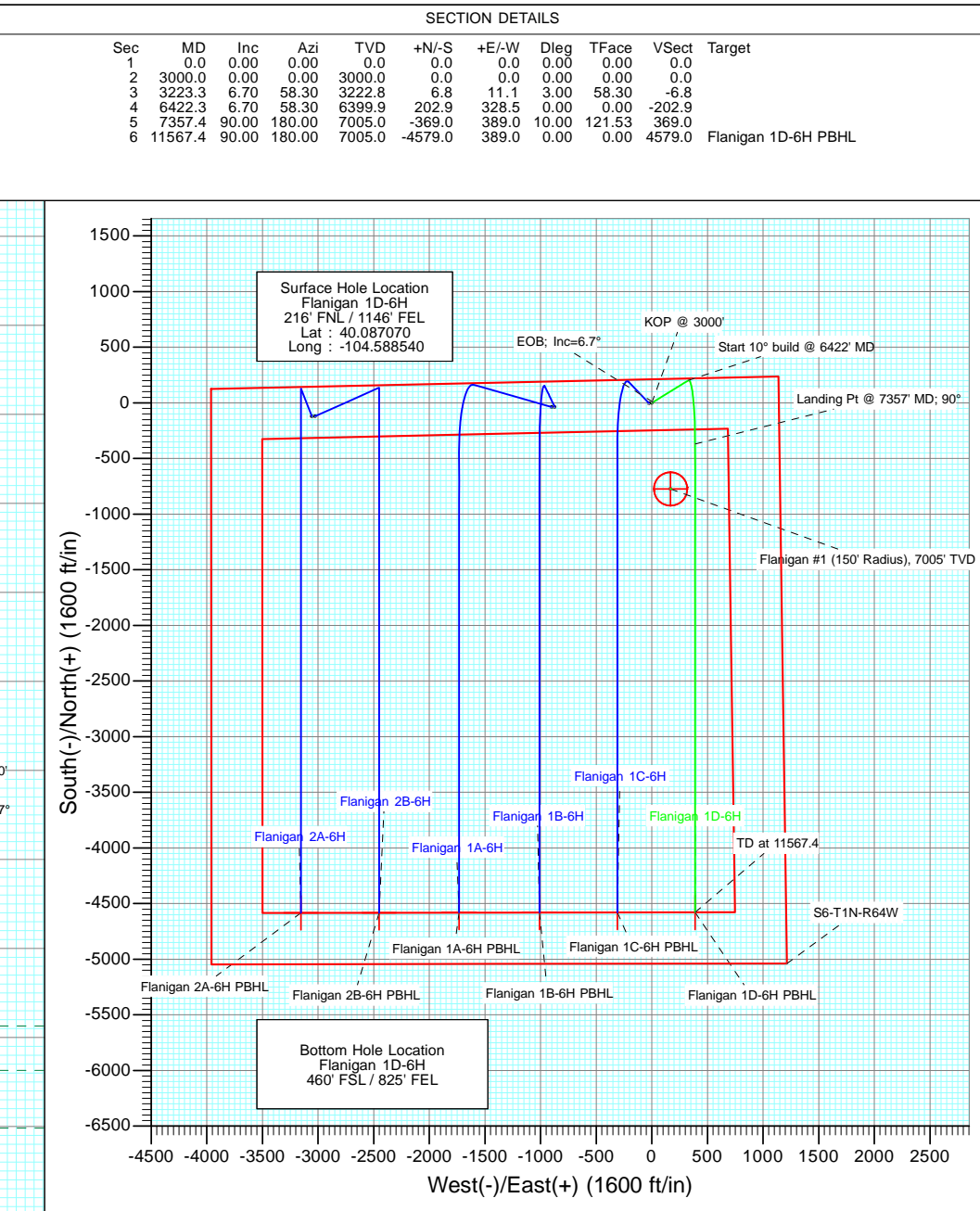
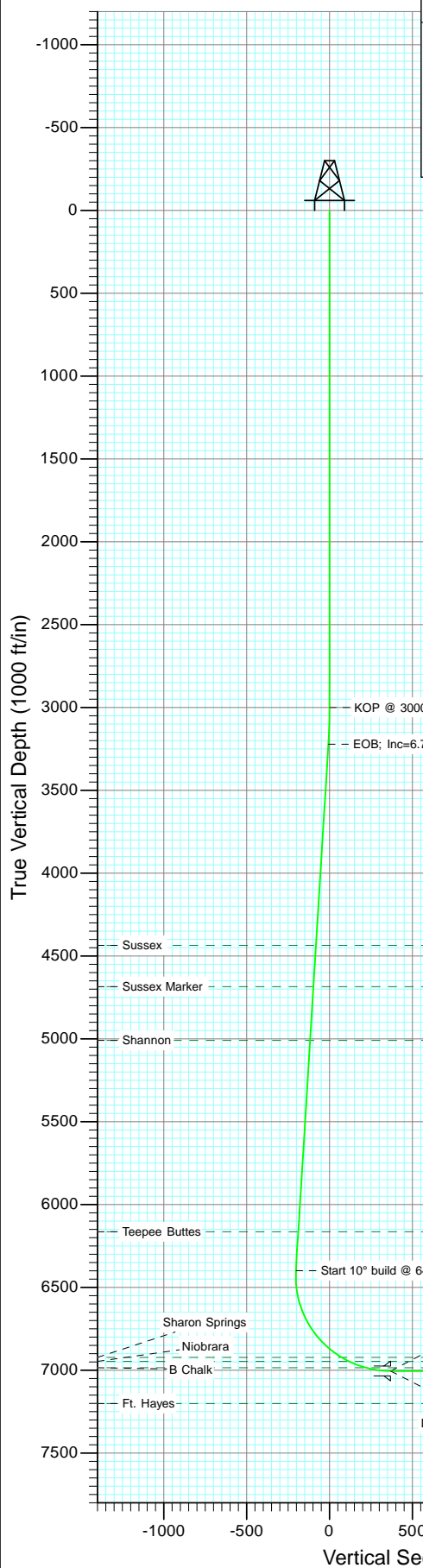




Project: DJ Wattenberg
Site: NWNE S6-T1N-R64W (Flanigan)
Well: Flanigan 1D-6H
Wellbore: Hz
Design: Plan #1



T **M**
Magnetic North: 8.63°
Magnetic Field
Strength: 52893.2snT
Dip Angle: 66.80°
Date: 4/25/2012
Model: IGRF2010

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4436.0	4444.8	Sussex
4685.0	4695.6	Sussex Marker
5009.0	5021.8	Shannon
6164.0	6184.7	Teepee Buttes
6923.0	7046.3	Sharon Springs
6947.0	7096.7	Niobrara
6985.0	7205.2	B Chalk

TD at 11567.4

Flanigan 1D-6H PBHL

Type	Target	No Target (Freehand)	Azimuth	Origin Type	N/S	E/W	From TVD
Name	Flanigan 1D-6H PBHL		TVD	+N/-S	+E/-W	Latitude	Longitude
			7005.0	-4579.0	389.0	40.074500	-104.587150

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Flanigan 1D-6H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Site:	NWNE S6-T1N-R64W (Flanigan)	North Reference:	True
Well:	Flanigan 1D-6H	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		NWNE S6-T1N-R64W (Flanigan)			
Site Position:		Northing:	1,275,832.11 ft	Latitude:	40.086970
From:	Lat/Long	Easting:	3,254,152.25 ft	Longitude:	-104.591660
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.59 °

Well	Flanigan 1D-6H					
Well Position	+N/-S	0.0 ft	Northing:	1,275,877.48 ft	Latitude:	40.087070
	+E/-W	0.0 ft	Easting:	3,255,024.80 ft	Longitude:	-104.588540
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,016.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/25/2012	8.63	66.80	52,893

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	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,223.3	6.70	58.30	3,222.8	6.8	11.1	3.00	3.00	0.00	58.30	
6,422.3	6.70	58.30	6,399.9	202.9	328.5	0.00	0.00	0.00	0.00	
7,357.4	90.00	180.00	7,005.0	-369.0	389.0	10.00	8.91	13.01	121.53	
11,567.4	90.00	180.00	7,005.0	-4,579.0	389.0	0.00	0.00	0.00	0.00	Flanigan 1D-6H PBHL

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Flanigan 1D-6H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Site:	NWNE S6-T1N-R64W (Flanigan)	North Reference:	True
Well:	Flanigan 1D-6H	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	
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	KOP @ 3000'
3,100.0	3.00	58.30	3,100.0	1.4	2.2	-1.4	3.00	3.00	
3,200.0	6.00	58.30	3,199.6	5.5	8.9	-5.5	3.00	3.00	
3,223.3	6.70	58.30	3,222.8	6.8	11.1	-6.8	3.00	3.00	EOB; Inc=6.7°
3,300.0	6.70	58.30	3,299.0	11.6	18.7	-11.6	0.00	0.00	
3,400.0	6.70	58.30	3,398.3	17.7	28.6	-17.7	0.00	0.00	
3,500.0	6.70	58.30	3,497.6	23.8	38.6	-23.8	0.00	0.00	
3,600.0	6.70	58.30	3,596.9	29.9	48.5	-29.9	0.00	0.00	
3,700.0	6.70	58.30	3,696.2	36.1	58.4	-36.1	0.00	0.00	
3,800.0	6.70	58.30	3,795.6	42.2	68.3	-42.2	0.00	0.00	
3,900.0	6.70	58.30	3,894.9	48.3	78.2	-48.3	0.00	0.00	
4,000.0	6.70	58.30	3,994.2	54.5	88.2	-54.5	0.00	0.00	
4,100.0	6.70	58.30	4,093.5	60.6	98.1	-60.6	0.00	0.00	
4,200.0	6.70	58.30	4,192.8	66.7	108.0	-66.7	0.00	0.00	
4,300.0	6.70	58.30	4,292.1	72.8	117.9	-72.8	0.00	0.00	
4,400.0	6.70	58.30	4,391.5	79.0	127.9	-79.0	0.00	0.00	
4,444.8	6.70	58.30	4,436.0	81.7	132.3	-81.7	0.00	0.00	Sussex
4,500.0	6.70	58.30	4,490.8	85.1	137.8	-85.1	0.00	0.00	
4,600.0	6.70	58.30	4,590.1	91.2	147.7	-91.2	0.00	0.00	
4,695.6	6.70	58.30	4,685.0	97.1	157.2	-97.1	0.00	0.00	Sussex Marker
4,700.0	6.70	58.30	4,689.4	97.4	157.6	-97.4	0.00	0.00	
4,800.0	6.70	58.30	4,788.7	103.5	167.6	-103.5	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Flanigan 1D-6H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Site:	NWNE S6-T1N-R64W (Flanigan)	North Reference:	True
Well:	Flanigan 1D-6H	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	6.70	58.30	4,888.0	109.6	177.5	-109.6	0.00	0.00	
5,000.0	6.70	58.30	4,987.4	115.7	187.4	-115.7	0.00	0.00	
5,021.8	6.70	58.30	5,009.0	117.1	189.6	-117.1	0.00	0.00	Shannon
5,100.0	6.70	58.30	5,086.7	121.9	197.3	-121.9	0.00	0.00	
5,200.0	6.70	58.30	5,186.0	128.0	207.2	-128.0	0.00	0.00	
5,300.0	6.70	58.30	5,285.3	134.1	217.2	-134.1	0.00	0.00	
5,400.0	6.70	58.30	5,384.6	140.3	227.1	-140.3	0.00	0.00	
5,500.0	6.70	58.30	5,484.0	146.4	237.0	-146.4	0.00	0.00	
5,600.0	6.70	58.30	5,583.3	152.5	246.9	-152.5	0.00	0.00	
5,700.0	6.70	58.30	5,682.6	158.7	256.9	-158.7	0.00	0.00	
5,800.0	6.70	58.30	5,781.9	164.8	266.8	-164.8	0.00	0.00	
5,900.0	6.70	58.30	5,881.2	170.9	276.7	-170.9	0.00	0.00	
6,000.0	6.70	58.30	5,980.5	177.0	286.6	-177.0	0.00	0.00	
6,100.0	6.70	58.30	6,079.9	183.2	296.6	-183.2	0.00	0.00	
6,184.7	6.70	58.30	6,164.0	188.4	305.0	-188.4	0.00	0.00	Teepee Buttes
6,200.0	6.70	58.30	6,179.2	189.3	306.5	-189.3	0.00	0.00	
6,300.0	6.70	58.30	6,278.5	195.4	316.4	-195.4	0.00	0.00	
6,400.0	6.70	58.30	6,377.8	201.6	326.3	-201.6	0.00	0.00	
6,422.3	6.70	58.30	6,399.9	202.9	328.5	-202.9	0.00	0.00	Start 10° build @ 6422' MD
6,500.0	7.12	126.83	6,477.2	202.4	336.3	-202.4	10.00	0.54	
6,600.0	15.34	158.63	6,575.3	186.3	346.1	-186.3	10.00	8.22	
6,700.0	24.88	167.56	6,669.1	153.4	355.4	-153.4	10.00	9.55	
6,800.0	34.67	171.70	6,755.8	104.6	364.1	-104.6	10.00	9.79	
6,900.0	44.55	174.17	6,832.8	41.4	371.8	-41.4	10.00	9.88	
7,000.0	54.46	175.91	6,897.6	-34.3	378.3	34.3	10.00	9.91	
7,046.3	59.06	176.57	6,923.0	-72.9	380.8	72.9	10.00	9.93	Sharon Springs
7,096.7	64.07	177.22	6,947.0	-117.2	383.2	117.2	10.00	9.94	Niobrara
7,100.0	64.39	177.26	6,948.4	-120.1	383.3	120.1	10.00	9.94	
7,200.0	74.34	178.39	6,983.6	-213.5	386.9	213.5	10.00	9.94	
7,205.2	74.86	178.45	6,985.0	-218.5	387.0	218.5	10.00	9.95	B Chalk
7,300.0	84.29	179.43	7,002.1	-311.6	388.7	311.6	10.00	9.95	
7,357.4	90.00	180.00	7,005.0	-368.9	389.0	368.9	10.00	9.95	Landing Pt @ 7357' MD; 90° - ICP
7,400.0	90.00	180.00	7,005.0	-411.5	389.0	411.5	0.00	0.00	
7,500.0	90.00	180.00	7,005.0	-511.5	389.0	511.5	0.00	0.00	
7,600.0	90.00	180.00	7,005.0	-611.5	389.0	611.5	0.00	0.00	
7,700.0	90.00	180.00	7,005.0	-711.5	389.0	711.5	0.00	0.00	
7,800.0	90.00	180.00	7,005.0	-811.5	389.0	811.5	0.00	0.00	
7,900.0	90.00	180.00	7,005.0	-911.5	389.0	911.5	0.00	0.00	
8,000.0	90.00	180.00	7,005.0	-1,011.5	389.0	1,011.5	0.00	0.00	
8,100.0	90.00	180.00	7,005.0	-1,111.5	389.0	1,111.5	0.00	0.00	
8,200.0	90.00	180.00	7,005.0	-1,211.5	389.0	1,211.5	0.00	0.00	
8,300.0	90.00	180.00	7,005.0	-1,311.5	389.0	1,311.5	0.00	0.00	
8,400.0	90.00	180.00	7,005.0	-1,411.5	389.0	1,411.5	0.00	0.00	
8,500.0	90.00	180.00	7,005.0	-1,511.5	389.0	1,511.5	0.00	0.00	
8,600.0	90.00	180.00	7,005.0	-1,611.5	389.0	1,611.5	0.00	0.00	
8,700.0	90.00	180.00	7,005.0	-1,711.5	389.0	1,711.5	0.00	0.00	
8,800.0	90.00	180.00	7,005.0	-1,811.5	389.0	1,811.5	0.00	0.00	
8,900.0	90.00	180.00	7,005.0	-1,911.5	389.0	1,911.5	0.00	0.00	
9,000.0	90.00	180.00	7,005.0	-2,011.5	389.0	2,011.5	0.00	0.00	
9,100.0	90.00	180.00	7,005.0	-2,111.5	389.0	2,111.5	0.00	0.00	
9,200.0	90.00	180.00	7,005.0	-2,211.5	389.0	2,211.5	0.00	0.00	
9,300.0	90.00	180.00	7,005.0	-2,311.5	389.0	2,311.5	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Flanigan 1D-6H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Site:	NWNE S6-T1N-R64W (Flanigan)	North Reference:	True
Well:	Flanigan 1D-6H	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
9,400.0	90.00	180.00	7,005.0	-2,411.5	389.0	2,411.5	0.00	0.00	
9,500.0	90.00	180.00	7,005.0	-2,511.5	389.0	2,511.5	0.00	0.00	
9,600.0	90.00	180.00	7,005.0	-2,611.5	389.0	2,611.5	0.00	0.00	
9,700.0	90.00	180.00	7,005.0	-2,711.5	389.0	2,711.5	0.00	0.00	
9,800.0	90.00	180.00	7,005.0	-2,811.5	389.0	2,811.5	0.00	0.00	
9,900.0	90.00	180.00	7,005.0	-2,911.5	389.0	2,911.5	0.00	0.00	
10,000.0	90.00	180.00	7,005.0	-3,011.5	389.0	3,011.5	0.00	0.00	
10,100.0	90.00	180.00	7,005.0	-3,111.5	389.0	3,111.5	0.00	0.00	
10,200.0	90.00	180.00	7,005.0	-3,211.5	389.0	3,211.5	0.00	0.00	
10,300.0	90.00	180.00	7,005.0	-3,311.5	389.0	3,311.5	0.00	0.00	
10,400.0	90.00	180.00	7,005.0	-3,411.5	389.0	3,411.5	0.00	0.00	
10,500.0	90.00	180.00	7,005.0	-3,511.5	389.0	3,511.5	0.00	0.00	
10,600.0	90.00	180.00	7,005.0	-3,611.5	389.0	3,611.5	0.00	0.00	
10,700.0	90.00	180.00	7,005.0	-3,711.5	389.0	3,711.5	0.00	0.00	
10,800.0	90.00	180.00	7,005.0	-3,811.5	389.0	3,811.5	0.00	0.00	
10,900.0	90.00	180.00	7,005.0	-3,911.5	389.0	3,911.5	0.00	0.00	
11,000.0	90.00	180.00	7,005.0	-4,011.5	389.0	4,011.5	0.00	0.00	
11,100.0	90.00	180.00	7,005.0	-4,111.5	389.0	4,111.5	0.00	0.00	
11,200.0	90.00	180.00	7,005.0	-4,211.5	389.0	4,211.5	0.00	0.00	
11,300.0	90.00	180.00	7,005.0	-4,311.5	389.0	4,311.5	0.00	0.00	
11,400.0	90.00	180.00	7,005.0	-4,411.5	389.0	4,411.5	0.00	0.00	
11,500.0	90.00	180.00	7,005.0	-4,511.5	389.0	4,511.5	0.00	0.00	
11,567.4	90.00	180.00	7,005.0	-4,579.0	389.0	4,579.0	0.00	0.00	TD at 11567.4 - Flanigan 1D-6H 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									
Flanigan 1D-6H PBHL	0.00	0.00	7,005.0	-4,579.0	389.0	1,271,302.76	3,255,460.83	40.074500	-104.587150
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
7,357.4	7,005.0	ICP	0.000	0.000	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Flanigan 1D-6H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Site:	NWNE S6-T1N-R64W (Flanigan)	North Reference:	True
Well:	Flanigan 1D-6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,444.8	4,436.0	Sussex				
4,695.6	4,685.0	Sussex Marker				
5,021.8	5,009.0	Shannon				
6,184.7	6,164.0	Teepee Buttes				
7,046.3	6,923.0	Sharon Springs				
7,096.7	6,947.0	Niobrara				
7,205.2	6,985.0	B Chalk				

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
3,000.0	3,000.0	0.0	0.0	KOP @ 3000'
3,223.3	3,222.8	6.8	11.1	EOB; Inc=6.7°
6,422.3	6,399.9	202.9	328.5	Start 10° build @ 6422' MD
7,357.4	7,005.0	-369.0	389.0	Landing Pt @ 7357' MD; 90°
11,567.4	7,005.0	-4,579.0	389.0	TD at 11567.4

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

NWNE S6-T1N-R64W (Flanigan)

Flanigan 1D-6H

Hz

Plan #1

Anticollision Report

25 April, 2012

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Flanigan 1D-6H
Project:	DJ Wattenberg	TVD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Reference Site:	NWNE S6-T1N-R64W (Flanigan)	MD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Flanigan 1D-6H	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 1,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date	4/25/2012		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	11,567.4	Plan #1 (Hz)	MWD	Geolink MWD

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
NWNE S6-T1N-R64W (Flanigan)						
Flanigan 1B-6H - Hz - Plan #1	3,000.0	3,000.0	873.7	863.3	83.798	CC, ES
Flanigan 1B-6H - Hz - Plan #1	4,300.0	4,292.1	996.9	981.9	66.513	SF
Flanigan 1C-6H - Hz - Plan #1	3,000.0	3,000.0	25.4	15.0	2.440	CC, ES, SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Flanigan 1D-6H
Project:	DJ Wattenberg	TVD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Reference Site:	NWNE S6-T1N-R64W (Flanigan)	MD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Flanigan 1D-6H	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 NWNE S6-T1N-R64W (Flanigan) - Flanigan 1B-6H - 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	-92.39	-36.4	-873.0	873.7					
100.0	100.0	100.0	100.0	0.2	0.2	-92.39	-36.4	-873.0	873.7	873.4	0.30	2,877.052		
200.0	200.0	200.0	200.0	0.3	0.3	-92.39	-36.4	-873.0	873.7	873.1	0.65	1,338.522		
300.0	300.0	300.0	300.0	0.5	0.5	-92.39	-36.4	-873.0	873.7	872.7	1.00	872.138		
400.0	400.0	400.0	400.0	0.7	0.7	-92.39	-36.4	-873.0	873.7	872.4	1.35	646.780		
500.0	500.0	500.0	500.0	0.8	0.8	-92.39	-36.4	-873.0	873.7	872.0	1.70	513.971		
600.0	600.0	600.0	600.0	1.0	1.0	-92.39	-36.4	-873.0	873.7	871.7	2.05	426.412		
700.0	700.0	700.0	700.0	1.2	1.2	-92.39	-36.4	-873.0	873.7	871.3	2.40	364.343		
800.0	800.0	800.0	800.0	1.4	1.4	-92.39	-36.4	-873.0	873.7	871.0	2.75	318.048		
900.0	900.0	900.0	900.0	1.5	1.5	-92.39	-36.4	-873.0	873.7	870.6	3.10	282.191		
1,000.0	1,000.0	1,000.0	1,000.0	1.7	1.7	-92.39	-36.4	-873.0	873.7	870.3	3.45	253.601		
1,100.0	1,100.0	1,100.0	1,100.0	1.9	1.9	-92.39	-36.4	-873.0	873.7	869.9	3.79	230.270		
1,200.0	1,200.0	1,200.0	1,200.0	2.1	2.1	-92.39	-36.4	-873.0	873.7	869.6	4.14	210.871		
1,300.0	1,300.0	1,300.0	1,300.0	2.2	2.2	-92.39	-36.4	-873.0	873.7	869.2	4.49	194.486		
1,400.0	1,400.0	1,400.0	1,400.0	2.4	2.4	-92.39	-36.4	-873.0	873.7	868.9	4.84	180.464		
1,500.0	1,500.0	1,500.0	1,500.0	2.6	2.6	-92.39	-36.4	-873.0	873.7	868.5	5.19	168.328		
1,600.0	1,600.0	1,600.0	1,600.0	2.8	2.8	-92.39	-36.4	-873.0	873.7	868.2	5.54	157.721		
1,700.0	1,700.0	1,700.0	1,700.0	2.9	2.9	-92.39	-36.4	-873.0	873.7	867.8	5.89	148.372		
1,800.0	1,800.0	1,800.0	1,800.0	3.1	3.1	-92.39	-36.4	-873.0	873.7	867.5	6.24	140.069		
1,900.0	1,900.0	1,900.0	1,900.0	3.3	3.3	-92.39	-36.4	-873.0	873.7	867.1	6.59	132.646		
2,000.0	2,000.0	2,000.0	2,000.0	3.5	3.5	-92.39	-36.4	-873.0	873.7	866.8	6.94	125.971		
2,100.0	2,100.0	2,100.0	2,100.0	3.6	3.6	-92.39	-36.4	-873.0	873.7	866.4	7.29	119.935		
2,200.0	2,200.0	2,200.0	2,200.0	3.8	3.8	-92.39	-36.4	-873.0	873.7	866.1	7.63	114.451		
2,300.0	2,300.0	2,300.0	2,300.0	4.0	4.0	-92.39	-36.4	-873.0	873.7	865.7	7.98	109.446		
2,400.0	2,400.0	2,400.0	2,400.0	4.2	4.2	-92.39	-36.4	-873.0	873.7	865.4	8.33	104.861		
2,500.0	2,500.0	2,500.0	2,500.0	4.3	4.3	-92.39	-36.4	-873.0	873.7	865.0	8.68	100.645		
2,600.0	2,600.0	2,600.0	2,600.0	4.5	4.5	-92.39	-36.4	-873.0	873.7	864.7	9.03	96.754		
2,700.0	2,700.0	2,700.0	2,700.0	4.7	4.7	-92.39	-36.4	-873.0	873.7	864.3	9.38	93.154		
2,800.0	2,800.0	2,800.0	2,800.0	4.9	4.9	-92.39	-36.4	-873.0	873.7	864.0	9.73	89.811		
2,900.0	2,900.0	2,900.0	2,900.0	5.0	5.0	-92.39	-36.4	-873.0	873.7	863.6	10.08	86.700		
3,000.0	3,000.0	3,000.0	3,000.0	5.2	5.2	-92.39	-36.4	-873.0	873.7	863.3	10.43	83.798 CC, ES		
3,100.0	3,100.0	3,100.0	3,100.0	5.4	5.4	-150.74	-36.4	-873.0	876.0	865.2	10.77	81.351		
3,200.0	3,199.6	3,199.6	3,199.6	5.6	5.6	-150.89	-36.4	-873.0	882.9	871.8	11.10	79.571		
3,300.0	3,299.0	3,299.0	3,299.0	5.8	5.7	-151.21	-36.4	-873.0	893.0	881.5	11.44	78.067		
3,400.0	3,398.3	3,398.3	3,398.3	6.0	5.9	-151.57	-36.4	-873.0	903.2	891.4	11.79	76.607		
3,500.0	3,497.6	3,497.6	3,497.6	6.2	6.1	-151.92	-36.4	-873.0	913.5	901.4	12.14	75.228		
3,600.0	3,596.9	3,596.9	3,596.9	6.4	6.3	-152.26	-36.4	-873.0	923.8	911.3	12.50	73.923		
3,700.0	3,696.2	3,696.2	3,696.2	6.6	6.4	-152.59	-36.4	-873.0	934.2	921.3	12.85	72.689		
3,800.0	3,795.6	3,795.6	3,795.6	6.8	6.6	-152.91	-36.4	-873.0	944.6	931.4	13.21	71.521		
3,900.0	3,894.9	3,894.9	3,894.9	7.0	6.8	-153.23	-36.4	-873.0	955.0	941.4	13.56	70.413		
4,000.0	3,994.2	3,994.2	3,994.2	7.2	6.9	-153.54	-36.4	-873.0	965.4	951.5	13.92	69.362		
4,100.0	4,093.5	4,093.5	4,093.5	7.4	7.1	-153.85	-36.4	-873.0	975.9	961.6	14.27	68.364		
4,200.0	4,192.8	4,192.8	4,192.8	7.7	7.3	-154.15	-36.4	-873.0	986.4	971.8	14.63	67.416		
4,300.0	4,292.1	4,292.1	4,292.1	7.9	7.5	-154.44	-36.4	-873.0	996.9	981.9	14.99	66.513 SF		

Anticollision Report

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Project:	DJ Wattenberg	TVD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Reference Site:	NWNE S6-T1N-R64W (Flanigan)	MD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Flanigan 1D-6H	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 NWNE S6-T1N-R64W (Flanigan) - Flanigan 1C-6H - 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				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	-98.25	-3.7	-25.2	25.4					
100.0	100.0	100.0	100.0	0.2	0.2	-98.25	-3.7	-25.2	25.4	25.1	0.30	83.787		
200.0	200.0	200.0	200.0	0.3	0.3	-98.25	-3.7	-25.2	25.4	24.8	0.65	38.981		
300.0	300.0	300.0	300.0	0.5	0.5	-98.25	-3.7	-25.2	25.4	24.4	1.00	25.399		
400.0	400.0	400.0	400.0	0.7	0.7	-98.25	-3.7	-25.2	25.4	24.1	1.35	18.836		
500.0	500.0	500.0	500.0	0.8	0.8	-98.25	-3.7	-25.2	25.4	23.7	1.70	14.968		
600.0	600.0	600.0	600.0	1.0	1.0	-98.25	-3.7	-25.2	25.4	23.4	2.05	12.418		
700.0	700.0	700.0	700.0	1.2	1.2	-98.25	-3.7	-25.2	25.4	23.0	2.40	10.611		
800.0	800.0	800.0	800.0	1.4	1.4	-98.25	-3.7	-25.2	25.4	22.7	2.75	9.262		
900.0	900.0	900.0	900.0	1.5	1.5	-98.25	-3.7	-25.2	25.4	22.3	3.10	8.218		
1,000.0	1,000.0	1,000.0	1,000.0	1.7	1.7	-98.25	-3.7	-25.2	25.4	22.0	3.45	7.385		
1,100.0	1,100.0	1,100.0	1,100.0	1.9	1.9	-98.25	-3.7	-25.2	25.4	21.7	3.79	6.706		
1,200.0	1,200.0	1,200.0	1,200.0	2.1	2.1	-98.25	-3.7	-25.2	25.4	21.3	4.14	6.141		
1,300.0	1,300.0	1,300.0	1,300.0	2.2	2.2	-98.25	-3.7	-25.2	25.4	21.0	4.49	5.664		
1,400.0	1,400.0	1,400.0	1,400.0	2.4	2.4	-98.25	-3.7	-25.2	25.4	20.6	4.84	5.256		
1,500.0	1,500.0	1,500.0	1,500.0	2.6	2.6	-98.25	-3.7	-25.2	25.4	20.3	5.19	4.902		
1,600.0	1,600.0	1,600.0	1,600.0	2.8	2.8	-98.25	-3.7	-25.2	25.4	19.9	5.54	4.593		
1,700.0	1,700.0	1,700.0	1,700.0	2.9	2.9	-98.25	-3.7	-25.2	25.4	19.6	5.89	4.321		
1,800.0	1,800.0	1,800.0	1,800.0	3.1	3.1	-98.25	-3.7	-25.2	25.4	19.2	6.24	4.079		
1,900.0	1,900.0	1,900.0	1,900.0	3.3	3.3	-98.25	-3.7	-25.2	25.4	18.9	6.59	3.863		
2,000.0	2,000.0	2,000.0	2,000.0	3.5	3.5	-98.25	-3.7	-25.2	25.4	18.5	6.94	3.669		
2,100.0	2,100.0	2,100.0	2,100.0	3.6	3.6	-98.25	-3.7	-25.2	25.4	18.2	7.29	3.493		
2,200.0	2,200.0	2,200.0	2,200.0	3.8	3.8	-98.25	-3.7	-25.2	25.4	17.8	7.63	3.333		
2,300.0	2,300.0	2,300.0	2,300.0	4.0	4.0	-98.25	-3.7	-25.2	25.4	17.5	7.98	3.187		
2,400.0	2,400.0	2,400.0	2,400.0	4.2	4.2	-98.25	-3.7	-25.2	25.4	17.1	8.33	3.054		
2,500.0	2,500.0	2,500.0	2,500.0	4.3	4.3	-98.25	-3.7	-25.2	25.4	16.8	8.68	2.931		
2,600.0	2,600.0	2,600.0	2,600.0	4.5	4.5	-98.25	-3.7	-25.2	25.4	16.4	9.03	2.818		
2,700.0	2,700.0	2,700.0	2,700.0	4.7	4.7	-98.25	-3.7	-25.2	25.4	16.1	9.38	2.713		
2,800.0	2,800.0	2,800.0	2,800.0	4.9	4.9	-98.25	-3.7	-25.2	25.4	15.7	9.73	2.616		
2,900.0	2,900.0	2,900.0	2,900.0	5.0	5.0	-98.25	-3.7	-25.2	25.4	15.4	10.08	2.525		
3,000.0	3,000.0	3,000.0	3,000.0	5.2	5.2	-98.25	-3.7	-25.2	25.4	15.0	10.43	2.440	CC, ES, SF	
3,100.0	3,100.0	3,100.0	3,100.0	5.4	5.4	-158.66	-3.7	-25.2	27.9	17.1	10.77	2.588		
3,200.0	3,199.6	3,199.6	3,199.6	5.6	5.6	-163.24	-3.7	-25.2	35.3	24.2	11.09	3.183		
3,300.0	3,299.0	3,299.0	3,299.0	5.8	5.7	-167.32	-3.7	-25.2	46.4	35.0	11.43	4.065		
3,400.0	3,398.3	3,398.3	3,398.3	6.0	5.9	-169.86	-3.7	-25.2	57.9	46.1	11.77	4.917		
3,500.0	3,497.6	3,497.6	3,497.6	6.2	6.1	-171.55	-3.7	-25.2	69.4	57.3	12.12	5.726		
3,600.0	3,596.9	3,596.9	3,596.9	6.4	6.3	-172.77	-3.7	-25.2	81.0	68.5	12.47	6.493		
3,700.0	3,696.2	3,696.2	3,696.2	6.6	6.4	-173.67	-3.7	-25.2	92.5	79.7	12.82	7.221		
3,800.0	3,795.6	3,795.6	3,795.6	6.8	6.6	-174.38	-3.7	-25.2	104.1	91.0	13.16	7.911		
3,900.0	3,894.9	3,894.9	3,894.9	7.0	6.8	-174.95	-3.7	-25.2	115.8	102.2	13.51	8.567		
4,000.0	3,994.2	3,994.2	3,994.2	7.2	6.9	-175.41	-3.7	-25.2	127.4	113.5	13.86	9.191		
4,100.0	4,093.5	4,093.5	4,093.5	7.4	7.1	-175.79	-3.7	-25.2	139.0	124.8	14.21	9.785		
4,200.0	4,192.8	4,192.8	4,192.8	7.7	7.3	-176.12	-3.7	-25.2	150.6	136.1	14.55	10.351		
4,300.0	4,292.1	4,292.1	4,292.1	7.9	7.5	-176.40	-3.7	-25.2	162.3	147.4	14.90	10.890		
4,400.0	4,391.5	4,391.5	4,391.5	8.1	7.6	-176.64	-3.7	-25.2	173.9	158.7	15.25	11.405		
4,500.0	4,490.8	4,490.8	4,490.8	8.4	7.8	-176.85	-3.7	-25.2	185.6	170.0	15.60	11.898		
4,600.0	4,590.1	4,590.1	4,590.1	8.6	8.0	-177.04	-3.7	-25.2	197.2	181.3	15.94	12.369		
4,700.0	4,689.4	4,689.4	4,689.4	8.8	8.2	-177.20	-3.7	-25.2	208.9	192.6	16.29	12.820		
4,800.0	4,788.7	4,788.7	4,788.7	9.1	8.3	-177.35	-3.7	-25.2	220.5	203.9	16.64	13.252		
4,900.0	4,888.0	4,888.0	4,888.0	9.3	8.5	-177.48	-3.7	-25.2	232.2	215.2	16.99	13.667		
5,000.0	4,987.4	4,987.4	4,987.4	9.6	8.7	-177.60	-3.7	-25.2	243.8	226.5	17.33	14.065		
5,100.0	5,086.7	5,083.9	5,083.9	9.8	8.9	-177.31	-2.3	-26.5	255.9	238.3	17.68	14.478		

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 Flanigan 1D-6H
Project:	DJ Wattenberg	TVD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Reference Site:	NWNE S6-T1N-R64W (Flanigan)	MD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Flanigan 1D-6H	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 NWNE S6-T1N-R64W (Flanigan) - Flanigan 1C-6H - 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)	
5,200.0	5,186.0	5,179.4	5,179.1	10.1	9.0	-176.05	2.5	-31.0	269.4	251.3	18.02	14.945		
5,300.0	5,285.3	5,273.8	5,272.8	10.3	9.2	-174.01	10.6	-38.7	284.4	266.0	18.38	15.474		
5,400.0	5,384.6	5,366.6	5,364.4	10.5	9.4	-171.37	21.8	-49.3	301.4	282.7	18.75	16.077		
5,500.0	5,484.0	5,459.0	5,454.6	10.8	9.6	-168.30	36.1	-62.9	320.9	301.7	19.14	16.767		
5,600.0	5,583.3	5,555.2	5,548.3	11.0	9.8	-165.25	51.8	-77.8	341.8	322.3	19.55	17.480		
5,700.0	5,682.6	5,651.4	5,642.0	11.3	10.0	-162.55	67.6	-92.8	363.6	343.6	19.98	18.197		
5,800.0	5,781.9	5,747.6	5,735.7	11.5	10.3	-160.16	83.4	-107.8	386.1	365.7	20.42	18.909		
5,900.0	5,881.2	5,843.8	5,829.5	11.8	10.5	-158.02	99.2	-122.8	409.2	388.3	20.86	19.613		
6,000.0	5,980.5	5,940.0	5,923.2	12.1	10.8	-156.11	115.0	-137.7	432.7	411.4	21.31	20.307		
6,100.0	6,079.9	6,036.2	6,016.9	12.3	11.1	-154.40	130.7	-152.7	456.7	434.9	21.76	20.988		
6,200.0	6,179.2	6,132.4	6,110.6	12.6	11.4	-152.85	146.5	-167.7	481.0	458.8	22.21	21.654		
6,300.0	6,278.5	6,228.6	6,204.3	12.8	11.6	-151.46	162.3	-182.7	505.6	483.0	22.67	22.306		
6,400.0	6,377.8	6,324.8	6,298.0	13.1	11.9	-150.19	178.1	-197.6	530.5	507.4	23.13	22.941		
6,500.0	6,477.2	6,419.5	6,390.5	13.3	12.2	141.15	191.9	-212.4	555.6	532.1	23.50	23.639		
6,600.0	6,575.3	6,514.4	6,484.1	13.4	12.4	108.95	192.2	-227.4	580.7	557.0	23.72	24.478		
6,700.0	6,669.1	6,612.4	6,579.4	13.5	12.6	99.73	176.1	-242.6	605.2	581.3	23.83	25.394		
6,800.0	6,755.8	6,714.0	6,673.9	13.6	12.7	95.43	142.4	-257.7	628.3	604.4	23.89	26.296		
6,900.0	6,832.8	6,819.7	6,764.4	13.7	12.8	92.97	89.9	-272.2	649.4	625.4	24.02	27.040		
7,000.0	6,897.6	6,929.9	6,846.9	13.9	13.0	91.46	18.3	-285.4	667.6	643.3	24.33	27.438		
7,100.0	6,948.4	7,044.7	6,916.8	14.3	13.3	90.54	-71.8	-296.5	682.3	657.3	25.00	27.292		
7,200.0	6,983.6	7,163.6	6,969.1	14.9	13.9	90.07	-178.0	-304.9	692.8	666.7	26.15	26.495		
7,300.0	7,002.1	7,285.6	6,999.0	15.6	14.7	89.93	-296.0	-309.7	698.6	670.7	27.81	25.115		
7,400.0	7,005.0	7,401.5	7,005.0	16.5	15.7	90.00	-411.5	-310.6	699.6	669.8	29.86	23.433		
7,500.0	7,005.0	7,501.5	7,005.0	17.5	16.8	90.00	-511.5	-310.6	699.6	667.6	32.04	21.833		
7,600.0	7,005.0	7,601.5	7,005.0	18.6	17.9	90.00	-611.5	-310.6	699.6	665.2	34.45	20.308		
7,700.0	7,005.0	7,701.5	7,005.0	19.8	19.2	90.00	-711.5	-310.6	699.6	662.6	37.03	18.892		
7,800.0	7,005.0	7,801.5	7,005.0	21.1	20.5	90.00	-811.5	-310.6	699.6	659.9	39.76	17.597		
7,900.0	7,005.0	7,901.5	7,005.0	22.4	21.9	90.00	-911.5	-310.6	699.6	657.0	42.60	16.424		
8,000.0	7,005.0	8,001.5	7,005.0	23.8	23.3	90.00	-1,011.5	-310.6	699.6	654.1	45.53	15.366		
8,100.0	7,005.0	8,101.5	7,005.0	25.3	24.8	90.00	-1,111.5	-310.6	699.6	651.1	48.54	14.413		
8,200.0	7,005.0	8,201.5	7,005.0	26.7	26.3	90.00	-1,211.5	-310.6	699.6	648.0	51.61	13.555		
8,300.0	7,005.0	8,301.5	7,005.0	28.3	27.8	90.00	-1,311.5	-310.6	699.6	644.9	54.74	12.781		
8,400.0	7,005.0	8,401.5	7,005.0	29.8	29.4	90.00	-1,411.5	-310.6	699.6	641.7	57.91	12.082		
8,500.0	7,005.0	8,501.5	7,005.0	31.4	30.9	90.00	-1,511.5	-310.6	699.6	638.5	61.11	11.448		
8,600.0	7,005.0	8,601.5	7,005.0	32.9	32.5	90.00	-1,611.5	-310.6	699.6	635.3	64.35	10.872		
8,700.0	7,005.0	8,701.5	7,005.0	34.5	34.1	90.00	-1,711.5	-310.6	699.6	632.0	67.61	10.347		
8,800.0	7,005.0	8,801.5	7,005.0	36.2	35.8	90.00	-1,811.5	-310.6	699.6	628.7	70.90	9.867		
8,900.0	7,005.0	8,901.5	7,005.0	37.8	37.4	90.00	-1,911.5	-310.6	699.6	625.4	74.21	9.428		
9,000.0	7,005.0	9,001.5	7,005.0	39.4	39.1	90.00	-2,011.5	-310.6	699.6	622.1	77.53	9.023		
9,100.0	7,005.0	9,101.5	7,005.0	41.1	40.7	90.00	-2,111.5	-310.6	699.6	618.7	80.88	8.651		
9,200.0	7,005.0	9,201.5	7,005.0	42.7	42.4	90.00	-2,211.5	-310.6	699.6	615.4	84.23	8.306		
9,300.0	7,005.0	9,301.5	7,005.0	44.4	44.0	90.00	-2,311.5	-310.6	699.6	612.0	87.60	7.987		
9,400.0	7,005.0	9,401.5	7,005.0	46.0	45.7	90.00	-2,411.5	-310.6	699.6	608.6	90.97	7.690		
9,500.0	7,005.0	9,501.5	7,005.0	47.7	47.4	90.00	-2,511.5	-310.6	699.6	605.3	94.36	7.414		
9,600.0	7,005.0	9,601.5	7,005.0	49.4	49.1	90.00	-2,611.5	-310.6	699.6	601.9	97.76	7.157		
9,700.0	7,005.0	9,701.5	7,005.0	51.1	50.8	90.00	-2,711.5	-310.6	699.6	598.5	101.16	6.916		
9,800.0	7,005.0	9,801.5	7,005.0	52.8	52.5	90.00	-2,811.5	-310.6	699.6	595.0	104.57	6.690		
9,900.0	7,005.0	9,901.5	7,005.0	54.5	54.2	90.00	-2,911.5	-310.6	699.6	591.6	107.99	6.479		
10,000.0	7,005.0	10,001.5	7,005.0	56.2	55.9	90.00	-3,011.5	-310.6	699.6	588.2	111.41	6.280		
10,100.0	7,005.0	10,101.5	7,005.0	57.9	57.6	90.00	-3,111.5	-310.6	699.6	584.8	114.83	6.092		
10,200.0	7,005.0	10,201.5	7,005.0	59.6	59.3	90.00	-3,211.5	-310.6	699.6	581.4	118.27	5.916		
10,300.0	7,005.0	10,301.5	7,005.0	61.3	61.0	90.00	-3,311.5	-310.6	699.6	577.9	121.70	5.749		

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 Flanigan 1D-6H
Project:	DJ Wattenberg	TVD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Reference Site:	NWNE S6-T1N-R64W (Flanigan)	MD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Flanigan 1D-6H	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

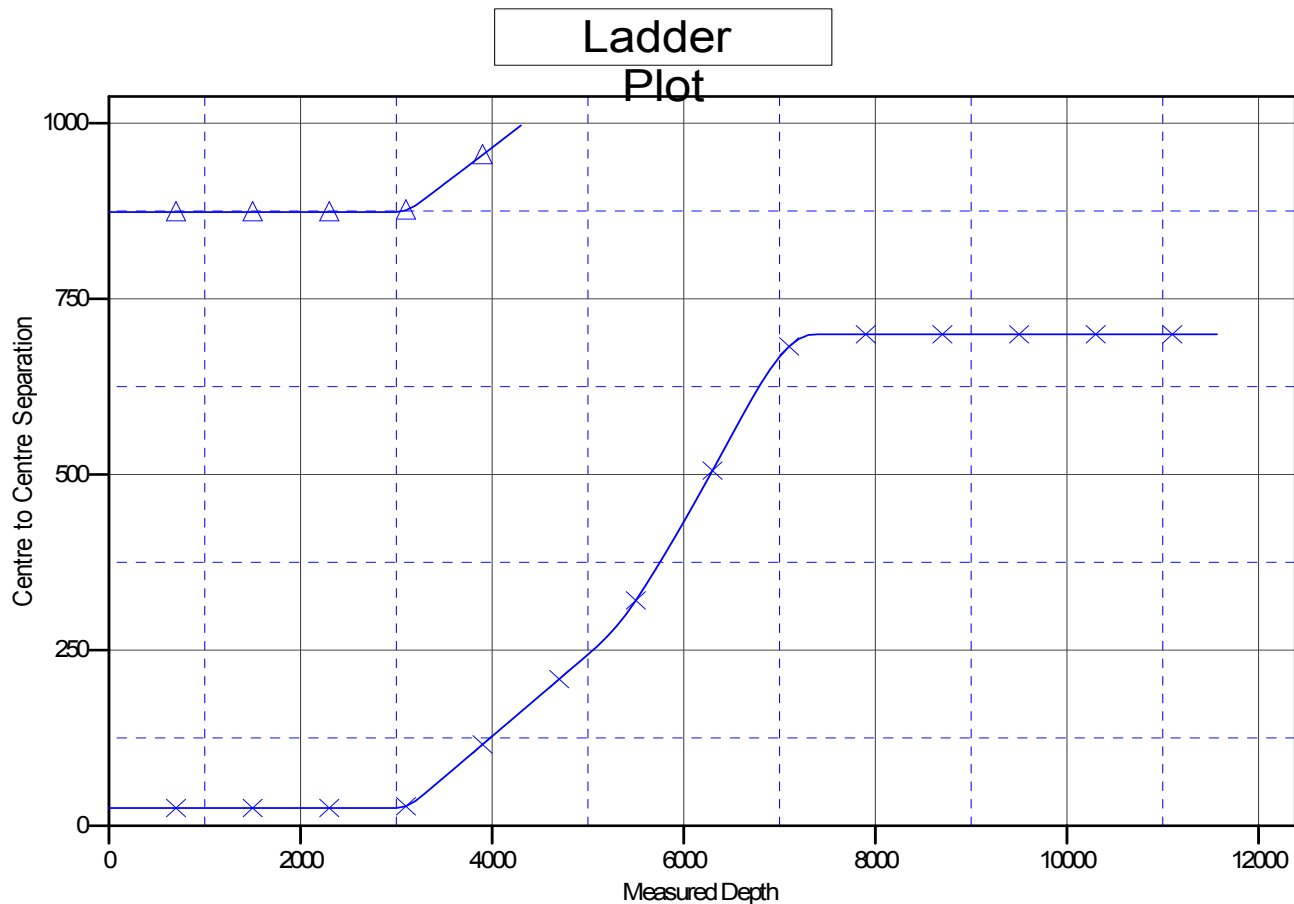
Offset Design NWNE S6-T1N-R64W (Flanigan) - Flanigan 1C-6H - Hz - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical 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	7,005.0	10,401.5	7,005.0	63.0	62.7	90.00	-3,411.5	-310.6	699.6	574.5	125.14	5.591		
10,500.0	7,005.0	10,501.5	7,005.0	64.7	64.4	90.00	-3,511.5	-310.6	699.6	571.0	128.59	5.441		
10,600.0	7,005.0	10,601.5	7,005.0	66.4	66.2	90.00	-3,611.5	-310.6	699.6	567.6	132.03	5.299		
10,700.0	7,005.0	10,701.5	7,005.0	68.1	67.9	90.00	-3,711.5	-310.6	699.6	564.1	135.48	5.164		
10,800.0	7,005.0	10,801.5	7,005.0	69.9	69.6	90.00	-3,811.5	-310.6	699.6	560.7	138.94	5.035		
10,900.0	7,005.0	10,901.5	7,005.0	71.6	71.3	90.00	-3,911.5	-310.6	699.6	557.2	142.39	4.913		
11,000.0	7,005.0	11,001.5	7,005.0	73.3	73.1	90.00	-4,011.5	-310.6	699.6	553.8	145.85	4.797		
11,100.0	7,005.0	11,101.5	7,005.0	75.0	74.8	90.00	-4,111.5	-310.6	699.6	550.3	149.31	4.686		
11,200.0	7,005.0	11,201.5	7,005.0	76.7	76.5	90.00	-4,211.5	-310.6	699.6	546.8	152.78	4.579		
11,300.0	7,005.0	11,301.5	7,005.0	78.5	78.2	90.00	-4,311.5	-310.6	699.6	543.4	156.24	4.478		
11,400.0	7,005.0	11,401.5	7,005.0	80.2	80.0	90.00	-4,411.5	-310.6	699.6	539.9	159.71	4.381		
11,500.0	7,005.0	11,501.5	7,005.0	81.9	81.7	90.00	-4,511.5	-310.6	699.6	536.4	163.18	4.288		
11,567.4	7,005.0	11,568.9	7,005.0	83.1	82.9	90.00	-4,579.0	-310.6	699.6	534.1	165.52	4.227		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Flanigan 1D-6H
Project:	DJ Wattenberg	TVD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Reference Site:	NWNE S6-T1N-R64W (Flanigan)	MD Reference:	KB=13' @ 5029.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Flanigan 1D-6H	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=13' @ 5029.0ft (Original Well Elev)
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °

Coordinates are relative to: Flanigan 1D-6H
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.59°



LEGEND

✕ Flanigan 1C-6H, Hz, Plan #1 V0
 ▲ Flanigan 1B-6H, Hz, Plan #1 V0