.66	2,476.4	68.7	314.3	-68.7	0.00	0.00	
2,600.0	8.58	77.66	2,575.3	71.9	328.9	-71.9	0.00	0.00	
2,700.0	8.58	77.66	2,674.2	75.1	343.5	-75.1	0.00	0.00	
2,800.0	8.58	77.66	2,773.1	78.3	358.0	-78.3	0.00	0.00	
2,900.0	8.58	77.66	2,871.9	81.5	372.6	-81.5	0.00	0.00	
3,000.0	8.58	77.66	2,970.8	84.7	387.2	-84.7	0.00	0.00	
3,100.0	8.58	77.66	3,069.7	87.9	401.7	-87.9	0.00	0.00	
3,200.0	8.58	77.66	3,168.6	91.1	416.3	-91.1	0.00	0.00	
3,300.0	8.58	77.66	3,267.5	94.2	430.9	-94.2	0.00	0.00	
3,400.0	8.58	77.66	3,366.3	97.4	445.5	-97.4	0.00	0.00	
3,500.0	8.58	77.66	3,465.2	100.6	460.0	-100.6	0.00	0.00	
3,600.0	8.58	77.66	3,564.1	103.8	474.6	-103.8	0.00	0.00	
3,700.0	8.58	77.66	3,663.0	107.0	489.2	-107.0	0.00	0.00	
3,800.0	8.58	77.66	3,761.9	110.2	503.7	-110.2	0.00	0.00	
3,900.0	8.58	77.66	3,860.7	113.4	518.3	-113.4	0.00	0.00	
4,000.0	8.58	77.66	3,959.6	116.5	532.9	-116.5	0.00	0.00	
4,100.0	8.58	77.66	4,058.5	119.7	547.5	-119.7	0.00	0.00	
4,200.0	8.58	77.66	4,157.4	122.9	562.0	-122.9	0.00	0.00	
4,300.0	8.58	77.66	4,256.3	126.1	576.6	-126.1	0.00	0.00	
4,400.0	8.58	77.66	4,355.2	129.3	591.2	-129.3	0.00	0.00	
4,439.3	8.58	77.66	4,394.0	130.5	596.9	-130.5	0.00	0.00	Sussex
4,500.0	8.58	77.66	4,454.0	132.5	605.7	-132.5	0.00	0.00	
4,600.0	8.58	77.66	4,552.9	135.7	620.3	-135.7	0.00	0.00	
4,700.0	8.58	77.66	4,651.8	138.9	634.9	-138.9	0.00	0.00	
4,728.5	8.58	77.66	4,680.0	139.8	639.0	-139.8	0.00	0.00	Sussex Marker
4,800.0	8.58	77.66	4,750.7	142.0	649.4	-142.0	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well lone 1A-8H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 4917.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 4917.0ft (Original Well Elev)
Site:	S8-T2N-R66W (lone)	North Reference:	True
Well:	lone 1A-8H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,900.0	8.58	77.66	4,849.6	145.2	664.0	-145.2	0.00	0.00	
5,000.0	8.58	77.66	4,948.4	148.4	678.6	-148.4	0.00	0.00	
5,037.0	8.58	77.66	4,985.0	149.6	684.0	-149.6	0.00	0.00	Shannon
5,100.0	8.58	77.66	5,047.3	151.6	693.2	-151.6	0.00	0.00	
5,200.0	8.58	77.66	5,146.2	154.8	707.7	-154.8	0.00	0.00	
5,300.0	8.58	77.66	5,245.1	158.0	722.3	-158.0	0.00	0.00	
5,400.0	8.58	77.66	5,344.0	161.2	736.9	-161.2	0.00	0.00	
5,500.0	8.58	77.66	5,442.9	164.4	751.4	-164.4	0.00	0.00	
5,600.0	8.58	77.66	5,541.7	167.5	766.0	-167.5	0.00	0.00	
5,700.0	8.58	77.66	5,640.6	170.7	780.6	-170.7	0.00	0.00	
5,800.0	8.58	77.66	5,739.5	173.9	795.1	-173.9	0.00	0.00	
5,900.0	8.58	77.66	5,838.4	177.1	809.7	-177.1	0.00	0.00	
6,000.0	8.58	77.66	5,937.3	180.3	824.3	-180.3	0.00	0.00	
6,100.0	8.58	77.66	6,036.1	183.5	838.9	-183.5	0.00	0.00	
6,200.0	8.58	77.66	6,135.0	186.7	853.4	-186.7	0.00	0.00	
6,300.0	8.58	77.66	6,233.9	189.8	868.0	-189.8	0.00	0.00	
6,400.0	8.58	77.66	6,332.8	193.0	882.6	-193.0	0.00	0.00	
6,500.0	8.58	77.66	6,431.7	196.2	897.1	-196.2	0.00	0.00	
6,600.0	8.58	77.66	6,530.5	199.4	911.7	-199.4	0.00	0.00	
6,630.9	8.58	77.66	6,561.1	200.4	916.2	-200.4	0.00	0.00	Start 9° build @ 6630' MD
6,700.0	9.46	117.78	6,629.4	198.8	926.3	-198.8	9.00	1.27	
6,800.0	15.76	148.52	6,727.1	183.4	940.7	-183.4	9.00	6.30	
6,900.0	23.83	160.52	6,821.1	152.7	954.5	-152.7	9.00	8.08	
7,000.0	32.38	166.56	6,909.2	107.5	967.5	-107.5	9.00	8.55	
7,100.0	41.11	170.28	6,989.3	49.0	979.3	-49.0	9.00	8.73	
7,176.7	47.86	172.34	7,044.0	-4.1	987.4	4.1	9.00	8.80	Sharon Springs
7,200.0	49.91	172.88	7,059.3	-21.5	989.6	21.5	9.00	8.83	
7,300.0	58.77	174.87	7,117.6	-102.3	998.2	102.3	9.00	8.85	
7,331.0	61.52	175.41	7,133.0	-129.0	1,000.5	129.0	9.00	8.87	Niobrara
7,400.0	67.65	176.53	7,162.6	-191.2	1,004.8	191.2	9.00	8.88	
7,457.3	72.74	177.38	7,182.0	-245.0	1,007.7	245.0	9.00	8.89	B Chalk
7,500.0	76.54	177.98	7,193.3	-286.1	1,009.4	286.1	9.00	8.90	
7,600.0	85.44	179.33	7,209.0	-384.8	1,011.7	384.8	9.00	8.90	
7,651.2	90.00	180.00	7,211.0	-435.9	1,012.0	435.9	9.00	8.90	Landing Pt @ 7651' MD; 90°
7,700.0	90.00	180.00	7,211.0	-484.7	1,012.0	484.7	0.00	0.00	
7,800.0	90.00	180.00	7,211.0	-584.7	1,012.0	584.7	0.00	0.00	
7,900.0	90.00	180.00	7,211.0	-684.7	1,012.0	684.7	0.00	0.00	
8,000.0	90.00	180.00	7,211.0	-784.7	1,012.0	784.7	0.00	0.00	
8,100.0	90.00	180.00	7,211.0	-884.7	1,012.0	884.7	0.00	0.00	
8,200.0	90.00	180.00	7,211.0	-984.7	1,012.0	984.7	0.00	0.00	
8,300.0	90.00	180.00	7,211.0	-1,084.7	1,012.0	1,084.7	0.00	0.00	
8,400.0	90.00	180.00	7,211.0	-1,184.7	1,012.0	1,184.7	0.00	0.00	
8,500.0	90.00	180.00	7,211.0	-1,284.7	1,012.0	1,284.7	0.00	0.00	
8,600.0	90.00	180.00	7,211.0	-1,384.7	1,012.0	1,384.7	0.00	0.00	
8,700.0	90.00	180.00	7,211.0	-1,484.7	1,012.0	1,484.7	0.00	0.00	
8,800.0	90.00	180.00	7,211.0	-1,584.7	1,012.0	1,584.7	0.00	0.00	
8,900.0	90.00	180.00	7,211.0	-1,684.7	1,012.0	1,684.7	0.00	0.00	
9,000.0	90.00	180.00	7,211.0	-1,784.7	1,012.0	1,784.7	0.00	0.00	
9,100.0	90.00	180.00	7,211.0	-1,884.7	1,012.0	1,884.7	0.00	0.00	
9,200.0	90.00	180.00	7,211.0	-1,984.7	1,012.0	1,984.7	0.00	0.00	
9,300.0	90.00	180.00	7,211.0	-2,084.7	1,012.0	2,084.7	0.00	0.00	
9,400.0	90.00	180.00	7,211.0	-2,184.7	1,012.0	2,184.7	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well lone 1A-8H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 4917.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 4917.0ft (Original Well Elev)
Site:	S8-T2N-R66W (lone)	North Reference:	True
Well:	lone 1A-8H	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
9,500.0	90.00	180.00	7,211.0	-2,284.7	1,012.0	2,284.7	0.00	0.00	
9,600.0	90.00	180.00	7,211.0	-2,384.7	1,012.0	2,384.7	0.00	0.00	
9,700.0	90.00	180.00	7,211.0	-2,484.7	1,012.0	2,484.7	0.00	0.00	
9,800.0	90.00	180.00	7,211.0	-2,584.7	1,012.0	2,584.7	0.00	0.00	
9,900.0	90.00	180.00	7,211.0	-2,684.7	1,012.0	2,684.7	0.00	0.00	
10,000.0	90.00	180.00	7,211.0	-2,784.7	1,012.0	2,784.7	0.00	0.00	
10,100.0	90.00	180.00	7,211.0	-2,884.7	1,012.0	2,884.7	0.00	0.00	
10,200.0	90.00	180.00	7,211.0	-2,984.7	1,012.0	2,984.7	0.00	0.00	
10,300.0	90.00	180.00	7,211.0	-3,084.7	1,012.0	3,084.7	0.00	0.00	
10,400.0	90.00	180.00	7,211.0	-3,184.7	1,012.0	3,184.7	0.00	0.00	
10,500.0	90.00	180.00	7,211.0	-3,284.7	1,012.0	3,284.7	0.00	0.00	
10,600.0	90.00	180.00	7,211.0	-3,384.7	1,012.0	3,384.7	0.00	0.00	
10,700.0	90.00	180.00	7,211.0	-3,484.7	1,012.0	3,484.7	0.00	0.00	
10,800.0	90.00	180.00	7,211.0	-3,584.7	1,012.0	3,584.7	0.00	0.00	
10,900.0	90.00	180.00	7,211.0	-3,684.7	1,012.0	3,684.7	0.00	0.00	
11,000.0	90.00	180.00	7,211.0	-3,784.7	1,012.0	3,784.7	0.00	0.00	
11,100.0	90.00	180.00	7,211.0	-3,884.7	1,012.0	3,884.7	0.00	0.00	
11,200.0	90.00	180.00	7,211.0	-3,984.7	1,012.0	3,984.7	0.00	0.00	
11,300.0	90.00	180.00	7,211.0	-4,084.7	1,012.0	4,084.7	0.00	0.00	
11,400.0	90.00	180.00	7,211.0	-4,184.7	1,012.0	4,184.7	0.00	0.00	
11,500.0	90.00	180.00	7,211.0	-4,284.7	1,012.0	4,284.7	0.00	0.00	
11,600.0	90.00	180.00	7,211.0	-4,384.7	1,012.0	4,384.7	0.00	0.00	
11,700.0	90.00	180.00	7,211.0	-4,484.7	1,012.0	4,484.7	0.00	0.00	
11,800.0	90.00	180.00	7,211.0	-4,584.7	1,012.0	4,584.7	0.00	0.00	
11,805.2	90.00	180.00	7,211.0	-4,589.9	1,012.0	4,589.9	0.00	0.00	TD at 11805.2 - lone 1A-8H PBHL

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
lone 1A-8H PBHL	0.00	0.00	7,211.0	-4,589.9	1,012.0	1,297,048.86	3,197,806.39	40.146620	-104.792430
- plan hits target center									
- Point									

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,439.3	4,394.0	Sussex			
4,728.5	4,680.0	Sussex Marker			
5,037.0	4,985.0	Shannon			
7,176.7	7,044.0	Sharon Springs			
7,331.0	7,133.0	Niobrara			
7,457.3	7,182.0	B Chalk			

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well lone 1A-8H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 4917.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 4917.0ft (Original Well Elev)
Site:	S8-T2N-R66W (lone)	North Reference:	True
Well:	lone 1A-8H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP @ 200'
485.9	484.9	4.6	20.9	EOB; Inc=8.28°
6,630.9	6,561.1	200.4	916.2	Start 9° build @ 6630' MD
7,651.2	7,211.0	-435.9	1,012.0	Landing Pt @ 7651' MD; 90°
11,805.2	7,211.0	-4,589.9	1,012.0	TD at 11805.2

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S8-T2N-R66W (lone)

lone 1A-8H

Hz

Plan #1

Anticollision Report

12 June, 2012

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well lone 1A-8H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4917.0ft (Original Well Elev)
Reference Site:	S8-T2N-R66W (lone)	MD Reference:	WELL @ 4917.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	lone 1A-8H	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	6/12/2012		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	11,805.2	Plan #1 (Hz)	MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well lone 1A-8H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4917.0ft (Original Well Elev)
Reference Site:	S8-T2N-R66W (lone)	MD Reference:	WELL @ 4917.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	lone 1A-8H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance		Separation Factor	Warning
Offset Well - Wellbore - Design			Between Centres (ft)	Between Ellipses (ft)		
S8-T2N-R66W (lone)						
Albert Herman #1 (Existing) - Existing - Existing						Out of range
Albert Herman #2 (Existing) - Existing - Existing						Out of range
Carl Mason #1 (Existing) - Existing - Existing						Out of range
Herman 33-8 (Existing) - Existing - Existing						Out of range
Herman 34-8 (existing) - DD - DD						Out of range
lone #31-8 (Existing) - Existing - Existing						Out of range
lone #32-8 (Existing) - Existing - Existing						Out of range
lone #42-8 (Existing) - Existing - Existing	9,076.8	7,176.0	357.9	308.9	7.302	CC, ES
lone #42-8 (Existing) - Existing - Existing	9,100.0	7,176.0	358.7	309.3	7.261	SF
lone #4-6-8 - DD - Plan #1						Out of range
lone #5 (Existing) - Existing - Existing						Out of range
lone #6 (Existing) - Existing - Existing						Out of range
lone #6-0-8 - DD - Plan #1	2,665.7	2,755.2	57.3	35.6	2.638	CC, ES, SF
lone #6-4-8 (Existing) - Existing - Existing						Out of range
lone #6-8-8 (Existing) - DD - DD						Out of range
lone #6-8-8 (Existing) - DD - Plan #1						Out of range
lone #7 (Existing) - Existing - Existing						Out of range
lone #8 (Existing) - Existing - Existing						Out of range
lone #8 J 1-A (Existing) - Existing - Existing						Out of range
lone #8-0-8 - DD - Plan #1	7,092.1	6,984.3	87.8	63.1	3.554	CC, ES
lone #8-0-8 - DD - Plan #1	7,100.0	6,990.3	88.0	63.1	3.546	SF
lone #8-2-8 - DD - Plan #1	8,388.2	7,412.8	159.2	108.5	3.139	CC, ES
lone #8-2-8 - DD - Plan #1	8,400.0	7,412.8	159.6	108.7	3.136	SF
lone #9 (Existing) - Existing - Existing						Out of range
lone 1B-8H - Hz - Plan #1	200.0	200.0	11.2	10.5	17.127	CC, ES
lone 1B-8H - Hz - Plan #1	300.0	300.0	13.7	12.7	13.732	SF
lone 1C-8H - Hz - Plan #1	200.0	200.0	19.6	18.9	29.973	CC, ES
lone 1C-8H - Hz - Plan #1	300.0	300.0	22.1	21.1	22.101	SF
lone 1D-8H - Hz - Plan #1	200.0	200.0	30.7	30.1	47.100	CC, ES
lone 1D-8H - Hz - Plan #1	400.0	397.8	43.1	41.8	32.028	SF
lone 1E-8H - Hz - Plan #1	200.0	200.0	41.9	41.3	64.228	CC, ES
lone 1E-8H - Hz - Plan #1	400.0	393.8	62.1	60.7	46.304	SF
Mason #2 (Existing) - Existing - Existing						Out of range
Mason #43-8 (Existing) - Existing - Existing	10,111.3	7,163.0	270.9	204.5	4.080	CC, ES, SF
Mason #44-8 (Existing) - Existing - Existing	11,699.6	7,173.0	271.4	177.7	2.894	CC
Mason #44-8 (Existing) - Existing - Existing	11,700.0	7,173.0	271.4	177.7	2.894	ES, SF
Mason Gas Unit #3-8 (Existing) - Existing - Existing						Out of range

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Ione 1A-8H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4917.0ft (Original Well Elev)
Reference Site:	S8-T2N-R66W (Ione)	MD Reference:	WELL @ 4917.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Ione 1A-8H	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 S8-T2N-R66W (Ione) - Ione #42-8 (Existing) - Existing - Existing												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
8,800.0	7,211.0	7,176.0	7,176.0	36.6	12.5	90.00	-1,861.5	654.1	452.4	407.9	44.49	10.169	
8,900.0	7,211.0	7,176.0	7,176.0	38.0	12.5	90.00	-1,861.5	654.1	399.2	353.1	46.11	8.656	
9,000.0	7,211.0	7,176.0	7,176.0	39.5	12.5	90.00	-1,861.5	654.1	366.0	318.3	47.75	7.666	
9,076.8	7,211.0	7,176.0	7,176.0	40.6	12.5	90.00	-1,861.5	654.1	357.9	308.9	49.01	7.302 CC, ES	
9,100.0	7,211.0	7,176.0	7,176.0	41.0	12.5	90.00	-1,861.5	654.1	358.7	309.3	49.40	7.261 SF	
9,200.0	7,211.0	7,176.0	7,176.0	42.5	12.5	90.00	-1,861.5	654.1	378.5	327.5	51.05	7.415	
9,300.0	7,211.0	7,176.0	7,176.0	44.0	12.5	90.00	-1,861.5	654.1	421.8	369.1	52.72	8.002	
9,400.0	7,211.0	7,176.0	7,176.0	45.5	12.5	90.00	-1,861.5	654.1	482.3	427.9	54.39	8.867	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well lone 1A-8H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4917.0ft (Original Well Elev)
Reference Site:	S8-T2N-R66W (lone)	MD Reference:	WELL @ 4917.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	lone 1A-8H	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 S8-T2N-R66W (lone) - lone #6-0-8 - DD - 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		
1,700.0	1,685.4	1,906.4	1,842.8	4.7	8.6	4.41	105.7	630.3	464.2	457.6	6.59	70.421		
1,800.0	1,784.2	1,994.3	1,925.3	5.0	9.1	3.49	108.4	600.1	416.9	409.9	7.01	59.432		
1,900.0	1,883.1	2,082.2	2,007.8	5.4	9.7	2.34	111.0	569.9	369.7	362.3	7.47	49.482		
2,000.0	1,982.0	2,170.1	2,090.3	5.7	10.3	0.86	113.7	539.7	322.7	314.7	7.98	40.429		
2,100.0	2,080.9	2,258.0	2,172.8	6.0	10.9	-1.12	116.3	509.4	275.9	267.3	8.58	32.163		
2,200.0	2,179.8	2,345.9	2,255.3	6.3	11.5	-3.90	119.0	479.2	229.4	220.1	9.32	24.610		
2,300.0	2,278.6	2,433.8	2,337.8	6.6	12.0	-8.04	121.6	449.0	183.6	173.3	10.35	17.745		
2,400.0	2,377.5	2,521.7	2,420.2	6.9	12.6	-14.77	124.3	418.8	139.1	127.2	11.95	11.645		
2,500.0	2,476.4	2,609.5	2,502.7	7.2	13.2	-27.07	126.9	388.6	97.7	82.9	14.78	6.610		
2,600.0	2,575.3	2,697.4	2,585.2	7.6	13.8	-51.87	129.6	358.3	65.4	45.8	19.50	3.351		
2,665.7	2,640.3	2,755.2	2,639.4	7.8	14.1	-77.53	131.3	338.5	57.3	35.6	21.74	2.638 CC, ES, SF		
2,700.0	2,674.2	2,785.3	2,667.7	7.9	14.3	-91.60	132.3	328.1	59.6	38.1	21.53	2.770		
2,800.0	2,773.1	2,873.2	2,750.2	8.2	14.9	-122.00	134.9	297.9	86.0	68.2	17.81	4.827		
2,900.0	2,871.9	2,961.1	2,832.7	8.5	15.5	-137.25	137.6	267.7	125.6	110.7	14.89	8.435		
3,000.0	2,970.8	3,049.0	2,915.2	8.8	16.1	-145.28	140.2	237.4	169.5	156.0	13.45	12.598		
3,100.0	3,069.7	3,136.9	2,997.7	9.1	16.7	-150.05	142.9	207.2	214.9	202.1	12.81	16.785		
3,200.0	3,168.6	3,224.8	3,080.1	9.5	17.2	-153.17	145.5	177.0	261.2	248.7	12.56	20.792		
3,300.0	3,267.5	3,312.7	3,162.6	9.8	17.8	-155.36	148.2	146.8	307.9	295.4	12.54	24.561		
3,400.0	3,366.3	3,400.6	3,245.1	10.1	18.4	-156.98	150.8	116.6	354.9	342.3	12.63	28.091		
3,500.0	3,465.2	3,488.4	3,327.6	10.4	19.0	-158.22	153.5	86.3	402.1	389.3	12.81	31.399		
3,600.0	3,564.1	3,576.3	3,410.1	10.7	19.6	-159.20	156.2	56.1	449.3	436.3	13.02	34.505		
3,700.0	3,663.0	3,664.2	3,492.6	11.0	20.1	-160.00	158.8	25.9	496.7	483.4	13.27	37.429		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Ione 1A-8H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4917.0ft (Original Well Elev)
Reference Site:	S8-T2N-R66W (Ione)	MD Reference:	WELL @ 4917.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Ione 1A-8H	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 S8-T2N-R66W (Ione) - Ione #8-0-8 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
4,300.0	4,256.3	4,257.3	4,257.3	12.9	7.4	19.18	69.2	1,064.9	491.6	476.0	15.62	31.480		
4,400.0	4,355.2	4,356.2	4,356.2	13.2	7.6	19.77	69.2	1,064.9	477.5	461.5	16.03	29.794		
4,500.0	4,454.0	4,455.0	4,455.0	13.6	7.8	20.39	69.2	1,064.9	463.5	447.0	16.44	28.185		
4,600.0	4,552.9	4,553.9	4,553.9	13.9	7.9	21.05	69.2	1,064.9	449.5	432.7	16.87	26.649		
4,700.0	4,651.8	4,652.8	4,652.8	14.2	8.1	21.75	69.2	1,064.9	435.6	418.3	17.30	25.181		
4,800.0	4,750.7	4,751.7	4,751.7	14.5	8.3	22.50	69.2	1,064.9	421.8	404.0	17.74	23.777		
4,900.0	4,849.6	4,850.6	4,850.6	14.8	8.4	23.30	69.2	1,064.9	408.0	389.8	18.19	22.433		
5,000.0	4,948.4	4,949.4	4,949.4	15.1	8.6	24.16	69.2	1,064.9	394.3	375.7	18.65	21.147		
5,100.0	5,047.3	5,048.3	5,048.3	15.4	8.8	25.08	69.2	1,064.9	380.8	361.6	19.12	19.915		
5,200.0	5,146.2	5,147.2	5,147.2	15.8	9.0	26.06	69.2	1,064.9	367.3	347.7	19.60	18.736		
5,300.0	5,245.1	5,246.1	5,246.1	16.1	9.1	27.12	69.2	1,064.9	353.9	333.8	20.10	17.606		
5,400.0	5,344.0	5,345.0	5,345.0	16.4	9.3	28.26	69.2	1,064.9	340.7	320.0	20.62	16.524		
5,500.0	5,442.9	5,443.9	5,443.9	16.7	9.5	29.49	69.2	1,064.9	327.6	306.4	21.15	15.488		
5,600.0	5,541.7	5,542.7	5,542.7	17.0	9.7	30.82	69.2	1,064.9	314.6	292.9	21.70	14.497		
5,700.0	5,640.6	5,641.6	5,641.6	17.3	9.8	32.27	69.2	1,064.9	301.9	279.6	22.28	13.549		
5,800.0	5,739.5	5,740.5	5,740.5	17.7	10.0	33.84	69.2	1,064.9	289.3	266.5	22.88	12.644		
5,900.0	5,838.4	5,839.4	5,839.4	18.0	10.2	35.55	69.2	1,064.9	277.0	253.5	23.51	11.782		
6,000.0	5,937.3	5,938.3	5,938.3	18.3	10.3	37.42	69.2	1,064.9	265.0	240.8	24.17	10.962		
6,100.0	6,036.1	6,037.1	6,037.1	18.6	10.5	39.46	69.2	1,064.9	253.3	228.4	24.87	10.184		
6,200.0	6,135.0	6,136.0	6,136.0	18.9	10.7	41.70	69.2	1,064.9	241.9	216.3	25.60	9.449		
6,300.0	6,233.9	6,234.9	6,234.9	19.2	10.9	44.15	69.2	1,064.9	230.9	204.5	26.37	8.757		
6,400.0	6,332.8	6,333.8	6,333.8	19.5	11.0	46.83	69.2	1,064.9	220.4	193.2	27.17	8.111		
6,500.0	6,431.7	6,432.7	6,432.7	19.9	11.2	49.78	69.2	1,064.9	210.4	182.4	28.01	7.510		
6,600.0	6,530.5	6,531.5	6,531.5	20.2	11.4	53.00	69.2	1,064.9	201.0	172.1	28.89	6.958		
6,700.0	6,629.4	6,630.4	6,630.4	20.5	11.5	56.49	69.2	1,064.9	189.8	160.3	29.43	6.448		
6,800.0	6,727.1	6,728.1	6,728.1	20.7	11.7	-16.53	69.2	1,064.9	168.7	139.8	28.93	5.833		
6,900.0	6,821.1	6,822.1	6,822.1	20.9	11.9	-35.80	69.2	1,064.9	138.4	111.1	27.32	5.065		
7,000.0	6,909.2	6,910.2	6,910.2	21.1	12.0	-59.50	69.2	1,064.9	104.6	79.7	24.98	4.188		
7,092.1	6,983.3	6,984.3	6,984.3	21.3	12.2	-90.00	69.2	1,064.9	87.8	63.1	24.70	3.554 CC, ES		
7,100.0	6,989.3	6,990.3	6,990.3	21.3	12.2	-92.72	69.2	1,064.9	88.0	63.1	24.80	3.546 SF		
7,200.0	7,059.3	7,060.3	7,060.3	21.6	12.3	-121.17	69.2	1,064.9	117.9	92.2	25.74	4.582		
7,300.0	7,117.6	7,118.6	7,118.6	21.9	12.4	-136.28	69.2	1,064.9	184.0	159.4	24.59	7.482		
7,400.0	7,162.6	7,163.6	7,163.6	22.3	12.5	-142.16	69.2	1,064.9	267.2	244.4	22.87	11.688		
7,500.0	7,193.3	7,194.3	7,194.3	22.8	12.5	-140.40	69.2	1,064.9	359.7	337.7	22.01	16.338		
7,600.0	7,209.0	7,210.0	7,210.0	23.4	12.6	-121.61	69.2	1,064.9	457.1	432.3	24.80	18.429		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Ione 1A-8H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4917.0ft (Original Well Elev)
Reference Site:	S8-T2N-R66W (Ione)	MD Reference:	WELL @ 4917.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Ione 1A-8H	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												S8-T2N-R66W (Ione) - Ione #8-2-8 - DD - 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				
8,000.0	7,211.0	7,412.8	7,212.0	26.7	25.3	-90.00	-1,172.9	1,171.2	419.6	374.6	45.05	9.314					
8,100.0	7,211.0	7,412.8	7,212.0	27.7	25.3	-90.00	-1,172.9	1,171.2	329.3	282.8	46.44	7.090					
8,200.0	7,211.0	7,412.8	7,212.0	28.8	25.3	-90.00	-1,172.9	1,171.2	246.5	198.6	47.89	5.148					
8,300.0	7,211.0	7,412.8	7,212.0	30.0	25.3	-90.00	-1,172.9	1,171.2	182.0	132.6	49.38	3.686					
8,388.2	7,211.0	7,412.8	7,212.0	31.1	25.3	-90.00	-1,172.9	1,171.2	159.2	108.5	50.72	3.139	CC, ES				
8,400.0	7,211.0	7,412.8	7,212.0	31.3	25.3	-90.00	-1,172.9	1,171.2	159.6	108.7	50.89	3.136	SF				
8,500.0	7,211.0	7,412.8	7,212.0	32.5	25.3	-90.00	-1,172.9	1,171.2	194.5	142.1	52.44	3.709					
8,600.0	7,211.0	7,412.8	7,212.0	33.9	25.3	-90.00	-1,172.9	1,171.2	264.9	210.9	54.01	4.905					
8,700.0	7,211.0	7,412.8	7,212.0	35.2	25.3	-90.00	-1,172.9	1,171.2	350.1	294.4	55.61	6.295					
8,800.0	7,211.0	7,412.8	7,212.0	36.6	25.3	-90.00	-1,172.9	1,171.2	441.5	384.2	57.21	7.716					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Ione 1A-8H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4917.0ft (Original Well Elev)
Reference Site:	S8-T2N-R66W (Ione)	MD Reference:	WELL @ 4917.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Ione 1A-8H	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 S8-T2N-R66W (Ione) - Ione 1B-8H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-90.04	0.0	-11.2	11.2					
100.0	100.0	100.0	100.0	0.2	0.2	-90.04	0.0	-11.2	11.2	10.9	0.30	36.814		
200.0	200.0	200.0	200.0	0.3	0.3	-90.04	0.0	-11.2	11.2	10.5	0.65	17.127 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-170.02	0.0	-11.2	13.7	12.7	1.00	13.732 SF		
400.0	399.6	400.5	400.5	0.7	0.7	-169.89	1.5	-9.0	19.3	17.9	1.35	14.237		
500.0	498.8	500.3	500.1	1.0	0.9	-168.30	4.7	-4.3	27.3	25.5	1.71	15.970		
600.0	597.7	599.8	599.4	1.3	1.1	-168.08	7.9	0.4	37.1	35.1	2.07	17.959		
700.0	696.5	699.3	698.8	1.6	1.3	-167.95	11.1	5.1	47.0	44.6	2.43	19.346		
800.0	795.4	798.8	798.1	1.9	1.5	-167.87	14.3	9.8	56.9	54.1	2.79	20.366		
900.0	894.3	898.3	897.5	2.2	1.7	-167.81	17.5	14.5	66.8	63.6	3.16	21.147		
1,000.0	993.2	997.8	996.8	2.5	1.9	-167.77	20.7	19.2	76.7	73.1	3.52	21.764		
1,100.0	1,092.1	1,097.3	1,096.2	2.8	2.1	-167.73	24.0	23.9	86.5	82.7	3.89	22.264		
1,200.0	1,190.9	1,196.9	1,195.5	3.2	2.3	-167.71	27.2	28.6	96.4	92.2	4.25	22.677		
1,300.0	1,289.8	1,296.4	1,294.9	3.5	2.5	-167.69	30.4	33.3	106.3	101.7	4.62	23.024		
1,400.0	1,388.7	1,395.9	1,394.2	3.8	2.7	-167.67	33.6	38.0	116.2	111.2	4.98	23.320		
1,500.0	1,487.6	1,495.4	1,493.5	4.1	2.8	-167.65	36.8	42.7	126.1	120.7	5.35	23.574		
1,600.0	1,586.5	1,594.9	1,592.9	4.4	3.0	-167.64	40.0	47.4	136.0	130.2	5.71	23.796		
1,700.0	1,685.4	1,694.4	1,692.2	4.7	3.2	-167.63	43.2	52.1	145.8	139.8	6.08	23.991		
1,800.0	1,784.2	1,793.9	1,791.6	5.0	3.4	-167.62	46.4	56.8	155.7	149.3	6.44	24.163		
1,900.0	1,883.1	1,893.4	1,890.9	5.4	3.6	-167.61	49.6	61.5	165.6	158.8	6.81	24.317		
2,000.0	1,982.0	1,992.9	1,990.3	5.7	3.8	-167.60	52.9	66.2	175.5	168.3	7.18	24.455		
2,100.0	2,080.9	2,092.4	2,089.6	6.0	4.0	-167.60	56.1	70.9	185.4	177.8	7.54	24.580		
2,200.0	2,179.8	2,192.0	2,189.0	6.3	4.2	-167.59	59.3	75.6	195.3	187.3	7.91	24.692		
2,300.0	2,278.6	2,291.5	2,288.3	6.6	4.4	-167.58	62.5	80.3	205.1	196.9	8.27	24.795		
2,400.0	2,377.5	2,391.0	2,387.7	6.9	4.6	-167.58	65.7	85.0	215.0	206.4	8.64	24.889		
2,500.0	2,476.4	2,490.5	2,487.0	7.2	4.8	-167.57	68.9	89.7	224.9	215.9	9.00	24.976		
2,600.0	2,575.3	2,590.0	2,586.4	7.6	5.0	-167.57	72.1	94.4	234.8	225.4	9.37	25.055		
2,700.0	2,674.2	2,689.5	2,685.7	7.9	5.2	-167.57	75.3	99.1	244.7	234.9	9.74	25.129		
2,800.0	2,773.1	2,789.0	2,785.1	8.2	5.4	-167.56	78.5	103.8	254.6	244.5	10.10	25.197		
2,900.0	2,871.9	2,888.5	2,884.4	8.5	5.6	-167.56	81.7	108.5	264.4	254.0	10.47	25.260		
3,000.0	2,970.8	2,988.0	2,983.8	8.8	5.8	-167.56	85.0	113.2	274.3	263.5	10.83	25.320		
3,100.0	3,069.7	3,087.6	3,083.1	9.1	6.0	-167.55	88.2	117.9	284.2	273.0	11.20	25.375		
3,200.0	3,168.6	3,187.1	3,182.5	9.5	6.2	-167.55	91.4	122.6	294.1	282.5	11.57	25.426		
3,300.0	3,267.5	3,286.6	3,281.8	9.8	6.4	-167.55	94.6	127.3	304.0	292.0	11.93	25.475		
3,400.0	3,366.3	3,386.1	3,381.2	10.1	6.6	-167.55	97.8	132.0	313.8	301.6	12.30	25.521		
3,500.0	3,465.2	3,485.6	3,480.5	10.4	6.8	-167.54	101.0	136.7	323.7	311.1	12.66	25.564		
3,600.0	3,564.1	3,585.1	3,579.8	10.7	7.0	-167.54	104.2	141.4	333.6	320.6	13.03	25.604		
3,700.0	3,663.0	3,684.6	3,679.2	11.0	7.2	-167.54	107.4	146.1	343.5	330.1	13.40	25.642		
3,800.0	3,761.9	3,784.1	3,778.5	11.3	7.4	-167.54	110.6	150.8	353.4	339.6	13.76	25.679		
3,900.0	3,860.7	3,883.6	3,877.9	11.7	7.6	-167.54	113.9	155.5	363.3	349.1	14.13	25.713		
4,000.0	3,959.6	3,983.1	3,977.2	12.0	7.8	-167.54	117.1	160.2	373.1	358.7	14.49	25.746		
4,100.0	4,058.5	4,082.7	4,076.6	12.3	8.0	-167.53	120.3	164.9	383.0	368.2	14.86	25.777		
4,200.0	4,157.4	4,182.2	4,175.9	12.6	8.2	-167.53	123.5	169.6	392.9	377.7	15.23	25.806		
4,300.0	4,256.3	4,281.7	4,275.3	12.9	8.4	-167.53	126.7	174.3	402.8	387.2	15.59	25.834		
4,400.0	4,355.2	4,381.2	4,374.6	13.2	8.6	-167.53	129.9	179.0	412.7	396.7	15.96	25.861		
4,500.0	4,454.0	4,480.7	4,474.0	13.6	8.8	-167.53	133.1	183.6	422.6	406.2	16.32	25.887		
4,600.0	4,552.9	4,580.2	4,573.3	13.9	9.0	-167.53	136.3	188.3	432.4	415.8	16.69	25.911		
4,700.0	4,651.8	4,679.7	4,672.7	14.2	9.2	-167.53	139.5	193.0	442.3	425.3	17.06	25.935		
4,800.0	4,750.7	4,779.2	4,772.0	14.5	9.4	-167.52	142.8	197.7	452.2	434.8	17.42	25.957		
4,900.0	4,849.6	4,878.7	4,871.4	14.8	9.6	-167.52	146.0	202.4	462.1	444.3	17.79	25.979		
5,000.0	4,948.4	4,978.3	4,970.7	15.1	9.8	-167.52	149.2	207.1	472.0	453.8	18.15	25.999		
5,100.0	5,047.3	5,077.8	5,070.1	15.4	10.0	-167.52	152.4	211.8	481.9	463.3	18.52	26.019		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Ione 1A-8H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4917.0ft (Original Well Elev)
Reference Site:	S8-T2N-R66W (Ione)	MD Reference:	WELL @ 4917.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Ione 1A-8H	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 S8-T2N-R66W (Ione) - Ione 1B-8H - 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	+E/-W	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)			
5,200.0	5,146.2	5,177.3	5,169.4	15.8	10.2	-167.52	155.6	216.5	491.7	472.8	18.89	26.038	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Ione 1A-8H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4917.0ft (Original Well Elev)
Reference Site:	S8-T2N-R66W (Ione)	MD Reference:	WELL @ 4917.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Ione 1A-8H	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 S8-T2N-R66W (Ione) - Ione 1C-8H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-89.98	0.0	-19.6	19.6					
100.0	100.0	100.0	100.0	0.2	0.2	-89.98	0.0	-19.6	19.6	19.3	64.425			
200.0	200.0	200.0	200.0	0.3	0.3	-89.98	0.0	-19.6	19.6	18.9	0.65	29.973 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-169.07	0.0	-19.6	22.1	21.1	1.00	22.101 SF		
400.0	399.6	399.6	399.6	0.7	0.7	-171.90	0.0	-19.6	29.9	28.5	1.35	22.166		
500.0	498.8	498.8	498.8	1.0	0.8	-174.32	0.0	-19.6	42.8	41.1	1.69	25.308		
600.0	597.7	597.7	597.7	1.3	1.0	-175.79	0.0	-19.6	57.6	55.6	2.04	28.296		
700.0	696.5	696.5	696.5	1.6	1.2	-176.65	0.0	-19.6	72.5	70.1	2.38	30.427		
800.0	795.4	795.4	795.4	1.9	1.4	-177.22	0.0	-19.6	87.4	84.7	2.73	32.022		
900.0	894.3	894.3	894.3	2.2	1.5	-177.63	0.0	-19.6	102.3	99.2	3.08	33.260		
1,000.0	993.2	993.2	993.2	2.5	1.7	-177.93	0.0	-19.6	117.2	113.8	3.42	34.249		
1,100.0	1,092.1	1,092.1	1,092.1	2.8	1.9	-178.16	0.0	-19.6	132.1	128.4	3.77	35.057		
1,200.0	1,190.9	1,190.9	1,190.9	3.2	2.1	-178.35	0.0	-19.6	147.0	142.9	4.12	35.729		
1,300.0	1,289.8	1,289.8	1,289.8	3.5	2.2	-178.50	0.0	-19.6	161.9	157.5	4.46	36.297		
1,400.0	1,388.7	1,388.7	1,388.7	3.8	2.4	-178.63	0.0	-19.6	176.9	172.0	4.81	36.784		
1,500.0	1,487.6	1,487.6	1,487.6	4.1	2.6	-178.73	0.0	-19.6	191.8	186.6	5.15	37.206		
1,600.0	1,586.5	1,586.5	1,586.5	4.4	2.7	-178.83	0.0	-19.6	206.7	201.2	5.50	37.574		
1,700.0	1,685.4	1,685.4	1,685.4	4.7	2.9	-178.90	0.0	-19.6	221.6	215.7	5.85	37.899		
1,800.0	1,784.2	1,784.2	1,784.2	5.0	3.1	-178.97	0.0	-19.6	236.5	230.3	6.19	38.188		
1,900.0	1,883.1	1,883.1	1,883.1	5.4	3.3	-179.03	0.0	-19.6	251.4	244.9	6.54	38.446		
2,000.0	1,982.0	1,982.0	1,982.0	5.7	3.4	-179.09	0.0	-19.6	266.3	259.4	6.89	38.678		
2,100.0	2,080.9	2,080.9	2,080.9	6.0	3.6	-179.14	0.0	-19.6	281.2	274.0	7.23	38.888		
2,200.0	2,179.8	2,179.8	2,179.8	6.3	3.8	-179.18	0.0	-19.6	296.2	288.6	7.58	39.079		
2,300.0	2,278.6	2,278.6	2,278.6	6.6	4.0	-179.22	0.0	-19.6	311.1	303.1	7.92	39.253		
2,400.0	2,377.5	2,377.5	2,377.5	6.9	4.1	-179.26	0.0	-19.6	326.0	317.7	8.27	39.413		
2,500.0	2,476.4	2,476.4	2,476.4	7.2	4.3	-179.29	0.0	-19.6	340.9	332.3	8.62	39.559		
2,600.0	2,575.3	2,575.3	2,575.3	7.6	4.5	-179.32	0.0	-19.6	355.8	346.8	8.96	39.695		
2,700.0	2,674.2	2,674.2	2,674.2	7.9	4.6	-179.35	0.0	-19.6	370.7	361.4	9.31	39.820		
2,800.0	2,773.1	2,773.1	2,773.1	8.2	4.8	-179.37	0.0	-19.6	385.6	376.0	9.66	39.937		
2,900.0	2,871.9	2,871.9	2,871.9	8.5	5.0	-179.39	0.0	-19.6	400.6	390.5	10.00	40.045		
3,000.0	2,970.8	2,970.8	2,970.8	8.8	5.2	-179.42	0.0	-19.6	415.5	405.1	10.35	40.146		
3,100.0	3,069.7	3,069.7	3,069.7	9.1	5.3	-179.44	0.0	-19.6	430.4	419.7	10.70	40.241		
3,200.0	3,168.6	3,168.6	3,168.6	9.5	5.5	-179.45	0.0	-19.6	445.3	434.3	11.04	40.329		
3,300.0	3,267.5	3,267.5	3,267.5	9.8	5.7	-179.47	0.0	-19.6	460.2	448.8	11.39	40.413		
3,400.0	3,366.3	3,366.3	3,366.3	10.1	5.9	-179.49	0.0	-19.6	475.1	463.4	11.73	40.491		
3,500.0	3,465.2	3,465.2	3,465.2	10.4	6.0	-179.50	0.0	-19.6	490.0	478.0	12.08	40.565		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Ione 1A-8H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4917.0ft (Original Well Elev)
Reference Site:	S8-T2N-R66W (Ione)	MD Reference:	WELL @ 4917.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Ione 1A-8H	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 S8-T2N-R66W (Ione) - Ione 1D-8H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-90.03	0.0	-30.7	30.7					
100.0	100.0	100.0	100.0	0.2	0.2	-90.03	0.0	-30.7	30.7	30.4	0.30	101.239		
200.0	200.0	200.0	200.0	0.3	0.3	-90.03	0.0	-30.7	30.7	30.1	0.65	47.100 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-168.64	0.0	-30.7	33.3	32.3	1.00	33.264		
400.0	399.6	397.8	397.8	0.7	0.7	-168.79	1.3	-32.9	43.1	41.8	1.35	32.028 SF		
500.0	498.8	495.8	495.6	1.0	0.9	-168.00	4.4	-37.9	60.9	59.2	1.70	35.909		
600.0	597.7	593.9	593.5	1.3	1.1	-167.87	7.6	-43.0	80.6	78.6	2.05	39.275		
700.0	696.5	691.9	691.3	1.6	1.3	-167.79	10.8	-48.2	100.4	97.9	2.41	41.621		
800.0	795.4	789.9	789.2	1.9	1.4	-167.74	13.9	-53.3	120.1	117.3	2.77	43.346		
900.0	894.3	888.0	887.0	2.2	1.6	-167.70	17.1	-58.4	139.8	136.7	3.13	44.667		
1,000.0	993.2	986.0	984.9	2.5	1.8	-167.67	20.3	-63.5	159.5	156.0	3.49	45.710		
1,100.0	1,092.1	1,084.0	1,082.7	2.8	2.0	-167.65	23.5	-68.7	179.2	175.4	3.85	46.555		
1,200.0	1,190.9	1,182.1	1,180.6	3.2	2.2	-167.63	26.6	-73.8	199.0	194.8	4.21	47.253		
1,300.0	1,289.8	1,280.1	1,278.4	3.5	2.4	-167.61	29.8	-78.9	218.7	214.1	4.57	47.839		
1,400.0	1,388.7	1,378.2	1,376.3	3.8	2.6	-167.60	33.0	-84.0	238.4	233.5	4.93	48.339		
1,500.0	1,487.6	1,476.2	1,474.1	4.1	2.8	-167.59	36.2	-89.2	258.1	252.8	5.29	48.769		
1,600.0	1,586.5	1,574.2	1,572.0	4.4	3.0	-167.58	39.3	-94.3	277.8	272.2	5.65	49.143		
1,700.0	1,685.4	1,672.3	1,669.8	4.7	3.2	-167.57	42.5	-99.4	297.6	291.6	6.01	49.473		
1,800.0	1,784.2	1,770.3	1,767.7	5.0	3.4	-167.57	45.7	-104.5	317.3	310.9	6.38	49.764		
1,900.0	1,883.1	1,868.3	1,865.5	5.4	3.6	-167.56	48.9	-109.6	337.0	330.3	6.74	50.024		
2,000.0	1,982.0	1,966.4	1,963.4	5.7	3.8	-167.56	52.0	-114.8	356.7	349.6	7.10	50.257		
2,100.0	2,080.9	2,064.4	2,061.2	6.0	4.0	-167.55	55.2	-119.9	376.5	369.0	7.46	50.467		
2,200.0	2,179.8	2,162.4	2,159.1	6.3	4.2	-167.55	58.4	-125.0	396.2	388.4	7.82	50.658		
2,300.0	2,278.6	2,260.5	2,256.9	6.6	4.4	-167.54	61.6	-130.1	415.9	407.7	8.18	50.831		
2,400.0	2,377.5	2,358.5	2,354.8	6.9	4.6	-167.54	64.7	-135.3	435.6	427.1	8.54	50.990		
2,500.0	2,476.4	2,456.6	2,452.6	7.2	4.8	-167.54	67.9	-140.4	455.3	446.4	8.90	51.136		
2,600.0	2,575.3	2,554.6	2,550.5	7.6	5.0	-167.53	71.1	-145.5	475.1	465.8	9.27	51.270		
2,700.0	2,674.2	2,652.6	2,648.3	7.9	5.2	-167.53	74.3	-150.6	494.8	485.2	9.63	51.395		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Ione 1A-8H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4917.0ft (Original Well Elev)
Reference Site:	S8-T2N-R66W (Ione)	MD Reference:	WELL @ 4917.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Ione 1A-8H	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 S8-T2N-R66W (Ione) - Ione 1E-8H - 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	-90.03	0.0	-41.9	41.9					
100.0	100.0	100.0	100.0	0.2	0.2	-90.03	0.0	-41.9	41.9	41.6	0.30	138.053		
200.0	200.0	200.0	200.0	0.3	0.3	-90.03	0.0	-41.9	41.9	41.3	0.65	64.228	CC, ES	
300.0	300.0	297.6	297.6	0.5	0.5	-167.70	0.5	-44.4	47.0	46.0	1.00	47.094		
400.0	399.6	393.8	393.5	0.7	0.7	-167.68	2.0	-51.5	62.1	60.7	1.34	46.304	SF	
500.0	498.8	487.1	486.1	1.0	1.0	-167.64	4.4	-63.0	86.9	85.2	1.68	51.696		
600.0	597.7	582.4	580.1	1.3	1.3	-167.61	7.5	-77.4	116.2	114.1	2.03	57.224		
700.0	696.5	678.0	674.6	1.6	1.6	-167.59	10.5	-91.8	145.5	143.1	2.38	61.090		
800.0	795.4	773.6	769.0	1.9	1.9	-167.57	13.6	-106.2	174.8	172.1	2.73	63.944		
900.0	894.3	869.2	863.5	2.2	2.2	-167.56	16.6	-120.6	204.2	201.1	3.09	66.136		
1,000.0	993.2	964.8	958.0	2.5	2.5	-167.56	19.7	-135.1	233.5	230.1	3.44	67.871		
1,100.0	1,092.1	1,060.4	1,052.4	2.8	2.8	-167.55	22.8	-149.5	262.9	259.1	3.79	69.279		
1,200.0	1,190.9	1,156.0	1,146.9	3.2	3.1	-167.55	25.8	-163.9	292.2	288.0	4.15	70.444		
1,300.0	1,289.8	1,251.6	1,241.3	3.5	3.4	-167.54	28.9	-178.4	321.5	317.0	4.50	71.424		
1,400.0	1,388.7	1,347.2	1,335.8	3.8	3.7	-167.54	31.9	-192.8	350.9	346.0	4.86	72.259		
1,500.0	1,487.6	1,442.8	1,430.2	4.1	4.0	-167.54	35.0	-207.2	380.2	375.0	5.21	72.980		
1,600.0	1,586.5	1,538.4	1,524.7	4.4	4.3	-167.53	38.0	-221.7	409.5	404.0	5.56	73.608		
1,700.0	1,685.4	1,634.0	1,619.1	4.7	4.6	-167.53	41.1	-236.1	438.9	433.0	5.92	74.160		
1,800.0	1,784.2	1,729.6	1,713.6	5.0	4.9	-167.53	44.2	-250.5	468.2	461.9	6.27	74.649		
1,900.0	1,883.1	1,825.2	1,808.1	5.4	5.2	-167.53	47.2	-264.9	497.5	490.9	6.63	75.086		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Ione 1A-8H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4917.0ft (Original Well Elev)
Reference Site:	S8-T2N-R66W (Ione)	MD Reference:	WELL @ 4917.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Ione 1A-8H	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 S8-T2N-R66W (Ione) - Mason #43-8 (Existing) - Existing - Existing												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
9,700.0	7,211.0	7,163.0	7,163.0	50.2	12.5	90.00	-2,896.0	741.0	492.5	433.1	59.42	8.290	
9,800.0	7,211.0	7,163.0	7,163.0	51.8	12.5	90.00	-2,896.0	741.0	412.7	351.6	61.11	6.753	
9,900.0	7,211.0	7,163.0	7,163.0	53.4	12.5	90.00	-2,896.0	741.0	343.6	280.8	62.81	5.471	
10,000.0	7,211.0	7,163.0	7,163.0	55.0	12.5	90.00	-2,896.0	741.0	292.9	228.4	64.51	4.541	
10,100.0	7,211.0	7,163.0	7,163.0	56.6	12.5	90.00	-2,896.0	741.0	271.2	205.0	66.21	4.095	
10,111.3	7,211.0	7,163.0	7,163.0	56.8	12.5	90.00	-2,896.0	741.0	270.9	204.5	66.41	4.080	CC, ES, SF
10,200.0	7,211.0	7,163.0	7,163.0	58.2	12.5	90.00	-2,896.0	741.0	285.1	217.2	67.92	4.197	
10,300.0	7,211.0	7,163.0	7,163.0	59.8	12.5	90.00	-2,896.0	741.0	330.2	260.5	69.63	4.742	
10,400.0	7,211.0	7,163.0	7,163.0	61.5	12.5	90.00	-2,896.0	741.0	395.9	324.6	71.35	5.549	
10,500.0	7,211.0	7,163.0	7,163.0	63.1	12.5	90.00	-2,896.0	741.0	473.8	400.7	73.06	6.485	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Ione 1A-8H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4917.0ft (Original Well Elev)
Reference Site:	S8-T2N-R66W (Ione)	MD Reference:	WELL @ 4917.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Ione 1A-8H	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													S8-T2N-R66W (Ione) - Mason #44-8 (Existing) - Existing - Existing		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				
11,300.0	7,211.0	7,173.0	7,173.0	76.4	12.5	90.00	-4,484.3	740.5	483.1	396.2	86.87	5.561					
11,400.0	7,211.0	7,173.0	7,173.0	78.1	12.5	90.00	-4,484.3	740.5	404.3	315.7	88.60	4.563					
11,500.0	7,211.0	7,173.0	7,173.0	79.8	12.5	90.00	-4,484.3	740.5	336.9	246.6	90.33	3.730					
11,600.0	7,211.0	7,173.0	7,173.0	81.5	12.5	90.00	-4,484.3	740.5	289.1	197.1	92.06	3.141					
11,699.6	7,211.0	7,173.0	7,173.0	83.2	12.5	90.00	-4,484.3	740.5	271.4	177.7	93.79	2.894 CC					
11,700.0	7,211.0	7,173.0	7,173.0	83.2	12.5	90.00	-4,484.3	740.5	271.4	177.7	93.80	2.894 ES, SF					
11,800.0	7,211.0	7,173.0	7,173.0	84.9	12.5	90.00	-4,484.3	740.5	289.4	193.9	95.53	3.030					
11,805.2	7,211.0	7,173.0	7,173.0	85.0	12.5	90.00	-4,484.3	740.5	291.3	195.7	95.62	3.046					

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well lone 1A-8H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4917.0ft (Original Well Elev)
Reference Site:	S8-T2N-R66W (lone)	MD Reference:	WELL @ 4917.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	lone 1A-8H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4917.0ft (Original Well Elev)

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: lone 1A-8H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.45°

