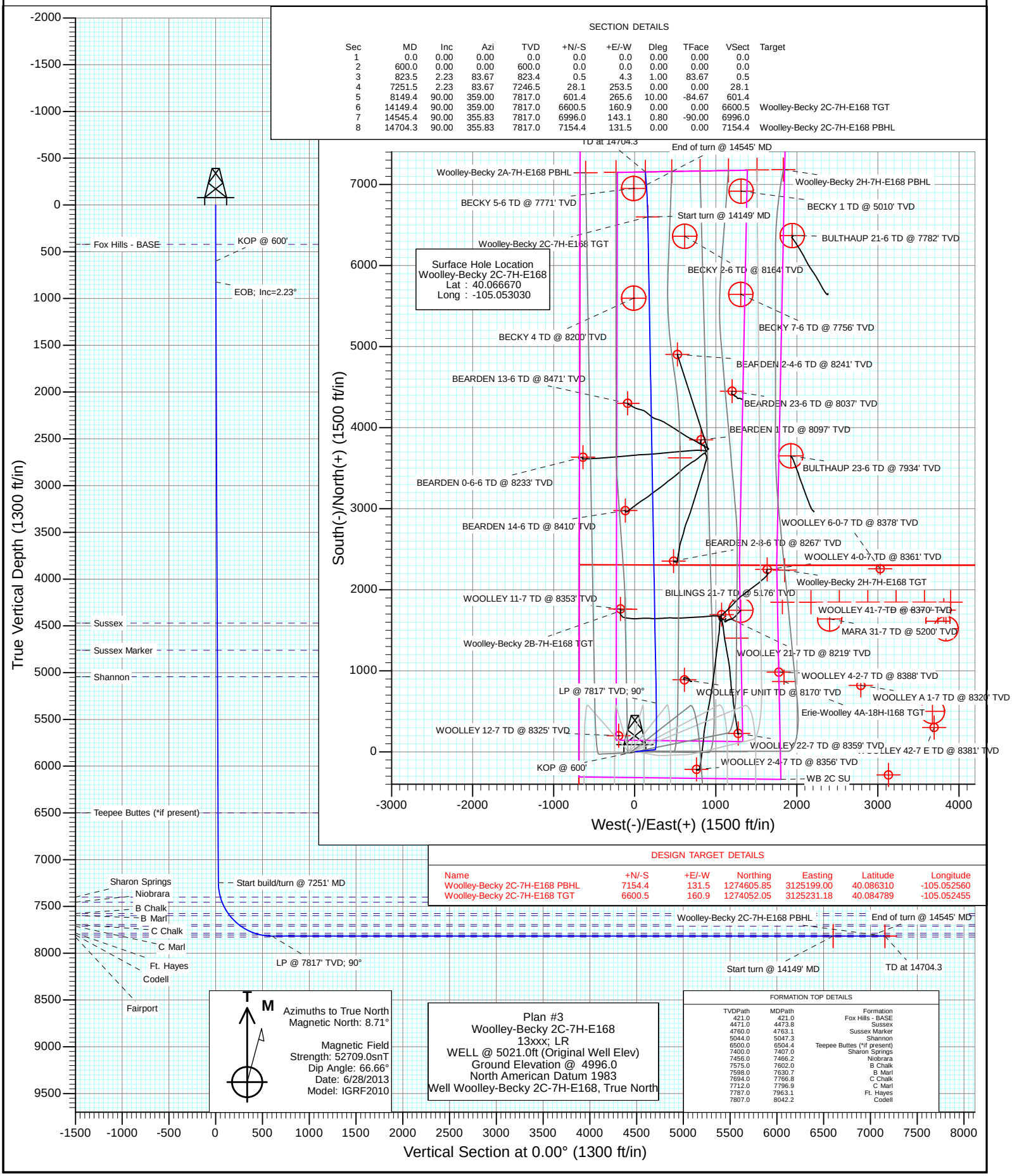
encana natural gas

Project: DJ Wattenberg
Site: S7-T1N-R68W (Woolley-Sosa/Becky)
Well: Woolley-Becky 2C-7H-E168
Wellbore: Hz
Design: Plan #3

CATHEDRAL

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	823.5	2.23	83.67	823.4	0.5	4.3	1.00	83.67	0.5	
4	7251.5	2.23	83.67	7246.5	28.1	253.5	0.00	0.00	28.1	
5	8149.4	90.00	359.00	7817.0	601.4	265.6	10.00	-84.67	601.4	
6	14149.4	90.00	359.00	7817.0	6600.5	160.9	0.00	0.00	6600.5	Woolley-Becky 2C-7H-E168 TGT
7	14545.4	90.00	355.83	7817.0	6996.0	143.1	0.80	-90.00	6996.0	
8	14704.3	90.00	355.83	7817.0	7154.4	131.5	0.00	0.00	7154.4	Woolley-Becky 2C-7H-E168 PBHL



DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Woolley-Becky 2C-7H-E168 PBHL	7154.4	131.5	1274605.85	3125199.00	40.086310	-105.052560
Woolley-Becky 2C-7H-E168 TGT	6600.5	160.9	1274052.05	3125231.18	40.084789	-105.052455

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
421.0	421.0	Fox Hills - BASE
4471.0	4473.8	Sussex
4760.0	4763.1	Sussex Marker
5044.0	5047.3	Shannon
6500.0	6504.4	Teepee Buttes (*if present)
7400.0	7407.0	Sharon Springs
7456.0	7466.2	Niobrara
7575.0	7602.0	B Chalk
7598.0	7630.7	B Marl
7694.0	7766.8	C Chalk
7712.0	7796.9	C Marl
7787.0	7963.1	Ft. Hayes
7807.0	8042.2	Codell

Planning Report

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**North Reference:**	True
Well:	Woolley-Becky 2C-7H-E168	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #3		

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	S7-T1N-R68W (Woolley-Sosa/Becky)				
Site Position:		**Northing:**	1,265,219.42 ft	**Latitude:**	40.060530
From:	Lat/Long	**Easting:**	3,126,139.27 ft	**Longitude:**	-105.049370
Position Uncertainty:	0.0 ft	**Slot Radius:**	13.200 in	**Grid Convergence:**	0.29 °

Well	Woolley-Becky 2C-7H-E168				
Well Position	**+N/-S** 0.0 ft	**Northing:**	1,267,450.86 ft	**Latitude:**	40.066670
	+E/-W 0.0 ft	**Easting:**	3,125,103.56 ft	**Longitude:**	-105.053030
Position Uncertainty	0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,996.0 ft

Wellbore	Hz			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	6/28/2013	8.71	66.66	52,709

Design	Plan #3			
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	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
823.5	2.23	83.67	823.4	0.5	4.3	1.00	1.00	0.00	83.67	
7,251.5	2.23	83.67	7,246.5	28.1	253.5	0.00	0.00	0.00	0.00	
8,149.4	90.00	359.00	7,817.0	601.4	265.6	10.00	9.77	-9.43	-84.67	
14,149.4	90.00	359.00	7,817.0	6,600.5	160.9	0.00	0.00	0.00	0.00	Woolley-Becky 2C-7H
14,545.4	90.00	355.83	7,817.0	6,996.0	143.1	0.80	0.00	-0.80	-90.00	
14,704.3	90.00	355.83	7,817.0	7,154.4	131.5	0.00	0.00	0.00	0.00	Woolley-Becky 2C-7H

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Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**North Reference:**	True
Well:	Woolley-Becky 2C-7H-E168	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #3		

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	
421.0	0.00	0.00	421.0	0.0	0.0	0.0	0.00	0.00	Fox Hills - BASE
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	KOP @ 600'
700.0	1.00	83.67	700.0	0.1	0.9	0.1	1.00	1.00	
800.0	2.00	83.67	800.0	0.4	3.5	0.4	1.00	1.00	
823.5	2.23	83.67	823.4	0.5	4.3	0.5	1.00	1.00	EOB; Inc=2.23°
900.0	2.23	83.67	899.9	0.8	7.3	0.8	0.00	0.00	
1,000.0	2.23	83.67	999.8	1.2	11.2	1.2	0.00	0.00	
1,100.0	2.23	83.67	1,099.7	1.7	15.0	1.7	0.00	0.00	
1,200.0	2.23	83.67	1,199.7	2.1	18.9	2.1	0.00	0.00	
1,300.0	2.23	83.67	1,299.6	2.5	22.8	2.5	0.00	0.00	
1,400.0	2.23	83.67	1,399.5	3.0	26.7	3.0	0.00	0.00	
1,500.0	2.23	83.67	1,499.4	3.4	30.6	3.4	0.00	0.00	
1,600.0	2.23	83.67	1,599.4	3.8	34.4	3.8	0.00	0.00	
1,700.0	2.23	83.67	1,699.3	4.2	38.3	4.2	0.00	0.00	
1,800.0	2.23	83.67	1,799.2	4.7	42.2	4.7	0.00	0.00	
1,900.0	2.23	83.67	1,899.1	5.1	46.1	5.1	0.00	0.00	
2,000.0	2.23	83.67	1,999.0	5.5	49.9	5.5	0.00	0.00	
2,100.0	2.23	83.67	2,099.0	6.0	53.8	6.0	0.00	0.00	
2,200.0	2.23	83.67	2,198.9	6.4	57.7	6.4	0.00	0.00	
2,300.0	2.23	83.67	2,298.8	6.8	61.6	6.8	0.00	0.00	
2,400.0	2.23	83.67	2,398.7	7.3	65.4	7.3	0.00	0.00	
2,500.0	2.23	83.67	2,498.7	7.7	69.3	7.7	0.00	0.00	
2,600.0	2.23	83.67	2,598.6	8.1	73.2	8.1	0.00	0.00	
2,700.0	2.23	83.67	2,698.5	8.5	77.1	8.5	0.00	0.00	
2,800.0	2.23	83.67	2,798.4	9.0	80.9	9.0	0.00	0.00	
2,900.0	2.23	83.67	2,898.4	9.4	84.8	9.4	0.00	0.00	
3,000.0	2.23	83.67	2,998.3	9.8	88.7	9.8	0.00	0.00	
3,100.0	2.23	83.67	3,098.2	10.3	92.6	10.3	0.00	0.00	
3,200.0	2.23	83.67	3,198.1	10.7	96.4	10.7	0.00	0.00	
3,300.0	2.23	83.67	3,298.1	11.1	100.3	11.1	0.00	0.00	
3,400.0	2.23	83.67	3,398.0	11.6	104.2	11.6	0.00	0.00	
3,500.0	2.23	83.67	3,497.9	12.0	108.1	12.0	0.00	0.00	
3,600.0	2.23	83.67	3,597.8	12.4	111.9	12.4	0.00	0.00	
3,700.0	2.23	83.67	3,697.8	12.8	115.8	12.8	0.00	0.00	
3,800.0	2.23	83.67	3,797.7	13.3	119.7	13.3	0.00	0.00	
3,900.0	2.23	83.67	3,897.6	13.7	123.6	13.7	0.00	0.00	
4,000.0	2.23	83.67	3,997.5	14.1	127.4	14.1	0.00	0.00	
4,100.0	2.23	83.67	4,097.5	14.6	131.3	14.6	0.00	0.00	
4,200.0	2.23	83.67	4,197.4	15.0	135.2	15.0	0.00	0.00	
4,300.0	2.23	83.67	4,297.3	15.4	139.1	15.4	0.00	0.00	
4,400.0	2.23	83.67	4,397.2	15.9	142.9	15.9	0.00	0.00	
4,473.8	2.23	83.67	4,471.0	16.2	145.8	16.2	0.00	0.00	Sussex
4,500.0	2.23	83.67	4,497.1	16.3	146.8	16.3	0.00	0.00	
4,600.0	2.23	83.67	4,597.1	16.7	150.7	16.7	0.00	0.00	
4,700.0	2.23	83.67	4,697.0	17.1	154.6	17.1	0.00	0.00	
4,763.1	2.23	83.67	4,760.0	17.4	157.0	17.4	0.00	0.00	Sussex Marker

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Well:	Woolley-Becky 2C-7H-E168	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #3		

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	2.23	83.67	4,796.9	17.6	158.4	17.6	0.00	0.00	
4,900.0	2.23	83.67	4,896.8	18.0	162.3	18.0	0.00	0.00	
5,000.0	2.23	83.67	4,996.8	18.4	166.2	18.4	0.00	0.00	
5,047.3	2.23	83.67	5,044.0	18.6	168.0	18.6	0.00	0.00	Shannon
5,100.0	2.23	83.67	5,096.7	18.9	170.1	18.9	0.00	0.00	
5,200.0	2.23	83.67	5,196.6	19.3	173.9	19.3	0.00	0.00	
5,300.0	2.23	83.67	5,296.5	19.7	177.8	19.7	0.00	0.00	
5,400.0	2.23	83.67	5,396.5	20.2	181.7	20.2	0.00	0.00	
5,500.0	2.23	83.67	5,496.4	20.6	185.6	20.6	0.00	0.00	
5,600.0	2.23	83.67	5,596.3	21.0	189.4	21.0	0.00	0.00	
5,700.0	2.23	83.67	5,696.2	21.4	193.3	21.4	0.00	0.00	
5,800.0	2.23	83.67	5,796.2	21.9	197.2	21.9	0.00	0.00	
5,900.0	2.23	83.67	5,896.1	22.3	201.1	22.3	0.00	0.00	
6,000.0	2.23	83.67	5,996.0	22.7	205.0	22.7	0.00	0.00	
6,100.0	2.23	83.67	6,095.9	23.2	208.8	23.2	0.00	0.00	
6,200.0	2.23	83.67	6,195.9	23.6	212.7	23.6	0.00	0.00	
6,300.0	2.23	83.67	6,295.8	24.0	216.6	24.0	0.00	0.00	
6,400.0	2.23	83.67	6,395.7	24.5	220.5	24.5	0.00	0.00	
6,500.0	2.23	83.67	6,495.6	24.9	224.3	24.9	0.00	0.00	
6,504.4	2.23	83.67	6,500.0	24.9	224.5	24.9	0.00	0.00	Teepee Buttes (*if present)
6,600.0	2.23	83.67	6,595.6	25.3	228.2	25.3	0.00	0.00	
6,700.0	2.23	83.67	6,695.5	25.7	232.1	25.7	0.00	0.00	
6,800.0	2.23	83.67	6,795.4	26.2	236.0	26.2	0.00	0.00	
6,900.0	2.23	83.67	6,895.3	26.6	239.8	26.6	0.00	0.00	
7,000.0	2.23	83.67	6,995.2	27.0	243.7	27.0	0.00	0.00	
7,100.0	2.23	83.67	7,095.2	27.5	247.6	27.5	0.00	0.00	
7,200.0	2.23	83.67	7,195.1	27.9	251.5	27.9	0.00	0.00	
7,251.5	2.23	83.67	7,246.5	28.1	253.5	28.1	0.00	0.00	Start build/turn @ 7251' MD
7,300.0	5.52	22.68	7,295.0	30.4	255.3	30.4	10.00	6.78	
7,400.0	15.22	7.21	7,393.2	47.9	258.8	47.9	10.00	9.69	
7,407.0	15.91	6.83	7,400.0	49.8	259.0	49.8	10.00	9.89	Sharon Springs
7,466.2	21.79	4.58	7,456.0	68.8	260.9	68.8	10.00	9.93	Niobrara
7,500.0	25.15	3.75	7,487.0	82.2	261.9	82.2	10.00	9.95	
7,600.0	35.12	2.17	7,573.3	132.3	264.3	132.3	10.00	9.97	
7,602.0	35.32	2.14	7,575.0	133.4	264.4	133.4	10.00	9.98	B Chalk
7,630.7	38.19	1.83	7,598.0	150.6	265.0	150.6	10.00	9.98	B Marl
7,700.0	45.10	1.22	7,649.7	196.6	266.2	196.6	10.00	9.98	
7,766.8	51.77	0.75	7,694.0	246.5	267.0	246.5	10.00	9.99	C Chalk
7,796.9	54.78	0.57	7,712.0	270.6	267.3	270.6	10.00	9.99	C Marl
7,800.0	55.09	0.55	7,713.8	273.2	267.3	273.2	10.00	9.99	
7,900.0	65.08	0.03	7,763.6	359.8	267.8	359.8	10.00	9.99	
7,963.1	71.38	359.75	7,787.0	418.3	267.6	418.3	10.00	9.99	Ft. Hayes
8,000.0	75.07	359.59	7,797.6	453.7	267.4	453.7	10.00	9.99	
8,042.2	79.28	359.42	7,807.0	494.8	267.1	494.8	10.00	9.99	Codell
8,100.0	85.06	359.19	7,814.9	552.0	266.4	552.0	10.00	9.99	
8,149.4	90.00	359.00	7,817.0	601.4	265.6	601.4	10.00	9.99	LP @ 7817' TVD; 90°
8,200.0	90.00	359.00	7,817.0	651.9	264.7	651.9	0.00	0.00	
8,300.0	90.00	359.00	7,817.0	751.9	263.0	751.9	0.00	0.00	
8,400.0	90.00	359.00	7,817.0	851.9	261.2	851.9	0.00	0.00	
8,500.0	90.00	359.00	7,817.0	951.9	259.5	951.9	0.00	0.00	
8,600.0	90.00	359.00	7,817.0	1,051.9	257.8	1,051.9	0.00	0.00	
8,700.0	90.00	359.00	7,817.0	1,151.9	256.0	1,151.9	0.00	0.00	

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Well:	Woolley-Becky 2C-7H-E168	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #3		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
8,800.0	90.00	359.00	7,817.0	1,251.9	254.3	1,251.9	0.00	0.00	
8,900.0	90.00	359.00	7,817.0	1,351.8	252.5	1,351.8	0.00	0.00	
9,000.0	90.00	359.00	7,817.0	1,451.8	250.8	1,451.8	0.00	0.00	
9,100.0	90.00	359.00	7,817.0	1,551.8	249.0	1,551.8	0.00	0.00	
9,200.0	90.00	359.00	7,817.0	1,651.8	247.3	1,651.8	0.00	0.00	
9,300.0	90.00	359.00	7,817.0	1,751.8	245.5	1,751.8	0.00	0.00	
9,400.0	90.00	359.00	7,817.0	1,851.8	243.8	1,851.8	0.00	0.00	
9,500.0	90.00	359.00	7,817.0	1,951.7	242.0	1,951.7	0.00	0.00	
9,600.0	90.00	359.00	7,817.0	2,051.7	240.3	2,051.7	0.00	0.00	
9,700.0	90.00	359.00	7,817.0	2,151.7	238.6	2,151.7	0.00	0.00	
9,800.0	90.00	359.00	7,817.0	2,251.7	236.8	2,251.7	0.00	0.00	
9,900.0	90.00	359.00	7,817.0	2,351.7	235.1	2,351.7	0.00	0.00	
10,000.0	90.00	359.00	7,817.0	2,451.7	233.3	2,451.7	0.00	0.00	
10,100.0	90.00	359.00	7,817.0	2,551.7	231.6	2,551.7	0.00	0.00	
10,200.0	90.00	359.00	7,817.0	2,651.6	229.8	2,651.6	0.00	0.00	
10,300.0	90.00	359.00	7,817.0	2,751.6	228.1	2,751.6	0.00	0.00	
10,400.0	90.00	359.00	7,817.0	2,851.6	226.3	2,851.6	0.00	0.00	
10,500.0	90.00	359.00	7,817.0	2,951.6	224.6	2,951.6	0.00	0.00	
10,600.0	90.00	359.00	7,817.0	3,051.6	222.8	3,051.6	0.00	0.00	
10,700.0	90.00	359.00	7,817.0	3,151.6	221.1	3,151.6	0.00	0.00	
10,800.0	90.00	359.00	7,817.0	3,251.6	219.4	3,251.6	0.00	0.00	
10,900.0	90.00	359.00	7,817.0	3,351.5	217.6	3,351.5	0.00	0.00	
11,000.0	90.00	359.00	7,817.0	3,451.5	215.9	3,451.5	0.00	0.00	
11,100.0	90.00	359.00	7,817.0	3,551.5	214.1	3,551.5	0.00	0.00	
11,200.0	90.00	359.00	7,817.0	3,651.5	212.4	3,651.5	0.00	0.00	
11,300.0	90.00	359.00	7,817.0	3,751.5	210.6	3,751.5	0.00	0.00	
11,400.0	90.00	359.00	7,817.0	3,851.5	208.9	3,851.5	0.00	0.00	
11,500.0	90.00	359.00	7,817.0	3,951.4	207.1	3,951.4	0.00	0.00	
11,600.0	90.00	359.00	7,817.0	4,051.4	205.4	4,051.4	0.00	0.00	
11,700.0	90.00	359.00	7,817.0	4,151.4	203.6	4,151.4	0.00	0.00	
11,800.0	90.00	359.00	7,817.0	4,251.4	201.9	4,251.4	0.00	0.00	
11,900.0	90.00	359.00	7,817.0	4,351.4	200.2	4,351.4	0.00	0.00	
12,000.0	90.00	359.00	7,817.0	4,451.4	198.4	4,451.4	0.00	0.00	
12,100.0	90.00	359.00	7,817.0	4,551.4	196.7	4,551.4	0.00	0.00	
12,200.0	90.00	359.00	7,817.0	4,651.3	194.9	4,651.3	0.00	0.00	
12,300.0	90.00	359.00	7,817.0	4,751.3	193.2	4,751.3	0.00	0.00	
12,400.0	90.00	359.00	7,817.0	4,851.3	191.4	4,851.3	0.00	0.00	
12,500.0	90.00	359.00	7,817.0	4,951.3	189.7	4,951.3	0.00	0.00	
12,600.0	90.00	359.00	7,817.0	5,051.3	187.9	5,051.3	0.00	0.00	
12,700.0	90.00	359.00	7,817.0	5,151.3	186.2	5,151.3	0.00	0.00	
12,800.0	90.00	359.00	7,817.0	5,251.2	184.5	5,251.2	0.00	0.00	
12,900.0	90.00	359.00	7,817.0	5,351.2	182.7	5,351.2	0.00	0.00	
13,000.0	90.00	359.00	7,817.0	5,451.2	181.0	5,451.2	0.00	0.00	
13,100.0	90.00	359.00	7,817.0	5,551.2	179.2	5,551.2	0.00	0.00	
13,200.0	90.00	359.00	7,817.0	5,651.2	177.5	5,651.2	0.00	0.00	
13,300.0	90.00	359.00	7,817.0	5,751.2	175.7	5,751.2	0.00	0.00	
13,400.0	90.00	359.00	7,817.0	5,851.2	174.0	5,851.2	0.00	0.00	
13,500.0	90.00	359.00	7,817.0	5,951.1	172.2	5,951.1	0.00	0.00	
13,600.0	90.00	359.00	7,817.0	6,051.1	170.5	6,051.1	0.00	0.00	
13,700.0	90.00	359.00	7,817.0	6,151.1	168.7	6,151.1	0.00	0.00	
13,800.0	90.00	359.00	7,817.0	6,251.1	167.0	6,251.1	0.00	0.00	
13,900.0	90.00	359.00	7,817.0	6,351.1	165.3	6,351.1	0.00	0.00	

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**North Reference:**	True
Well:	Woolley-Becky 2C-7H-E168	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #3		

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
14,000.0	90.00	359.00	7,817.0	6,451.1	163.5	6,451.1	0.00	0.00	
14,100.0	90.00	359.00	7,817.0	6,551.0	161.8	6,551.0	0.00	0.00	
14,149.4	90.00	359.00	7,817.0	6,600.5	160.9	6,600.5	0.00	0.00	Start turn @ 14149' MD - Woolley-Becky 2C-7H
14,200.0	90.00	358.60	7,817.0	6,651.0	159.8	6,651.0	0.80	0.00	
14,300.0	90.00	357.80	7,817.0	6,751.0	156.7	6,751.0	0.80	0.00	
14,400.0	90.00	357.00	7,817.0	6,850.9	152.1	6,850.9	0.80	0.00	
14,500.0	90.00	356.20	7,817.0	6,950.7	146.2	6,950.7	0.80	0.00	
14,545.4	90.00	355.83	7,817.0	6,996.0	143.1	6,996.0	0.80	0.00	End of turn @ 14545' MD
14,600.0	90.00	355.83	7,817.0	7,050.4	139.1	7,050.4	0.00	0.00	
14,700.0	90.00	355.83	7,817.0	7,150.2	131.8	7,150.2	0.00	0.00	
14,704.3	90.00	355.83	7,817.0	7,154.4	131.5	7,154.4	0.00	0.00	TD at 14704.3 - Woolley-Becky 2C-7H-E168 PE

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Woolley-Becky 2C-7H-E - plan hits target center - Point	0.00	0.00	7,817.0	6,600.5	160.9	1,274,052.05	3,125,231.18	40.084789	-105.052455
Woolley-Becky 2C-7H-E - plan hits target center - Point	0.00	0.00	7,817.0	7,154.4	131.5	1,274,605.85	3,125,199.00	40.086310	-105.052560

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
421.0	421.0	Fox Hills - BASE			
4,473.8	4,471.0	Sussex			
4,763.1	4,760.0	Sussex Marker			
5,047.3	5,044.0	Shannon			
6,504.4	6,500.0	Teepee Buttes (*if present)			
7,407.0	7,400.0	Sharon Springs			
7,466.2	7,456.0	Niobrara			
7,602.0	7,575.0	B Chalk			
7,630.7	7,598.0	B Marl			
7,766.8	7,694.0	C Chalk			
7,796.9	7,712.0	C Marl			
7,963.1	7,787.0	Ft. Hayes			
8,042.2	7,807.0	Codell			

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**North Reference:**	True
Well:	Woolley-Becky 2C-7H-E168	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #3		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
600.0	600.0	0.0	0.0	KOP @ 600'
823.5	823.4	0.5	4.3	EOB; Inc=2.23°
7,251.5	7,246.5	28.1	253.5	Start build/turn @ 7251' MD
8,149.4	7,817.0	601.4	265.6	LP @ 7817' TVD; 90°
14,149.4	7,817.0	6,600.5	160.9	Start turn @ 14149' MD
14,545.4	7,817.0	6,996.0	143.1	End of turn @ 14545' MD
14,704.3	7,817.0	7,154.4	131.5	TD at 14704.3

EnCana Oil & Gas (USA) Inc

DJ Wattenberg
S7-T1N-R68W (Woolley-Sosa/Becky)
Woolley-Becky 2C-7H-E168
Hz
Plan #3

Anticollision Report

04 December, 2013

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Reference	Plan #3

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

Survey Tool Program **Date** 10/11/2013

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	14,704.2	Plan #3 (Hz)	Geolink MWD	Geolink MWD

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
S7-T1N-R68W (Woolley-Sosa/Becky)						
BEARDEN 0-6-6 (EXISTING) - ENCANA WELL - SURVE						Out of range
BEARDEN 1 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
BEARDEN 13-6 (EXISTING) - ENCANA WELL - SURVE	11,850.5	7,904.5	285.3	190.0	2.993	CC, ES, SF
BEARDEN 14-6 (EXISTING) - ENCANA WELL - SURVE	10,525.7	7,954.7	342.0	267.9	4.616	CC, ES, SF
BEARDEN 23-6 (EXISTING) - ENCANA WELL - GYRO						Out of range
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O						Out of range
BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - PLAN O	12,445.7	7,913.5	335.6	222.2	2.959	CC, ES, SF
BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - SURVE	9,890.8	7,979.9	246.8	175.1	3.444	CC, ES
BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - SURVE	9,900.0	7,980.0	247.0	175.2	3.439	SF
BECKY 1 (EXISTING) - FOUNDATION WELL - NO SUR						Out of range
BECKY 2-6 (EXISTING) - NOBLE WELL - NO SURVEYS	13,901.7	7,756.0	450.7	323.3	3.538	CC, ES, SF
BECKY 4 (EXISTING) - MARTIN EXP WELL - NO SURV	13,150.0	7,760.0	191.8	77.5	1.678	CC, ES, SF
BECKY 5-6 (EXISTING) - FOUNDATION WELL - NO SU	14,510.6	7,751.0	159.9	22.2	1.162	Level 2, CC, ES, SF
BECKY 7-6 (EXISTING) - NOBLE WELL - NO SURVEYS						Out of range
BILLINGS 21-7 (EXISTING) - KPK WELL - SURVEYS						Out of range
BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WELL - S						Out of range
BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WELL - S						Out of range
Sosa 11-18 - DD - DD						Out of range
Sosa 11-18 - DD - Plan #1						Out of range
Sosa 12-18 - DD - DD						Out of range
Sosa 12-18 - DD - Plan #3						Out of range
Sosa 21-18 - DD (Gyro) - DD						Out of range
Sosa 21-18 - DD (MWD) - DD						Out of range
Sosa 21-18 - DD (MWD) - Plan #2						Out of range
Sosa 22-18 - DD - DD						Out of range
Sosa 22-18 - DD - Plan #2						Out of range
SOSA A UNIT 1 (EXISTING) - EXISTING - EXISTING						Out of range
THOMAS 14-7(EXISTING) - EXISTING - NO SURVEY						Out of range
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY						Out of range
THOMAS 24-7 (Existing) - Existing - NO SURVEYS						Out of range
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SURVEY						Out of range
THOMAS 33-7 (EXISTING) - ENCANA WELL - SURVEY						Out of range
Thomas 7-12 (Existing) - Existing - NO SURVEYS						Out of range
Thomas 7-14 (Existing) - Existing - NO SURVEYS						Out of range
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY						Out of range
THOMAS K UNIT 1 (EXISTING) - EXISTING - NO SURV						Out of range
WOOLLEY 11-7 (EXISTING) - ENCANA WELL - SURVE	9,283.2	8,018.7	423.1	374.5	8.702	CC, ES
WOOLLEY 11-7 (EXISTING) - ENCANA WELL - SURVE	9,300.0	8,020.1	423.5	374.6	8.661	SF
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	600.0	674.0	281.1	278.9	128.934	CC, ES
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	7,750.0	7,757.4	467.1	439.5	16.874	SF
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO						Out of range
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE						Out of range
WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVE						Out of range
WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - SURVE						Out of range
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	8,431.6	7,835.9	349.3	314.1	9.917	CC, ES
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	8,500.0	7,835.4	355.9	319.7	9.837	SF
Woolley-Becky 2A-7H-E168 - Hz - Plan #1	200.0	199.0	8.4	7.8	13.784	CC, ES
Woolley-Becky 2A-7H-E168 - Hz - Plan #1	400.0	398.7	11.5	10.2	8.779	SF
Woolley-Becky 2B-7H-E168 - Hz - Plan #1	509.1	508.2	6.8	5.1	4.043	CC, ES
Woolley-Becky 2B-7H-E168 - Hz - Plan #1	14,704.3	14,508.5	430.9	214.3	1.989	SF
Woolley-Becky 2D-7H-E168 - Hz - Plan #3	500.0	500.0	9.2	7.5	5.541	CC, ES
Woolley-Becky 2D-7H-E168 - Hz - Plan #3	14,704.3	14,506.9	398.6	190.4	1.914	SF
Woolley-Becky 2E-7H-E168 - Hz - Plan #2	400.0	400.0	22.4	21.1	17.105	CC, ES

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
S7-T1N-R68W (Woolley-Sosa/Becky)						
Woolley-Becky 2E-7H-E168 - Hz - Plan #2	900.0	897.3	36.8	33.8	12.073	SF
Woolley-Becky 2F-7H-E168 - Hz - Plan #2	266.3	267.3	26.2	25.4	31.063	CC
Woolley-Becky 2F-7H-E168 - Hz - Plan #2	300.0	301.0	26.2	25.3	27.267	ES
Woolley-Becky 2F-7H-E168 - Hz - Plan #2	823.5	821.0	45.7	42.9	16.429	SF
Woolley-Becky 2G-7H-E168 - Hz - Plan #1	232.0	233.0	30.8	30.1	42.509	CC
Woolley-Becky 2G-7H-E168 - Hz - Plan #1	300.0	300.7	31.0	30.0	32.258	ES
Woolley-Becky 2G-7H-E168 - Hz - Plan #1	900.0	895.5	60.1	57.0	19.711	SF
Woolley-Becky 2H-7H-E168 - Hz - Plan #2	166.3	167.3	37.1	36.6	74.951	CC
Woolley-Becky 2H-7H-E168 - Hz - Plan #2	200.0	201.0	37.1	36.5	60.572	ES
Woolley-Becky 2H-7H-E168 - Hz - Plan #2	900.0	893.9	71.9	68.8	23.599	SF
Woolley-Sosa 2A-7H-E168 - Hz - Plan #1	200.0	198.0	75.2	74.6	123.765	CC, ES
Woolley-Sosa 2A-7H-E168 - Hz - Plan #1	1,000.0	987.6	127.3	123.9	36.775	SF
Woolley-Sosa 2B-7H-E168 - HZ - Plan #1	300.0	298.0	70.3	69.4	73.550	CC
Woolley-Sosa 2B-7H-E168 - HZ - Plan #1	400.0	397.6	70.6	69.3	54.135	ES
Woolley-Sosa 2B-7H-E168 - HZ - Plan #1	2,300.0	2,286.3	229.6	221.3	27.721	SF
Woolley-Sosa 2C-7H-E168 - HZ - Plan #1	652.2	650.8	64.1	61.9	29.178	CC, ES
Woolley-Sosa 2C-7H-E168 - HZ - Plan #1	7,777.0	7,854.1	153.8	125.2	5.374	SF
Woolley-Sosa 2D-7H-E168 - HZ - Plan #1	710.3	709.5	59.4	57.0	24.809	CC, ES
Woolley-Sosa 2D-7H-E168 - HZ - Plan #1	7,786.8	7,861.3	170.8	142.2	5.959	SF
Woolley-Sosa 2E-7H-E168 - HZ - Plan #2	600.0	598.0	45.2	43.2	22.547	CC, ES
Woolley-Sosa 2E-7H-E168 - HZ - Plan #2	2,000.0	2,000.8	54.2	46.8	7.360	SF
Woolley-Sosa 2F-7H-E168 - HZ - Plan #1	947.4	947.2	27.3	23.9	8.073	CC, ES
Woolley-Sosa 2F-7H-E168 - HZ - Plan #1	1,100.0	1,099.1	30.3	26.3	7.489	SF
Woolley-Sosa 2G-7H-E168 - HZ - Plan #1	839.5	839.0	14.2	11.1	4.693	CC, ES
Woolley-Sosa 2G-7H-E168 - HZ - Plan #1	900.0	899.3	14.9	11.6	4.554	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - BEARDEN 13-6 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 765-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
11,500.0	7,817.0	7,904.3	7,786.2	72.3	24.5	-89.63	4,296.9	-84.2	451.9	362.6	89.28	5.062	
11,600.0	7,817.0	7,904.4	7,786.2	74.1	24.5	-89.64	4,296.9	-84.2	379.6	288.6	91.00	4.172	
11,700.0	7,817.0	7,904.4	7,786.3	75.8	24.5	-89.65	4,296.9	-84.2	322.5	229.8	92.73	3.478	
11,800.0	7,817.0	7,904.5	7,786.3	77.5	24.5	-89.66	4,296.9	-84.2	289.7	195.3	94.46	3.067	
11,850.5	7,817.0	7,904.5	7,786.4	78.4	24.5	-89.67	4,296.9	-84.2	285.3	190.0	95.33	2.993	CC, ES, SF
11,900.0	7,817.0	7,904.5	7,786.4	79.2	24.5	-89.67	4,296.9	-84.2	289.6	193.4	96.19	3.010	
12,000.0	7,817.0	7,904.6	7,786.4	81.0	24.5	-89.68	4,296.9	-84.2	322.1	224.2	97.92	3.289	
12,100.0	7,817.0	7,904.6	7,786.5	82.7	24.5	-89.69	4,296.9	-84.2	379.0	279.4	99.65	3.803	
12,200.0	7,817.0	7,904.7	7,786.5	84.4	24.5	-89.71	4,296.9	-84.2	451.2	349.8	101.38	4.450	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - BEARDEN 14-6 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 797-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,200.0	7,817.0	7,950.5	7,784.9	50.1	25.9	-89.48	2,971.2	-117.8	472.2	403.7	68.54	6.889	
10,300.0	7,817.0	7,951.8	7,786.2	51.8	25.9	-89.70	2,971.3	-117.8	409.7	339.5	70.24	5.833	
10,400.0	7,817.0	7,953.1	7,787.5	53.5	25.9	-89.92	2,971.3	-117.8	364.3	292.4	71.94	5.065	
10,500.0	7,817.0	7,954.4	7,788.8	55.2	25.9	-90.14	2,971.3	-117.8	342.9	269.3	73.64	4.657	
10,525.7	7,817.0	7,954.7	7,789.1	55.7	25.9	-90.19	2,971.3	-117.8	342.0	267.9	74.07	4.616	CC, ES, SF
10,600.0	7,817.0	7,955.7	7,790.1	56.9	25.9	-90.35	2,971.3	-117.8	349.9	274.6	75.34	4.645	
10,700.0	7,817.0	7,957.0	7,791.4	58.6	25.9	-90.57	2,971.3	-117.8	383.8	306.8	77.05	4.982	
10,800.0	7,817.0	7,958.3	7,792.7	60.3	25.9	-90.78	2,971.3	-117.7	438.4	359.6	78.75	5.567	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - PLAN ONLY

Offset Site Error: 0.0 ft

Survey Program: 775-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
12,100.0	7,817.0	7,913.5	7,787.0	82.7	25.6	90.00	4,902.9	526.2	481.8	374.4	107.40	4.486	
12,200.0	7,817.0	7,913.5	7,787.0	84.4	25.6	90.00	4,902.9	526.2	415.9	306.8	109.14	3.811	
12,300.0	7,817.0	7,913.5	7,787.0	86.1	25.6	90.00	4,902.9	526.2	365.8	255.0	110.87	3.300	
12,400.0	7,817.0	7,913.5	7,787.0	87.9	25.6	90.00	4,902.9	526.2	338.7	226.1	112.60	3.008	
12,445.7	7,817.0	7,913.5	7,787.0	88.7	25.6	90.00	4,902.9	526.2	335.6	222.2	113.40	2.959	CC, ES, SF
12,500.0	7,817.0	7,913.5	7,787.0	89.6	25.6	90.00	4,902.9	526.2	339.9	225.6	114.34	2.973	
12,600.0	7,817.0	7,913.5	7,787.0	91.3	25.6	90.00	4,902.9	526.2	369.3	253.3	116.08	3.182	
12,700.0	7,817.0	7,913.5	7,787.0	93.1	25.6	90.00	4,902.9	526.2	421.0	303.2	117.81	3.574	
12,800.0	7,817.0	7,913.5	7,787.0	94.8	25.6	90.00	4,902.9	526.2	488.0	368.4	119.55	4.082	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 76-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,500.0	7,817.0	7,975.1	7,782.7	38.5	27.9	89.00	2,346.7	482.0	462.2	397.0	65.13	7.096	
9,600.0	7,817.0	7,976.3	7,783.9	40.1	27.9	89.28	2,346.7	482.0	381.4	314.6	66.79	5.710	
9,700.0	7,817.0	7,977.5	7,785.1	41.8	27.9	89.57	2,346.8	482.0	311.9	243.5	68.46	4.556	
9,800.0	7,817.0	7,978.7	7,786.3	43.4	27.9	89.85	2,346.8	482.0	263.0	192.8	70.13	3.749	
9,890.8	7,817.0	7,979.9	7,787.5	45.0	27.9	90.11	2,346.8	482.0	246.8	175.1	71.65	3.444	CC, ES
9,900.0	7,817.0	7,980.0	7,787.6	45.1	27.9	90.13	2,346.8	482.0	247.0	175.2	71.81	3.439	SF
10,000.0	7,817.0	7,981.2	7,788.8	46.8	27.9	90.42	2,346.8	482.0	269.9	196.4	73.49	3.672	
10,100.0	7,817.0	7,982.4	7,790.0	48.5	27.9	90.70	2,346.8	482.0	323.5	248.4	75.18	4.304	
10,200.0	7,817.0	7,983.7	7,791.3	50.1	27.9	90.99	2,346.8	482.0	395.6	318.7	76.86	5.147	
10,300.0	7,817.0	7,984.9	7,792.5	51.8	27.9	91.28	2,346.8	482.0	477.8	399.3	78.55	6.083	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - BECKY 2-6 (EXISTING) - NOBLE WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 8164-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
13,700.0	7,817.0	7,756.0	7,756.0	110.5	13.5	90.00	6,360.7	615.9	493.8	369.9	123.88	3.986	
13,800.0	7,817.0	7,756.0	7,756.0	112.2	13.5	90.00	6,360.7	615.9	462.0	336.4	125.63	3.678	
13,900.0	7,817.0	7,756.0	7,756.0	113.9	13.5	90.00	6,360.7	615.9	450.7	323.3	127.37	3.539	
13,901.7	7,817.0	7,756.0	7,756.0	114.0	13.5	90.00	6,360.7	615.9	450.7	323.3	127.40	3.538	CC, ES, SF
14,000.0	7,817.0	7,756.0	7,756.0	115.7	13.5	90.00	6,360.7	615.9	461.3	332.2	129.11	3.573	
14,100.0	7,817.0	7,756.0	7,756.0	117.4	13.5	90.00	6,360.7	615.9	492.4	361.5	130.85	3.763	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - BECKY 4 (EXISTING) - MARTIN EXP WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 8200-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
12,700.0	7,817.0	7,760.0	7,760.0	93.1	13.5	-90.00	5,597.8	-13.4	489.2	382.7	106.49	4.593	
12,800.0	7,817.0	7,760.0	7,760.0	94.8	13.5	-90.00	5,597.8	-13.4	399.1	290.9	108.23	3.688	
12,900.0	7,817.0	7,760.0	7,760.0	96.5	13.5	-90.00	5,597.8	-13.4	315.1	205.1	109.97	2.865	
13,000.0	7,817.0	7,760.0	7,760.0	98.3	13.5	-90.00	5,597.8	-13.4	243.5	131.8	111.71	2.180	
13,100.0	7,817.0	7,760.0	7,760.0	100.0	13.5	-90.00	5,597.8	-13.4	198.2	84.8	113.45	1.747	
13,150.0	7,817.0	7,760.0	7,760.0	100.9	13.5	-90.00	5,597.8	-13.4	191.8	77.5	114.32	1.678	CC, ES, SF
13,200.0	7,817.0	7,760.0	7,760.0	101.8	13.5	-90.00	5,597.8	-13.4	198.2	83.0	115.19	1.721	
13,300.0	7,817.0	7,760.0	7,760.0	103.5	13.5	-90.00	5,597.8	-13.4	243.5	126.6	116.93	2.082	
13,400.0	7,817.0	7,760.0	7,760.0	105.2	13.5	-90.00	5,597.8	-13.4	315.1	196.4	118.67	2.655	
13,500.0	7,817.0	7,760.0	7,760.0	107.0	13.5	-90.00	5,597.8	-13.4	399.1	278.7	120.41	3.315	
13,600.0	7,817.0	7,760.0	7,760.0	108.7	13.5	-90.00	5,597.8	-13.4	489.2	367.0	122.15	4.005	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - BECKY 5-6 (EXISTING) - FOUNDATION WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 7771-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
14,100.0	7,817.0	7,751.0	7,751.0	117.4	13.5	-90.00	6,950.4	-14.0	436.3	305.5	130.85	3.335	
14,149.4	7,817.0	7,751.0	7,751.0	118.3	13.5	-90.00	6,950.4	-14.0	391.2	259.5	131.71	2.970	
14,200.0	7,817.0	7,751.0	7,751.0	119.2	13.5	-90.00	6,950.4	-14.0	346.2	213.6	132.55	2.612	
14,300.0	7,817.0	7,751.0	7,751.0	120.9	13.5	-90.00	6,950.4	-14.0	262.5	128.3	134.21	1.956	
14,400.0	7,817.0	7,751.0	7,751.0	122.6	13.5	-90.00	6,950.4	-14.0	193.7	57.8	135.84	1.426	Level 3
14,500.0	7,817.0	7,751.0	7,751.0	124.4	13.5	-90.00	6,950.4	-14.0	160.2	22.7	137.45	1.165	Level 2
14,510.6	7,817.0	7,751.0	7,751.0	124.6	13.5	-90.00	6,950.4	-14.0	159.9	22.2	137.62	1.162	Level 2, CC, ES, SF
14,545.4	7,817.0	7,751.0	7,751.0	125.2	13.5	-90.00	6,950.4	-14.0	163.5	25.3	138.18	1.183	Level 2
14,600.0	7,817.0	7,751.0	7,751.0	126.1	13.5	-90.00	6,950.4	-14.0	182.9	43.7	139.13	1.314	Level 3
14,704.3	7,817.0	7,751.0	7,751.0	127.9	13.5	-90.00	6,950.4	-14.0	250.6	109.6	140.95	1.778	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - WOOLLEY 11-7 (EXISTING) - ENCANA WELL - SURVEYS

Survey Program: 132-Geolink MWD

Offset Site Error: 0.0 ft

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,100.0	7,817.0	8,004.3	7,843.7	32.0	26.4	-88.47	1,726.5	-177.3	460.9	415.2	45.67	10.091	
9,200.0	7,817.0	8,012.1	7,851.4	33.6	26.4	-89.51	1,727.1	-177.3	431.2	383.9	47.28	9.120	
9,283.2	7,817.0	8,018.7	7,858.0	35.0	26.4	-90.41	1,727.6	-177.2	423.1	374.5	48.62	8.702	CC, ES
9,300.0	7,817.0	8,020.1	7,859.4	35.2	26.4	-90.59	1,727.7	-177.2	423.5	374.6	48.89	8.661	SF
9,400.0	7,817.0	8,028.4	7,867.7	36.9	26.4	-91.72	1,728.4	-177.2	438.8	388.4	50.50	8.690	
9,500.0	7,817.0	8,037.0	7,876.3	38.5	26.4	-92.88	1,729.1	-177.1	475.1	423.0	52.10	9.120	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 8325-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	74.0	74.0	0.0	0.1	-45.07	198.5	-199.0	281.1				
100.0	100.0	174.0	174.0	0.1	0.3	-45.07	198.5	-199.0	281.1	280.7	0.43	646.506	
200.0	200.0	274.0	274.0	0.3	0.5	-45.07	198.5	-199.0	281.1	280.3	0.78	358.603	
300.0	300.0	374.0	374.0	0.5	0.7	-45.07	198.5	-199.0	281.1	280.0	1.13	248.113	
400.0	400.0	474.0	474.0	0.7	0.8	-45.07	198.5	-199.0	281.1	279.6	1.48	189.673	
500.0	500.0	574.0	574.0	0.8	1.0	-45.07	198.5	-199.0	281.1	279.3	1.83	153.514	
600.0	600.0	674.0	674.0	1.0	1.2	-45.07	198.5	-199.0	281.1	278.9	2.18	128.934	CC, ES
700.0	700.0	774.0	774.0	1.2	1.4	-128.87	198.5	-199.0	281.6	279.1	2.53	111.350	
800.0	800.0	874.0	874.0	1.4	1.5	-129.27	198.5	-199.0	283.3	280.4	2.88	98.378	
823.5	823.4	897.4	897.4	1.4	1.6	-129.40	198.5	-199.0	283.8	280.9	2.96	95.827	
900.0	899.9	973.9	973.9	1.5	1.7	-129.86	198.5	-199.0	285.7	282.5	3.23	88.426	
1,000.0	999.8	1,073.8	1,073.8	1.7	1.9	-130.46	198.5	-199.0	288.3	284.7	3.58	80.424	
1,100.0	1,099.7	1,173.7	1,173.7	1.9	2.0	-131.04	198.5	-199.0	290.8	286.9	3.94	73.854	
1,200.0	1,199.7	1,273.7	1,273.7	2.1	2.2	-131.62	198.5	-199.0	293.4	289.1	4.29	68.368	
1,300.0	1,299.6	1,373.6	1,373.6	2.3	2.4	-132.18	198.5	-199.0	296.0	291.3	4.65	63.720	
1,400.0	1,399.5	1,473.5	1,473.5	2.5	2.6	-132.73	198.5	-199.0	298.6	293.6	5.00	59.736	
1,500.0	1,499.4	1,573.4	1,573.4	2.6	2.7	-133.28	198.5	-199.0	301.3	295.9	5.35	56.283	
1,600.0	1,599.4	1,673.4	1,673.4	2.8	2.9	-133.81	198.5	-199.0	304.0	298.3	5.71	53.263	
1,700.0	1,699.3	1,773.3	1,773.3	3.0	3.1	-134.34	198.5	-199.0	306.7	300.6	6.06	50.600	
1,800.0	1,799.2	1,873.2	1,873.2	3.2	3.3	-134.86	198.5	-199.0	309.4	303.0	6.41	48.236	
1,900.0	1,899.1	1,973.1	1,973.1	3.4	3.4	-135.36	198.5	-199.0	312.2	305.4	6.77	46.124	
2,000.0	1,999.0	2,073.0	2,073.0	3.6	3.6	-135.86	198.5	-199.0	315.0	307.8	7.12	44.225	
2,100.0	2,099.0	2,173.0	2,173.0	3.8	3.8	-136.35	198.5	-199.0	317.8	310.3	7.48	42.510	
2,200.0	2,198.9	2,272.9	2,272.9	3.9	4.0	-136.83	198.5	-199.0	320.6	312.8	7.83	40.953	
2,300.0	2,298.8	2,372.8	2,372.8	4.1	4.1	-137.30	198.5	-199.0	323.5	315.3	8.18	39.534	
2,400.0	2,398.7	2,472.7	2,472.7	4.3	4.3	-137.77	198.5	-199.0	326.3	317.8	8.54	38.235	
2,500.0	2,498.7	2,572.7	2,572.7	4.5	4.5	-138.22	198.5	-199.0	329.2	320.4	8.89	37.043	
2,600.0	2,598.6	2,672.6	2,672.6	4.7	4.7	-138.67	198.5	-199.0	332.2	322.9	9.24	35.944	
2,700.0	2,698.5	2,772.5	2,772.5	4.9	4.8	-139.11	198.5	-199.0	335.1	325.5	9.59	34.929	
2,800.0	2,798.4	2,872.4	2,872.4	5.1	5.0	-139.54	198.5	-199.0	338.1	328.1	9.95	33.988	
2,900.0	2,898.4	2,972.4	2,972.4	5.2	5.2	-139.97	198.5	-199.0	341.0	330.7	10.30	33.114	
3,000.0	2,998.3	3,072.3	3,072.3	5.4	5.4	-140.39	198.5	-199.0	344.0	333.4	10.65	32.300	
3,100.0	3,098.2	3,172.2	3,172.2	5.6	5.5	-140.80	198.5	-199.0	347.1	336.0	11.00	31.540	
3,200.0	3,198.1	3,272.1	3,272.1	5.8	5.7	-141.20	198.5	-199.0	350.1	338.7	11.36	30.829	
3,300.0	3,298.1	3,372.1	3,372.1	6.0	5.9	-141.60	198.5	-199.0	353.1	341.4	11.71	30.163	
3,400.0	3,398.0	3,472.0	3,472.0	6.2	6.1	-141.99	198.5	-199.0	356.2	344.1	12.06	29.537	
3,500.0	3,497.9	3,571.9	3,571.9	6.4	6.2	-142.37	198.5	-199.0	359.3	346.9	12.41	28.948	
3,600.0	3,597.8	3,671.8	3,671.8	6.6	6.4	-142.75	198.5	-199.0	362.4	349.6	12.76	28.393	
3,700.0	3,697.8	3,771.8	3,771.8	6.7	6.6	-143.12	198.5	-199.0	365.5	352.4	13.11	27.869	
3,800.0	3,797.7	3,871.7	3,871.7	6.9	6.8	-143.48	198.5	-199.0	368.6	355.1	13.47	27.374	
3,900.0	3,897.6	3,971.6	3,971.6	7.1	6.9	-143.84	198.5	-199.0	371.8	357.9	13.82	26.906	
4,000.0	3,997.5	4,071.5	4,071.5	7.3	7.1	-144.19	198.5	-199.0	374.9	360.7	14.17	26.461	
4,100.0	4,097.5	4,171.5	4,171.5	7.5	7.3	-144.53	198.5	-199.0	378.1	363.6	14.52	26.040	
4,200.0	4,197.4	4,271.4	4,271.4	7.7	7.5	-144.87	198.5	-199.0	381.3	366.4	14.87	25.639	
4,300.0	4,297.3	4,371.3	4,371.3	7.9	7.6	-145.21	198.5	-199.0	384.5	369.2	15.22	25.258	
4,400.0	4,397.2	4,471.2	4,471.2	8.0	7.8	-145.54	198.5	-199.0	387.7	372.1	15.57	24.895	
4,500.0	4,497.1	4,571.1	4,571.1	8.2	8.0	-145.86	198.5	-199.0	390.9	375.0	15.92	24.549	
4,600.0	4,597.1	4,671.1	4,671.1	8.4	8.2	-146.18	198.5	-199.0	394.1	377.9	16.27	24.219	
4,700.0	4,697.0	4,771.0	4,771.0	8.6	8.3	-146.49	198.5	-199.0	397.4	380.7	16.62	23.903	
4,800.0	4,796.9	4,870.9	4,870.9	8.8	8.5	-146.80	198.5	-199.0	400.6	383.7	16.97	23.602	
4,900.0	4,896.8	4,970.8	4,970.8	9.0	8.7	-147.10	198.5	-199.0	403.9	386.6	17.32	23.313	
5,000.0	4,996.8	5,070.8	5,070.8	9.2	8.9	-147.40	198.5	-199.0	407.2	389.5	17.68	23.037	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 8325-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,096.7	5,170.7	5,170.7	9.4	9.0	-147.69	198.5	-199.0	410.5	392.4	18.03	22.772	
5,200.0	5,196.6	5,270.6	5,270.6	9.5	9.2	-147.98	198.5	-199.0	413.8	395.4	18.38	22.517	
5,300.0	5,296.5	5,370.5	5,370.5	9.7	9.4	-148.27	198.5	-199.0	417.1	398.4	18.73	22.273	
5,400.0	5,396.5	5,470.5	5,470.5	9.9	9.5	-148.54	198.5	-199.0	420.4	401.3	19.08	22.038	
5,500.0	5,496.4	5,570.4	5,570.4	10.1	9.7	-148.82	198.5	-199.0	423.7	404.3	19.43	21.813	
5,600.0	5,596.3	5,670.3	5,670.3	10.3	9.9	-149.09	198.5	-199.0	427.1	407.3	19.78	21.596	
5,700.0	5,696.2	5,770.2	5,770.2	10.5	10.1	-149.36	198.5	-199.0	430.4	410.3	20.13	21.387	
5,800.0	5,796.2	5,870.2	5,870.2	10.7	10.2	-149.62	198.5	-199.0	433.8	413.3	20.48	21.185	
5,900.0	5,896.1	5,970.1	5,970.1	10.9	10.4	-149.88	198.5	-199.0	437.2	416.3	20.83	20.991	
6,000.0	5,996.0	6,070.0	6,070.0	11.0	10.6	-150.13	198.5	-199.0	440.5	419.4	21.18	20.804	
6,100.0	6,095.9	6,169.9	6,169.9	11.2	10.8	-150.38	198.5	-199.0	443.9	422.4	21.53	20.624	
6,200.0	6,195.9	6,269.9	6,269.9	11.4	10.9	-150.63	198.5	-199.0	447.3	425.4	21.87	20.449	
6,300.0	6,295.8	6,369.8	6,369.8	11.6	11.1	-150.87	198.5	-199.0	450.7	428.5	22.22	20.280	
6,400.0	6,395.7	6,469.7	6,469.7	11.8	11.3	-151.11	198.5	-199.0	454.1	431.6	22.57	20.118	
6,500.0	6,495.6	6,569.6	6,569.6	12.0	11.5	-151.35	198.5	-199.0	457.6	434.6	22.92	19.960	
6,600.0	6,595.6	6,669.6	6,669.6	12.2	11.6	-151.58	198.5	-199.0	461.0	437.7	23.27	19.807	
6,700.0	6,695.5	6,769.5	6,769.5	12.4	11.8	-151.81	198.5	-199.0	464.4	440.8	23.62	19.660	
6,800.0	6,795.4	6,869.4	6,869.4	12.5	12.0	-152.04	198.5	-199.0	467.9	443.9	23.97	19.517	
6,900.0	6,895.3	6,969.3	6,969.3	12.7	12.2	-152.26	198.5	-199.0	471.3	447.0	24.32	19.378	
7,000.0	6,995.2	7,069.2	7,069.2	12.9	12.3	-152.48	198.5	-199.0	474.8	450.1	24.67	19.244	
7,100.0	7,095.2	7,169.2	7,169.2	13.1	12.5	-152.69	198.5	-199.0	478.2	453.2	25.02	19.114	
7,200.0	7,195.1	7,269.1	7,269.1	13.3	12.7	-152.91	198.5	-199.0	481.7	456.3	25.37	18.987	
7,251.5	7,246.5	7,320.5	7,320.5	13.4	12.8	-153.01	198.5	-199.0	483.5	457.9	25.55	18.923	
7,300.0	7,295.0	7,369.0	7,369.0	13.5	12.9	-92.36	198.5	-199.0	484.4	458.7	25.73	18.828	
7,350.0	7,344.5	7,418.5	7,418.5	13.6	12.9	-81.97	198.5	-199.0	483.9	458.0	25.90	18.681	
7,400.0	7,393.2	7,467.2	7,467.2	13.7	13.0	-79.37	198.5	-199.0	481.9	455.9	26.07	18.489	
7,450.0	7,440.8	7,514.8	7,514.8	13.8	13.1	-79.31	198.5	-199.0	479.0	452.7	26.24	18.254	
7,500.0	7,487.0	7,561.0	7,561.0	13.9	13.2	-80.55	198.5	-199.0	475.3	448.9	26.43	17.986	
7,550.0	7,531.2	7,605.2	7,605.2	14.1	13.3	-82.58	198.5	-199.0	471.5	444.8	26.64	17.699	
7,600.0	7,573.3	7,647.3	7,647.3	14.2	13.3	-85.11	198.5	-199.0	468.0	441.2	26.88	17.415	
7,650.0	7,612.9	7,686.9	7,686.9	14.4	13.4	-87.89	198.5	-199.0	465.7	438.6	27.13	17.164	
7,687.5	7,640.8	7,714.8	7,714.8	14.6	13.5	-90.00	198.5	-199.0	465.1	437.8	27.34	17.013	
7,700.0	7,649.7	7,723.7	7,723.7	14.7	13.5	-90.69	198.5	-199.0	465.2	437.8	27.40	16.975	
7,750.0	7,683.4	7,757.4	7,757.4	14.9	13.5	-93.31	198.5	-199.0	467.1	439.5	27.68	16.874	SF
7,800.0	7,713.8	7,787.8	7,787.8	15.2	13.6	-95.56	198.5	-199.0	472.3	444.3	27.98	16.878	
7,850.0	7,740.6	7,814.6	7,814.6	15.6	13.6	-97.27	198.5	-199.0	481.0	452.7	28.31	16.991	
7,900.0	7,763.6	7,837.6	7,837.6	16.0	13.7	-98.30	198.5	-199.0	493.8	465.1	28.69	17.209	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GYRO

Offset Site Error: 0.0 ft

Survey Program: 100-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
8,100.0	7,814.9	7,836.6	7,834.5	17.9	13.8	84.58	889.6	609.9	481.6	450.7	30.85	15.609	
8,149.4	7,817.0	7,838.3	7,836.2	18.5	13.8	89.21	889.6	609.9	449.0	417.5	31.53	14.238	
8,200.0	7,817.0	7,837.9	7,835.7	19.1	13.8	89.14	889.6	609.9	419.1	386.9	32.15	13.034	
8,300.0	7,817.0	7,837.1	7,834.9	20.3	13.8	89.00	889.6	609.9	373.2	339.8	33.43	11.164	
8,400.0	7,817.0	7,836.2	7,834.1	21.6	13.8	88.86	889.6	609.8	350.7	315.9	34.78	10.084	
8,431.6	7,817.0	7,835.9	7,833.8	22.1	13.8	88.82	889.6	609.8	349.3	314.1	35.22	9.917	CC, ES
8,500.0	7,817.0	7,835.4	7,833.2	23.0	13.8	88.72	889.6	609.8	355.9	319.7	36.18	9.837	SF
8,600.0	7,817.0	7,834.5	7,832.3	24.4	13.8	88.58	889.6	609.8	387.8	350.1	37.63	10.305	
8,700.0	7,817.0	7,833.6	7,831.5	25.9	13.8	88.44	889.6	609.8	440.5	401.4	39.12	11.261	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Becky 2A-7H-E168 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-8.4	8.5				
100.0	100.0	99.0	99.0	0.1	0.1	-90.00	0.0	-8.4	8.4	8.1	0.26	32.233	
200.0	200.0	199.0	199.0	0.3	0.3	-90.00	0.0	-8.4	8.4	7.8	0.61	13.784	CC, ES
300.0	300.0	298.9	298.9	0.5	0.5	-92.67	-0.4	-9.1	9.1	8.2	0.96	9.541	
400.0	400.0	398.7	398.6	0.7	0.7	-98.61	-1.7	-11.4	11.5	10.2	1.31	8.779	SF
500.0	500.0	498.4	498.2	0.8	0.8	-104.40	-3.9	-15.1	15.6	14.0	1.67	9.349	
600.0	600.0	597.9	597.5	1.0	1.0	-108.74	-6.9	-20.4	21.5	19.5	2.04	10.539	
700.0	700.0	697.7	697.1	1.2	1.2	166.87	-9.6	-26.5	29.1	26.7	2.35	12.351	
800.0	800.0	797.4	796.6	1.4	1.4	169.59	-10.5	-32.8	37.9	35.2	2.70	14.044	
823.5	823.4	820.7	819.9	1.4	1.5	170.34	-10.6	-34.3	40.2	37.4	2.78	14.463	
900.0	899.9	896.8	895.9	1.5	1.6	172.31	-10.8	-39.1	47.9	44.9	3.05	15.732	
1,000.0	999.8	996.3	995.2	1.7	1.8	174.09	-11.0	-45.5	58.1	54.7	3.39	17.109	
1,100.0	1,099.7	1,095.8	1,094.4	1.9	2.0	175.35	-11.3	-51.8	68.3	64.5	3.74	18.240	
1,200.0	1,199.7	1,195.2	1,193.7	2.1	2.3	176.27	-11.6	-58.2	78.5	74.4	4.09	19.184	
1,300.0	1,299.6	1,294.7	1,293.0	2.3	2.5	176.99	-11.8	-64.5	88.7	84.2	4.44	19.985	
1,400.0	1,399.5	1,394.2	1,392.2	2.5	2.7	177.55	-12.1	-70.9	98.9	94.1	4.78	20.671	
1,500.0	1,499.4	1,493.7	1,491.5	2.6	2.9	178.01	-12.4	-77.2	109.1	104.0	5.13	21.266	
1,600.0	1,599.4	1,593.1	1,590.8	2.8	3.1	178.40	-12.6	-83.6	119.4	113.9	5.48	21.786	
1,700.0	1,699.3	1,692.6	1,690.0	3.0	3.3	178.72	-12.9	-89.9	129.6	123.8	5.83	22.245	
1,800.0	1,799.2	1,792.1	1,789.3	3.2	3.5	178.99	-13.1	-96.3	139.9	133.7	6.18	22.653	
1,900.0	1,899.1	1,891.5	1,888.6	3.4	3.7	179.23	-13.4	-102.6	150.1	143.6	6.52	23.018	
2,000.0	1,999.0	1,991.0	1,987.8	3.6	3.9	179.43	-13.7	-109.0	160.4	153.5	6.87	23.346	
2,100.0	2,099.0	2,090.5	2,087.1	3.8	4.1	179.62	-13.9	-115.3	170.7	163.4	7.22	23.643	
2,200.0	2,198.9	2,190.0	2,186.4	3.9	4.3	179.78	-14.2	-121.7	180.9	173.4	7.57	23.913	
2,300.0	2,298.8	2,289.4	2,285.6	4.1	4.5	179.92	-14.5	-128.0	191.2	183.3	7.91	24.159	
2,400.0	2,398.7	2,388.9	2,384.9	4.3	4.7	-179.95	-14.7	-134.4	201.4	193.2	8.26	24.385	
2,500.0	2,498.7	2,488.4	2,484.2	4.5	4.9	-179.84	-15.0	-140.7	211.7	203.1	8.61	24.592	
2,600.0	2,598.6	2,587.8	2,583.4	4.7	5.1	-179.73	-15.3	-147.1	222.0	213.0	8.96	24.783	
2,700.0	2,698.5	2,687.3	2,682.7	4.9	5.3	-179.63	-15.5	-153.4	232.2	222.9	9.30	24.961	
2,800.0	2,798.4	2,786.8	2,782.0	5.1	5.5	-179.54	-15.8	-159.8	242.5	232.8	9.65	25.125	
2,900.0	2,898.4	2,886.3	2,881.2	5.2	5.7	-179.46	-16.1	-166.2	252.8	242.8	10.00	25.278	
3,000.0	2,998.3	2,985.7	2,980.5	5.4	5.9	-179.39	-16.3	-172.5	263.0	252.7	10.35	25.421	
3,100.0	3,098.2	3,085.2	3,079.8	5.6	6.2	-179.32	-16.6	-178.9	273.3	262.6	10.69	25.555	
3,200.0	3,198.1	3,184.7	3,179.0	5.8	6.4	-179.26	-16.9	-185.2	283.6	272.5	11.04	25.680	
3,300.0	3,298.1	3,284.1	3,278.3	6.0	6.6	-179.20	-17.1	-191.6	293.8	282.4	11.39	25.797	
3,400.0	3,398.0	3,383.6	3,377.6	6.2	6.8	-179.14	-17.4	-197.9	304.1	292.4	11.74	25.908	
3,500.0	3,497.9	3,483.1	3,476.8	6.4	7.0	-179.09	-17.7	-204.3	314.4	302.3	12.09	26.012	
3,600.0	3,597.8	3,582.6	3,576.1	6.6	7.2	-179.04	-17.9	-210.6	324.6	312.2	12.43	26.111	
3,700.0	3,697.8	3,682.0	3,675.4	6.7	7.4	-178.99	-18.2	-217.0	334.9	322.1	12.78	26.204	
3,800.0	3,797.7	3,781.5	3,774.6	6.9	7.6	-178.95	-18.5	-223.3	345.2	332.0	13.13	26.292	
3,900.0	3,897.6	3,881.0	3,873.9	7.1	7.8	-178.91	-18.7	-229.7	355.4	342.0	13.48	26.376	
4,000.0	3,997.5	3,980.4	3,973.2	7.3	8.0	-178.87	-19.0	-236.0	365.7	351.9	13.82	26.455	
4,100.0	4,097.5	4,079.9	4,072.5	7.5	8.2	-178.84	-19.2	-242.4	376.0	361.8	14.17	26.531	
4,200.0	4,197.4	4,179.4	4,171.7	7.7	8.4	-178.80	-19.5	-248.7	386.2	371.7	14.52	26.603	
4,300.0	4,297.3	4,278.9	4,271.0	7.9	8.6	-178.77	-19.8	-255.1	396.5	381.7	14.87	26.672	
4,400.0	4,397.2	4,378.3	4,370.3	8.0	8.8	-178.74	-20.0	-261.4	406.8	391.6	15.21	26.737	
4,500.0	4,497.1	4,477.8	4,469.5	8.2	9.0	-178.71	-20.3	-267.8	417.1	401.5	15.56	26.800	
4,600.0	4,597.1	4,577.3	4,568.8	8.4	9.2	-178.68	-20.6	-274.1	427.3	411.4	15.91	26.859	
4,700.0	4,697.0	4,676.7	4,668.1	8.6	9.4	-178.66	-20.8	-280.5	437.6	421.3	16.26	26.917	
4,800.0	4,796.9	4,776.2	4,767.3	8.8	9.7	-178.63	-21.1	-286.8	447.9	431.3	16.61	26.972	
4,900.0	4,896.8	4,875.7	4,866.6	9.0	9.9	-178.61	-21.4	-293.2	458.1	441.2	16.95	27.024	
5,000.0	4,996.8	4,975.1	4,965.9	9.2	10.1	-178.58	-21.6	-299.5	468.4	451.1	17.30	27.075	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Becky 2A-7H-E168 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,096.7	5,074.6	5,065.1	9.4	10.3	-178.56	-21.9	-305.9	478.7	461.0	17.65	27.123	
5,200.0	5,196.6	5,174.1	5,164.4	9.5	10.5	-178.54	-22.2	-312.2	488.9	471.0	18.00	27.170	
5,300.0	5,296.5	5,273.6	5,263.7	9.7	10.7	-178.52	-22.4	-318.6	499.2	480.9	18.34	27.215	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Becky 2B-7H-E168 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-21.01	7.3	-2.8	7.9				
100.0	100.0	99.0	99.0	0.1	0.1	-21.01	7.3	-2.8	7.8	7.5	0.26	29.961	
200.0	200.0	199.0	199.0	0.3	0.3	-21.01	7.3	-2.8	7.8	7.2	0.61	12.813	
300.0	300.0	299.0	299.0	0.5	0.5	-21.01	7.3	-2.8	7.8	6.8	0.96	8.145	
400.0	400.0	399.1	399.1	0.7	0.7	-26.80	6.6	-3.3	7.4	6.1	1.31	5.681	
500.0	500.0	499.1	499.0	0.8	0.8	-47.28	4.6	-5.0	6.8	5.2	1.66	4.126	
509.1	509.1	508.2	508.1	0.8	0.8	-50.00	4.4	-5.2	6.8	5.1	1.69	4.043	CC, ES
600.0	600.0	598.9	598.8	1.0	1.0	-80.45	1.3	-7.8	7.9	5.9	2.01	3.945	
700.0	700.0	698.9	698.7	1.2	1.2	176.28	-2.0	-10.7	11.8	9.4	2.36	4.989	
800.0	800.0	798.9	798.7	1.4	1.4	172.10	-3.7	-12.8	16.8	14.1	2.71	6.188	
823.5	823.4	822.4	822.1	1.4	1.4	172.15	-3.9	-13.1	18.0	15.2	2.79	6.455	
900.0	899.9	898.9	898.6	1.5	1.6	173.25	-4.1	-14.0	21.9	18.8	3.06	7.157	
1,000.0	999.8	998.8	998.5	1.7	1.7	174.42	-4.3	-15.1	26.9	23.5	3.41	7.887	
1,100.0	1,099.7	1,098.7	1,098.4	1.9	1.9	175.23	-4.5	-16.2	31.9	28.1	3.75	8.483	
1,200.0	1,199.7	1,198.5	1,198.3	2.1	2.1	175.81	-4.6	-17.3	36.8	32.7	4.10	8.979	
1,300.0	1,299.6	1,298.4	1,298.1	2.3	2.3	176.26	-4.8	-18.4	41.8	37.4	4.45	9.398	
1,400.0	1,399.5	1,398.3	1,398.0	2.5	2.4	176.61	-4.9	-19.5	46.8	42.0	4.80	9.757	
1,500.0	1,499.4	1,498.2	1,497.9	2.6	2.6	176.90	-5.1	-20.6	51.8	46.7	5.15	10.067	
1,600.0	1,599.4	1,598.0	1,597.7	2.8	2.8	177.13	-5.3	-21.7	56.8	51.3	5.50	10.338	
1,700.0	1,699.3	1,697.9	1,697.6	3.0	3.0	177.33	-5.4	-22.8	61.8	56.0	5.85	10.577	
1,800.0	1,799.2	1,797.8	1,797.5	3.2	3.1	177.49	-5.6	-23.9	66.8	60.6	6.19	10.789	
1,900.0	1,899.1	1,897.7	1,897.3	3.4	3.3	177.64	-5.7	-24.9	71.8	65.3	6.54	10.978	
2,000.0	1,999.0	1,997.5	1,997.2	3.6	3.5	177.76	-5.9	-26.0	76.8	69.9	6.89	11.149	
2,100.0	2,099.0	2,097.4	2,097.1	3.8	3.7	177.87	-6.1	-27.1	81.8	74.6	7.24	11.302	
2,200.0	2,198.9	2,197.3	2,196.9	3.9	3.8	177.97	-6.2	-28.2	86.8	79.2	7.59	11.442	
2,300.0	2,298.8	2,297.2	2,296.8	4.1	4.0	178.05	-6.4	-29.3	91.8	83.9	7.94	11.570	
2,400.0	2,398.7	2,397.0	2,396.7	4.3	4.2	178.13	-6.5	-30.4	96.8	88.5	8.29	11.687	
2,500.0	2,498.7	2,496.9	2,496.5	4.5	4.4	178.20	-6.7	-31.5	101.8	93.2	8.63	11.794	
2,600.0	2,598.6	2,596.8	2,596.4	4.7	4.5	178.26	-6.9	-32.6	106.8	97.9	8.98	11.893	
2,700.0	2,698.5	2,696.7	2,696.3	4.9	4.7	178.32	-7.0	-33.7	111.8	102.5	9.33	11.985	
2,800.0	2,798.4	2,796.5	2,796.1	5.1	4.9	178.37	-7.2	-34.8	116.8	107.2	9.68	12.070	
2,900.0	2,898.4	2,896.4	2,896.0	5.2	5.1	178.42	-7.4	-35.9	121.8	111.8	10.03	12.149	
3,000.0	2,998.3	2,996.3	2,995.9	5.4	5.2	178.47	-7.5	-37.0	126.8	116.5	10.38	12.223	
3,100.0	3,098.2	3,096.2	3,095.8	5.6	5.4	178.51	-7.7	-38.1	131.8	121.1	10.73	12.292	
3,200.0	3,198.1	3,196.0	3,195.6	5.8	5.6	178.55	-7.8	-39.1	136.8	125.8	11.07	12.357	
3,300.0	3,298.1	3,295.9	3,295.5	6.0	5.8	178.58	-8.0	-40.2	141.8	130.4	11.42	12.417	
3,400.0	3,398.0	3,395.8	3,395.4	6.2	5.9	178.61	-8.2	-41.3	146.9	135.1	11.77	12.474	
3,500.0	3,497.9	3,495.7	3,495.2	6.4	6.1	178.64	-8.3	-42.4	151.9	139.7	12.12	12.528	
3,600.0	3,597.8	3,595.5	3,595.1	6.6	6.3	178.67	-8.5	-43.5	156.9	144.4	12.47	12.579	
3,700.0	3,697.8	3,695.4	3,695.0	6.7	6.5	178.70	-8.6	-44.6	161.9	149.0	12.82	12.627	
3,800.0	3,797.7	3,795.3	3,794.8	6.9	6.6	178.73	-8.8	-45.7	166.9	153.7	13.17	12.673	
3,900.0	3,897.6	3,895.2	3,894.7	7.1	6.8	178.75	-9.0	-46.8	171.9	158.3	13.52	12.716	
4,000.0	3,997.5	3,995.0	3,994.6	7.3	7.0	178.77	-9.1	-47.9	176.9	163.0	13.86	12.757	
4,100.0	4,097.5	4,094.9	4,094.4	7.5	7.2	178.79	-9.3	-49.0	181.9	167.7	14.21	12.796	
4,200.0	4,197.4	4,194.8	4,194.3	7.7	7.3	178.81	-9.4	-50.1	186.9	172.3	14.56	12.833	
4,300.0	4,297.3	4,294.7	4,294.2	7.9	7.5	178.83	-9.6	-51.2	191.9	177.0	14.91	12.868	
4,400.0	4,397.2	4,394.5	4,394.0	8.0	7.7	178.85	-9.8	-52.2	196.9	181.6	15.26	12.902	
4,500.0	4,497.1	4,494.4	4,493.9	8.2	7.9	178.87	-9.9	-53.3	201.9	186.3	15.61	12.934	
4,600.0	4,597.1	4,594.3	4,593.8	8.4	8.0	178.89	-10.1	-54.4	206.9	190.9	15.96	12.965	
4,700.0	4,697.0	4,694.2	4,693.7	8.6	8.2	178.90	-10.2	-55.5	211.9	195.6	16.31	12.995	
4,800.0	4,796.9	4,794.0	4,793.5	8.8	8.4	178.92	-10.4	-56.6	216.9	200.2	16.65	13.023	
4,900.0	4,896.8	4,893.9	4,893.4	9.0	8.6	178.93	-10.6	-57.7	221.9	204.9	17.00	13.050	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Becky 2B-7H-E168 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,996.8	4,993.8	4,993.3	9.2	8.7	178.94	-10.7	-58.8	226.9	209.5	17.35	13.076	
5,100.0	5,096.7	5,093.7	5,093.1	9.4	8.9	178.96	-10.9	-59.9	231.9	214.2	17.70	13.101	
5,200.0	5,196.6	5,193.5	5,193.0	9.5	9.1	178.97	-11.0	-61.0	236.9	218.8	18.05	13.125	
5,300.0	5,296.5	5,293.4	5,292.9	9.7	9.3	178.98	-11.2	-62.1	241.9	223.5	18.40	13.149	
5,400.0	5,396.5	5,393.3	5,392.7	9.9	9.4	178.99	-11.4	-63.2	246.9	228.2	18.75	13.171	
5,500.0	5,496.4	5,493.2	5,492.6	10.1	9.6	179.00	-11.5	-64.3	251.9	232.8	19.09	13.192	
5,600.0	5,596.3	5,593.0	5,592.5	10.3	9.8	179.02	-11.7	-65.4	256.9	237.5	19.44	13.213	
5,700.0	5,696.2	5,692.9	5,692.3	10.5	10.0	179.03	-11.8	-66.4	261.9	242.1	19.79	13.233	
5,800.0	5,796.2	5,792.8	5,792.2	10.7	10.1	179.04	-12.0	-67.5	266.9	246.8	20.14	13.252	
5,900.0	5,896.1	5,892.7	5,892.1	10.9	10.3	179.04	-12.2	-68.6	271.9	251.4	20.49	13.271	
6,000.0	5,996.0	5,992.5	5,991.9	11.0	10.5	179.05	-12.3	-69.7	276.9	256.1	20.84	13.289	
6,100.0	6,095.9	6,092.4	6,091.8	11.2	10.7	179.06	-12.5	-70.8	281.9	260.7	21.19	13.306	
6,200.0	6,195.9	6,192.3	6,191.7	11.4	10.8	179.07	-12.7	-71.9	286.9	265.4	21.54	13.323	
6,300.0	6,295.8	6,292.2	6,291.6	11.6	11.0	179.08	-12.8	-73.0	291.9	270.0	21.88	13.339	
6,400.0	6,395.7	6,392.0	6,391.4	11.8	11.2	179.09	-13.0	-74.1	296.9	274.7	22.23	13.355	
6,500.0	6,495.6	6,491.9	6,491.3	12.0	11.4	179.10	-13.1	-75.2	301.9	279.4	22.58	13.370	
6,600.0	6,595.6	6,591.8	6,591.2	12.2	11.5	179.10	-13.3	-76.3	306.9	284.0	22.93	13.385	
6,700.0	6,695.5	6,691.7	6,691.0	12.4	11.7	179.11	-13.5	-77.4	311.9	288.7	23.28	13.400	
6,800.0	6,795.4	6,791.5	6,790.9	12.5	11.9	179.12	-13.6	-78.5	316.9	293.3	23.63	13.414	
6,900.0	6,895.3	6,891.4	6,890.8	12.7	12.1	179.12	-13.8	-79.6	321.9	298.0	23.98	13.427	
7,000.0	6,995.2	6,991.3	6,990.6	12.9	12.2	179.13	-13.9	-80.6	326.9	302.6	24.33	13.440	
7,100.0	7,095.2	7,095.8	7,094.9	13.1	12.4	-179.81	-8.0	-81.9	331.4	306.7	24.68	13.426	
7,200.0	7,195.1	7,196.5	7,192.7	13.3	12.6	-175.84	15.2	-83.4	335.1	310.0	25.04	13.382	
7,251.5	7,246.5	7,244.5	7,237.6	13.4	12.7	-172.96	32.2	-84.2	337.7	312.5	25.23	13.386	
7,300.0	7,295.0	7,287.7	7,276.6	13.5	12.8	-108.92	50.7	-84.9	341.2	315.8	25.43	13.421	
7,350.0	7,344.5	7,331.0	7,314.2	13.6	12.9	-94.54	72.1	-85.7	345.8	320.2	25.65	13.482	
7,400.0	7,393.2	7,373.3	7,349.3	13.7	13.0	-87.50	95.7	-86.5	351.2	325.3	25.89	13.564	
7,450.0	7,440.8	7,414.6	7,381.8	13.8	13.2	-82.61	121.2	-87.3	357.3	331.1	26.15	13.661	
7,500.0	7,487.0	7,455.1	7,411.8	13.9	13.3	-78.70	148.4	-88.1	363.8	337.4	26.42	13.772	
7,550.0	7,531.2	7,494.9	7,439.3	14.1	13.5	-75.39	177.1	-88.9	370.6	344.0	26.68	13.890	
7,600.0	7,573.3	7,534.0	7,464.3	14.2	13.7	-72.51	207.1	-89.7	377.6	350.7	26.95	14.011	
7,650.0	7,612.9	7,572.5	7,486.9	14.4	14.0	-69.97	238.3	-90.5	384.6	357.4	27.21	14.134	
7,700.0	7,649.7	7,610.6	7,507.2	14.7	14.2	-67.72	270.5	-91.3	391.5	364.0	27.47	14.253	
7,750.0	7,683.4	7,650.0	7,525.8	14.9	14.5	-65.68	305.2	-92.1	398.1	370.4	27.73	14.356	
7,800.0	7,713.8	7,685.4	7,540.5	15.2	14.8	-63.99	337.4	-92.8	404.4	376.4	28.00	14.443	
7,850.0	7,740.6	7,722.3	7,553.7	15.6	15.1	-62.46	371.9	-93.5	410.1	381.9	28.28	14.501	
7,900.0	7,763.6	7,758.9	7,564.5	16.0	15.5	-61.15	406.9	-94.3	415.4	386.8	28.60	14.523	
7,950.0	7,782.7	7,800.0	7,573.9	16.4	15.9	-59.97	446.8	-95.1	420.0	391.0	28.99	14.489	
8,000.0	7,797.6	7,831.5	7,579.2	16.9	16.2	-59.13	477.8	-95.7	423.9	394.5	29.38	14.429	
8,050.0	7,808.4	7,867.4	7,583.2	17.4	16.6	-58.40	513.6	-96.3	427.1	397.2	29.86	14.303	
8,100.0	7,814.9	7,903.3	7,584.9	17.9	17.0	-57.86	549.4	-97.0	429.5	399.1	30.41	14.123	
8,149.4	7,817.0	7,949.0	7,585.0	18.5	17.6	-57.56	595.0	-97.8	430.7	399.5	31.16	13.820	
8,200.0	7,817.0	7,999.6	7,585.0	19.1	18.2	-57.56	645.6	-98.7	430.7	398.5	32.20	13.373	
8,300.0	7,817.0	8,099.6	7,585.0	20.3	19.5	-57.56	745.6	-100.4	430.7	396.3	34.37	12.529	
8,400.0	7,817.0	8,199.6	7,585.0	21.6	20.8	-57.56	845.6	-102.2	430.7	394.0	36.66	11.748	
8,500.0	7,817.0	8,299.6	7,585.0	23.0	22.2	-57.56	945.6	-103.9	430.7	391.6	39.03	11.034	
8,600.0	7,817.0	8,399.6	7,585.0	24.4	23.7	-57.56	1,045.5	-105.7	430.7	389.2	41.48	10.381	
8,700.0	7,817.0	8,499.6	7,585.0	25.9	25.2	-57.56	1,145.5	-107.4	430.7	386.7	44.00	9.788	
8,800.0	7,817.0	8,599.6	7,585.0	27.4	26.7	-57.56	1,245.5	-109.1	430.7	384.1	46.57	9.248	
8,900.0	7,817.0	8,699.6	7,585.0	28.9	28.3	-57.56	1,345.5	-110.9	430.7	381.5	49.18	8.756	
9,000.0	7,817.0	8,799.6	7,585.0	30.5	29.8	-57.56	1,445.5	-112.6	430.7	378.8	51.83	8.308	
9,100.0	7,817.0	8,899.6	7,585.0	32.0	31.4	-57.56	1,545.5	-114.4	430.7	376.1	54.52	7.899	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Becky 2B-7H-E168 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,200.0	7,817.0	8,999.6	7,585.0	33.6	33.0	-57.56	1,645.5	-116.1	430.7	373.4	57.23	7.525	
9,300.0	7,817.0	9,099.6	7,585.0	35.2	34.7	-57.56	1,745.4	-117.9	430.7	370.7	59.97	7.181	
9,400.0	7,817.0	9,199.6	7,585.0	36.9	36.3	-57.56	1,845.4	-119.6	430.7	367.9	62.73	6.866	
9,405.0	7,817.0	9,204.6	7,585.0	36.9	36.4	-57.56	1,850.4	-119.7	430.7	367.8	62.86	6.851	
9,500.0	7,817.0	9,294.4	7,585.0	38.5	37.9	-57.60	1,940.2	-121.9	431.2	365.7	65.46	6.587	
9,600.0	7,817.0	9,388.4	7,585.0	40.1	39.4	-57.75	2,034.1	-125.6	433.1	364.8	68.26	6.344	
9,700.0	7,817.0	9,482.2	7,585.0	41.8	41.0	-58.01	2,127.9	-130.9	436.4	365.2	71.16	6.132	
9,800.0	7,817.0	9,580.1	7,585.0	43.4	42.6	-58.36	2,225.5	-137.6	440.7	366.5	74.21	5.939	
9,900.0	7,817.0	9,680.0	7,585.0	45.1	44.3	-58.71	2,325.1	-144.6	445.2	367.9	77.32	5.758	
10,000.0	7,817.0	9,779.9	7,585.0	46.8	46.0	-59.06	2,424.8	-151.6	449.7	369.2	80.46	5.589	
10,100.0	7,817.0	9,879.7	7,585.0	48.5	47.7	-59.39	2,524.4	-158.5	454.2	370.6	83.62	5.432	
10,200.0	7,817.0	9,979.6	7,585.0	50.1	49.4	-59.73	2,624.0	-165.5	458.7	371.9	86.80	5.285	
10,300.0	7,817.0	10,079.5	7,585.0	51.8	51.1	-60.05	2,723.6	-172.5	463.2	373.2	89.99	5.147	
10,400.0	7,817.0	10,179.3	7,585.0	53.5	52.8	-60.37	2,823.2	-179.4	467.8	374.6	93.21	5.019	
10,500.0	7,817.0	10,279.2	7,585.0	55.2	54.5	-60.69	2,922.9	-186.4	472.3	375.9	96.44	4.898	
10,600.0	7,817.0	10,379.0	7,585.0	56.9	56.2	-61.00	3,022.5	-193.4	476.9	377.2	99.69	4.784	
10,700.0	7,817.0	10,478.9	7,585.0	58.6	57.9	-61.30	3,122.1	-200.3	481.5	378.5	102.96	4.677	
10,800.0	7,817.0	10,578.8	7,585.0	60.3	59.6	-61.59	3,221.7	-207.3	486.1	379.9	106.23	4.576	
10,900.0	7,817.0	10,678.6	7,585.0	62.0	61.3	-61.88	3,321.3	-214.3	490.7	381.2	109.53	4.480	
11,000.0	7,817.0	10,783.9	7,585.0	63.7	63.1	-62.16	3,426.4	-221.2	495.0	382.1	112.90	4.384	
11,100.0	7,817.0	10,892.2	7,585.0	65.5	65.0	-62.34	3,534.5	-226.3	497.7	381.4	116.25	4.281	
11,200.0	7,817.0	11,000.5	7,585.0	67.2	66.8	-62.40	3,642.8	-229.5	498.7	379.2	119.49	4.173	
11,300.0	7,817.0	11,108.9	7,585.0	68.9	68.7	-62.36	3,751.2	-230.6	498.0	375.4	122.63	4.061	
11,400.0	7,817.0	11,209.0	7,585.0	70.6	70.4	-62.27	3,851.2	-230.6	496.5	370.9	125.59	3.954	
11,500.0	7,817.0	11,308.9	7,585.0	72.3	72.2	-62.18	3,951.2	-230.7	495.0	366.5	128.54	3.851	
11,600.0	7,817.0	11,408.9	7,585.0	74.1	73.9	-62.09	4,051.2	-230.7	493.5	362.0	131.50	3.753	
11,700.0	7,817.0	11,508.9	7,585.0	75.8	75.6	-62.00	4,151.2	-230.8	492.0	357.6	134.44	3.660	
11,800.0	7,817.0	11,608.9	7,585.0	77.5	77.3	-61.90	4,251.2	-230.8	490.5	353.1	137.39	3.570	
11,900.0	7,817.0	11,708.9	7,585.0	79.2	79.1	-61.81	4,351.2	-230.9	489.0	348.7	140.33	3.485	
12,000.0	7,817.0	11,808.9	7,585.0	81.0	80.8	-61.71	4,451.2	-230.9	487.5	344.3	143.26	3.403	
12,100.0	7,817.0	11,908.9	7,585.0	82.7	82.5	-61.62	4,551.1	-231.0	486.0	339.9	146.19	3.325	
12,200.0	7,817.0	12,008.8	7,585.0	84.4	84.2	-61.52	4,651.1	-231.0	484.6	335.4	149.12	3.249	
12,300.0	7,817.0	12,108.8	7,585.0	86.1	86.0	-61.43	4,751.1	-231.1	483.1	331.0	152.04	3.177	
12,400.0	7,817.0	12,208.8	7,585.0	87.9	87.7	-61.33	4,851.1	-231.1	481.6	326.6	154.95	3.108	
12,500.0	7,817.0	12,308.8	7,585.0	89.6	89.4	-61.24	4,951.1	-231.2	480.1	322.2	157.86	3.041	
12,600.0	7,817.0	12,408.8	7,585.0	91.3	91.2	-61.14	5,051.1	-231.2	478.6	317.8	160.77	2.977	
12,700.0	7,817.0	12,508.8	7,585.0	93.1	92.9	-61.04	5,151.1	-231.3	477.1	313.4	163.67	2.915	
12,800.0	7,817.0	12,608.7	7,585.0	94.8	94.6	-60.94	5,251.0	-231.3	475.6	309.1	166.56	2.856	
12,900.0	7,817.0	12,708.7	7,585.0	96.5	96.4	-60.84	5,351.0	-231.4	474.1	304.7	169.45	2.798	
13,000.0	7,817.0	12,808.7	7,585.0	98.3	98.1	-60.74	5,451.0	-231.4	472.7	300.3	172.33	2.743	
13,100.0	7,817.0	12,908.7	7,585.0	100.0	99.9	-60.64	5,551.0	-231.5	471.2	296.0	175.20	2.689	
13,200.0	7,817.0	13,008.7	7,585.0	101.8	101.6	-60.54	5,651.0	-231.5	469.7	291.6	178.07	2.638	
13,300.0	7,817.0	13,108.7	7,585.0	103.5	103.3	-60.44	5,751.0	-231.6	468.2	287.3	180.93	2.588	
13,400.0	7,817.0	13,208.7	7,585.0	105.2	105.1	-60.33	5,851.0	-231.6	466.8	283.0	183.78	2.540	
13,500.0	7,817.0	13,308.6	7,585.0	107.0	106.8	-60.23	5,950.9	-231.7	465.3	278.6	186.63	2.493	
13,600.0	7,817.0	13,408.6	7,585.0	108.7	108.5	-60.13	6,050.9	-231.7	463.8	274.3	189.47	2.448	
13,700.0	7,817.0	13,508.6	7,585.0	110.5	110.3	-60.02	6,150.9	-231.8	462.3	270.0	192.30	2.404	
13,800.0	7,817.0	13,608.6	7,585.0	112.2	112.0	-59.92	6,250.9	-231.8	460.9	265.7	195.13	2.362	
13,900.0	7,817.0	13,708.6	7,585.0	113.9	113.8	-59.81	6,350.9	-231.8	459.4	261.5	197.95	2.321	
14,000.0	7,817.0	13,808.6	7,585.0	115.7	115.5	-59.70	6,450.9	-231.9	457.9	257.2	200.76	2.281	
14,100.0	7,817.0	13,908.6	7,585.0	117.4	117.3	-59.59	6,550.9	-231.9	456.5	252.9	203.56	2.242	
14,149.4	7,817.0	13,958.0	7,585.0	118.3	118.1	-59.54	6,600.3	-232.0	455.7	250.8	204.94	2.224	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Becky 2B-7H-E168 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
14,200.0	7,817.0	14,008.5	7,585.0	119.2	119.0	-59.47	6,650.8	-232.0	454.9	248.6	206.29	2.205	
14,300.0	7,817.0	14,108.5	7,585.0	120.9	120.7	-59.26	6,750.8	-232.0	452.2	243.4	208.78	2.166	
14,400.0	7,817.0	14,208.4	7,585.0	122.6	122.5	-58.95	6,850.7	-232.1	448.3	237.3	211.01	2.125	
14,500.0	7,817.0	14,308.2	7,585.0	124.4	124.2	-58.54	6,950.5	-232.1	443.3	230.3	212.95	2.082	
14,545.4	7,817.0	14,353.5	7,585.0	125.2	125.0	-58.31	6,995.8	-232.2	440.6	226.9	213.72	2.062	
14,600.0	7,817.0	14,408.0	7,585.0	126.1	126.0	-58.04	7,050.3	-232.2	437.3	222.5	214.74	2.036	
14,704.3	7,817.0	14,508.5	7,585.0	127.9	127.7	-57.53	7,150.8	-232.2	430.9	214.3	216.61	1.989	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Becky 2D-7H-E168 - Hz - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	37.54	7.3	5.6	9.2				
100.0	100.0	100.0	100.0	0.1	0.1	37.54	7.3	5.6	9.2	8.9	0.26	35.094	
200.0	200.0	200.0	200.0	0.3	0.3	37.54	7.3	5.6	9.2	8.6	0.61	15.040	
300.0	300.0	300.0	300.0	0.5	0.5	37.54	7.3	5.6	9.2	8.2	0.96	9.571	
400.0	400.0	400.0	400.0	0.7	0.7	37.54	7.3	5.6	9.2	7.9	1.31	7.019	
500.0	500.0	500.0	500.0	0.8	0.8	37.54	7.3	5.6	9.2	7.5	1.66	5.541	CC, ES
600.0	600.0	599.9	599.9	1.0	1.0	41.62	7.3	6.5	9.7	7.7	2.01	4.852	
700.0	700.0	699.8	699.7	1.2	1.2	-34.76	7.3	9.1	10.9	8.5	2.36	4.625	
800.0	800.0	799.6	799.4	1.4	1.4	-28.14	7.2	13.4	12.1	9.4	2.71	4.465	
823.5	823.4	823.0	822.8	1.4	1.4	-26.66	7.2	14.7	12.4	9.6	2.79	4.435	
900.0	899.9	899.4	899.0	1.5	1.6	-21.20	7.2	19.5	13.8	10.7	3.06	4.510	
1,000.0	999.8	999.2	998.6	1.7	1.8	-14.11	7.1	27.0	16.9	13.5	3.41	4.954	
1,100.0	1,099.7	1,099.1	1,098.3	1.9	2.0	-9.18	7.1	34.5	20.3	16.5	3.76	5.389	
1,200.0	1,199.7	1,199.1	1,197.9	2.1	2.2	-5.67	7.0	42.1	23.7	19.6	4.11	5.777	
1,300.0	1,299.6	1,299.0	1,297.6	2.3	2.4	-3.06	7.0	49.6	27.3	22.8	4.45	6.120	
1,400.0	1,399.5	1,398.9	1,397.2	2.5	2.6	-1.06	6.9	57.2	30.8	26.0	4.80	6.422	
1,500.0	1,499.4	1,498.9	1,496.8	2.6	2.8	0.53	6.9	64.7	34.4	29.3	5.15	6.688	
1,600.0	1,599.4	1,598.8	1,596.5	2.8	3.0	1.81	6.8	72.3	38.1	32.6	5.50	6.924	
1,700.0	1,699.3	1,698.7	1,696.1	3.0	3.2	2.88	6.8	79.8	41.7	35.9	5.85	7.135	
1,800.0	1,799.2	1,798.7	1,795.8	3.2	3.4	3.77	6.7	87.4	45.4	39.2	6.20	7.324	
1,900.0	1,899.1	1,898.6	1,895.4	3.4	3.7	4.52	6.6	94.9	49.0	42.5	6.54	7.493	
2,000.0	1,999.0	1,998.5	1,995.1	3.6	3.9	5.17	6.6	102.5	52.7	45.8	6.89	7.647	
2,100.0	2,099.0	2,098.5	2,094.7	3.8	4.1	5.74	6.5	110.0	56.4	49.2	7.24	7.786	
2,200.0	2,198.9	2,198.4	2,194.4	3.9	4.3	6.24	6.5	117.6	60.1	52.5	7.59	7.913	
2,300.0	2,298.8	2,298.3	2,294.0	4.1	4.5	6.68	6.4	125.1	63.8	55.8	7.94	8.030	
2,400.0	2,398.7	2,398.2	2,393.6	4.3	4.7	7.07	6.4	132.7	67.5	59.2	8.29	8.137	
2,500.0	2,498.7	2,498.2	2,493.3	4.5	4.9	7.42	6.3	140.2	71.2	62.5	8.64	8.235	
2,600.0	2,598.6	2,598.1	2,592.9	4.7	5.2	7.74	6.3	147.8	74.9	65.9	8.99	8.326	
2,700.0	2,698.5	2,698.0	2,692.6	4.9	5.4	8.02	6.2	155.4	78.6	69.2	9.34	8.410	
2,800.0	2,798.4	2,798.0	2,792.2	5.1	5.6	8.29	6.2	162.9	82.3	72.6	9.69	8.489	
2,900.0	2,898.4	2,897.9	2,891.9	5.2	5.8	8.52	6.1	170.5	86.0	75.9	10.04	8.562	
3,000.0	2,998.3	2,997.8	2,991.5	5.4	6.0	8.74	6.0	178.0	89.7	79.3	10.39	8.630	
3,100.0	3,098.2	3,097.8	3,091.2	5.6	6.3	8.94	6.0	185.6	93.4	82.6	10.74	8.694	
3,200.0	3,198.1	3,197.7	3,190.8	5.8	6.5	9.13	5.9	193.1	97.1	86.0	11.09	8.754	
3,300.0	3,298.1	3,297.6	3,290.5	6.0	6.7	9.30	5.9	200.7	100.8	89.3	11.44	8.810	
3,400.0	3,398.0	3,397.6	3,390.1	6.2	6.9	9.46	5.8	208.2	104.5	92.7	11.79	8.863	
3,500.0	3,497.9	3,497.5	3,489.7	6.4	7.1	9.61	5.8	215.8	108.2	96.1	12.14	8.913	
3,600.0	3,597.8	3,597.4	3,589.4	6.6	7.3	9.75	5.7	223.3	111.9	99.4	12.49	8.960	
3,700.0	3,697.8	3,697.3	3,689.0	6.7	7.6	9.88	5.7	230.9	115.6	102.8	12.84	9.005	
3,800.0	3,797.7	3,797.3	3,788.7	6.9	7.8	10.00	5.6	238.4	119.3	106.1	13.19	9.047	
3,900.0	3,897.6	3,897.2	3,888.3	7.1	8.0	10.12	5.6	246.0	123.0	109.5	13.54	9.087	
4,000.0	3,997.5	3,997.1	3,988.0	7.3	8.2	10.23	5.5	253.5	126.8	112.9	13.89	9.126	
4,100.0	4,097.5	4,097.1	4,087.6	7.5	8.4	10.33	5.4	261.1	130.5	116.2	14.24	9.162	
4,200.0	4,197.4	4,197.0	4,187.3	7.7	8.6	10.42	5.4	268.6	134.2	119.6	14.59	9.196	
4,300.0	4,297.3	4,296.9	4,286.9	7.9	8.9	10.51	5.3	276.2	137.9	123.0	14.94	9.229	
4,400.0	4,397.2	4,396.9	4,386.5	8.0	9.1	10.60	5.3	283.7	141.6	126.3	15.29	9.261	
4,500.0	4,497.1	4,496.8	4,486.2	8.2	9.3	10.68	5.2	291.3	145.3	129.7	15.64	9.291	
4,600.0	4,597.1	4,596.7	4,585.8	8.4	9.5	10.76	5.2	298.9	149.0	133.0	15.99	9.320	
4,700.0	4,697.0	4,696.7	4,685.5	8.6	9.7	10.83	5.1	306.4	152.7	136.4	16.34	9.347	
4,800.0	4,796.9	4,796.6	4,785.1	8.8	10.0	10.91	5.1	314.0	156.5	139.8	16.69	9.374	
4,900.0	4,896.8	4,896.5	4,884.8	9.0	10.2	10.97	5.0	321.5	160.2	143.1	17.04	9.399	
5,000.0	4,996.8	4,996.4	4,984.4	9.2	10.4	11.04	5.0	329.1	163.9	146.5	17.39	9.423	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Becky 2D-7H-E168 - Hz - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,096.7	5,096.4	5,084.1	9.4	10.6	11.10	4.9	336.6	167.6	149.9	17.74	9.447	
5,200.0	5,196.6	5,196.3	5,183.7	9.5	10.8	11.16	4.9	344.2	171.3	153.2	18.09	9.469	
5,300.0	5,296.5	5,296.2	5,283.3	9.7	11.1	11.21	4.8	351.7	175.0	156.6	18.44	9.491	
5,400.0	5,396.5	5,396.2	5,383.0	9.9	11.3	11.27	4.7	359.3	178.8	160.0	18.79	9.511	
5,500.0	5,496.4	5,496.1	5,482.6	10.1	11.5	11.32	4.7	366.8	182.5	163.3	19.14	9.531	
5,600.0	5,596.3	5,596.0	5,582.3	10.3	11.7	11.37	4.6	374.4	186.2	166.7	19.49	9.551	
5,700.0	5,696.2	5,696.0	5,681.9	10.5	11.9	11.42	4.6	381.9	189.9	170.1	19.84	9.569	
5,800.0	5,796.2	5,795.9	5,781.6	10.7	12.1	11.46	4.5	389.5	193.6	173.4	20.20	9.587	
5,900.0	5,896.1	5,895.8	5,881.2	10.9	12.4	11.51	4.5	397.0	197.3	176.8	20.55	9.605	
6,000.0	5,996.0	5,995.8	5,980.9	11.0	12.6	11.55	4.4	404.6	201.1	180.2	20.90	9.622	
6,100.0	6,095.9	6,095.7	6,080.5	11.2	12.8	11.59	4.4	412.1	204.8	183.5	21.25	9.638	
6,200.0	6,195.9	6,195.6	6,180.2	11.4	13.0	11.63	4.3	419.7	208.5	186.9	21.60	9.654	
6,300.0	6,295.8	6,295.6	6,279.8	11.6	13.2	11.67	4.3	427.3	212.2	190.3	21.95	9.669	
6,400.0	6,395.7	6,395.5	6,379.4	11.8	13.5	11.70	4.2	434.8	215.9	193.6	22.30	9.684	
6,500.0	6,495.6	6,495.4	6,479.1	12.0	13.7	11.74	4.1	442.4	219.6	197.0	22.65	9.698	
6,600.0	6,595.6	6,595.3	6,578.7	12.2	13.9	11.77	4.1	449.9	223.4	200.4	23.00	9.712	
6,700.0	6,695.5	6,695.3	6,678.4	12.4	14.1	11.81	4.0	457.5	227.1	203.7	23.35	9.725	
6,800.0	6,795.4	6,795.2	6,778.0	12.5	14.3	11.84	4.0	465.0	230.8	207.1	23.70	9.738	
6,900.0	6,895.3	6,895.1	6,877.7	12.7	14.5	11.87	3.9	472.6	234.5	210.5	24.05	9.751	
7,000.0	6,995.2	6,995.1	6,977.3	12.9	14.8	11.90	3.9	480.1	238.2	213.8	24.40	9.763	
7,100.0	7,095.2	7,097.2	7,079.0	13.1	15.0	11.04	7.6	487.9	241.6	216.9	24.75	9.764	
7,200.0	7,195.1	7,196.7	7,176.1	13.3	15.2	6.43	27.4	495.4	244.7	219.6	25.06	9.762	
7,251.5	7,246.5	7,244.7	7,221.3	13.4	15.3	2.88	42.9	499.0	247.2	222.0	25.22	9.802	
7,300.0	7,295.0	7,288.0	7,260.9	13.5	15.4	59.91	60.1	502.1	250.9	225.5	25.38	9.886	
7,350.0	7,344.5	7,331.5	7,299.3	13.6	15.6	67.34	80.4	505.2	255.9	230.3	25.55	10.016	
7,400.0	7,393.2	7,374.1	7,335.2	13.7	15.7	67.79	103.0	508.1	261.8	236.1	25.70	10.189	
7,450.0	7,440.8	7,415.7	7,368.7	13.8	15.8	66.48	127.7	510.9	268.6	242.7	25.81	10.404	
7,500.0	7,487.0	7,456.6	7,399.7	13.9	16.0	64.60	154.2	513.5	275.9	250.0	25.88	10.657	
7,550.0	7,531.2	7,500.0	7,430.5	14.1	16.2	62.41	184.7	516.0	283.5	257.6	25.91	10.943	
7,600.0	7,573.3	7,536.5	7,454.5	14.2	16.4	60.56	212.0	518.1	291.4	265.5	25.89	11.251	
7,650.0	7,612.9	7,575.5	7,478.2	14.4	16.6	58.67	243.0	520.2	299.2	273.4	25.85	11.576	
7,700.0	7,649.7	7,614.1	7,499.6	14.7	16.8	56.92	275.1	522.1	306.9	281.1	25.79	11.902	
7,750.0	7,683.4	7,650.0	7,517.4	14.9	17.1	55.40	306.1	523.7	314.3	288.6	25.73	12.215	
7,800.0	7,713.8	7,690.1	7,535.0	15.2	17.4	53.93	342.1	525.3	321.4	295.6	25.74	12.487	
7,850.0	7,740.6	7,727.6	7,549.2	15.6	17.7	52.70	376.8	526.7	327.9	302.1	25.81	12.704	
7,900.0	7,763.6	7,764.9	7,561.0	16.0	18.0	51.64	412.1	527.9	333.9	307.9	25.99	12.845	
7,950.0	7,782.7	7,800.0	7,570.0	16.4	18.3	50.78	446.0	528.9	339.2	312.9	26.30	12.896	
8,000.0	7,797.6	7,838.7	7,577.5	16.9	18.6	50.04	484.0	529.8	343.8	317.0	26.79	12.832	
8,050.0	7,808.4	7,875.4	7,582.3	17.4	19.0	49.48	520.4	530.5	347.7	320.2	27.45	12.665	
8,100.0	7,814.9	7,912.0	7,584.7	17.9	19.4	49.07	556.9	531.0	350.8	322.5	28.29	12.398	
8,149.4	7,817.0	7,954.2	7,585.0	18.5	19.8	48.87	599.1	531.4	352.8	323.4	29.37	12.013	
8,200.0	7,817.0	8,004.7	7,585.0	19.1	20.4	49.01	649.6	531.8	353.8	323.5	30.32	11.667	
8,300.0	7,817.0	8,104.7	7,585.0	20.3	21.5	49.29	749.6	532.7	355.8	323.4	32.32	11.008	
8,400.0	7,817.0	8,204.7	7,585.0	21.6	22.8	49.56	849.5	533.6	357.8	323.3	34.43	10.390	
8,500.0	7,817.0	8,304.6	7,585.0	23.0	24.1	49.83	949.5	534.4	359.8	323.1	36.64	9.818	
8,600.0	7,817.0	8,404.6	7,585.0	24.4	25.4	50.10	1,049.5	535.3	361.8	322.8	38.94	9.289	
8,700.0	7,817.0	8,504.6	7,585.0	25.9	26.8	50.36	1,149.4	536.2	363.8	322.5	41.32	8.804	
8,800.0	7,817.0	8,604.5	7,585.0	27.4	28.3	50.63	1,249.4	537.1	365.8	322.0	43.76	8.359	
8,900.0	7,817.0	8,704.5	7,585.0	28.9	29.8	50.89	1,349.3	537.9	367.8	321.6	46.26	7.951	
9,000.0	7,817.0	8,804.5	7,585.0	30.5	31.3	51.14	1,449.3	538.8	369.9	321.0	48.82	7.576	
9,100.0	7,817.0	8,904.4	7,585.0	32.0	32.8	51.39	1,549.3	539.7	371.9	320.5	51.42	7.233	
9,200.0	7,817.0	9,004.4	7,585.0	33.6	34.3	51.64	1,649.2	540.5	373.9	319.9	54.07	6.917	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Becky 2D-7H-E168 - Hz - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,300.0	7,817.0	9,104.4	7,585.0	35.2	35.9	51.89	1,749.2	541.4	376.0	319.3	56.75	6.626	
9,400.0	7,817.0	9,204.3	7,585.0	36.9	37.5	52.14	1,849.2	542.3	378.1	318.6	59.47	6.357	
9,500.0	7,817.0	9,304.3	7,585.0	38.5	39.1	52.38	1,949.1	543.2	380.1	317.9	62.22	6.109	
9,600.0	7,817.0	9,404.3	7,585.0	40.1	40.7	52.62	2,049.1	544.0	382.2	317.2	65.01	5.879	
9,700.0	7,817.0	9,504.2	7,585.0	41.8	42.3	52.86	2,149.0	544.9	384.3	316.5	67.82	5.666	
9,800.0	7,817.0	9,604.2	7,585.0	43.4	44.0	53.09	2,249.0	545.8	386.4	315.7	70.66	5.468	
9,900.0	7,817.0	9,704.2	7,585.0	45.1	45.6	53.32	2,349.0	546.7	388.5	315.0	73.53	5.284	
10,000.0	7,817.0	9,804.1	7,585.0	46.8	47.3	53.55	2,448.9	547.5	390.6	314.2	76.41	5.111	
10,100.0	7,817.0	9,904.1	7,585.0	48.5	48.9	53.78	2,548.9	548.4	392.7	313.4	79.32	4.951	
10,200.0	7,817.0	10,004.1	7,585.0	50.1	50.6	54.00	2,648.9	549.3	394.8	312.6	82.25	4.800	
10,300.0	7,817.0	10,104.0	7,585.0	51.8	52.3	54.22	2,748.8	550.1	396.9	311.7	85.21	4.659	
10,400.0	7,817.0	10,204.0	7,585.0	53.5	53.9	54.44	2,848.8	551.0	399.1	310.9	88.17	4.526	
10,500.0	7,817.0	10,304.0	7,585.0	55.2	55.6	54.66	2,948.7	551.9	401.2	310.0	91.16	4.401	
10,600.0	7,817.0	10,403.9	7,585.0	56.9	57.3	54.88	3,048.7	552.8	403.3	309.2	94.17	4.283	
10,700.0	7,817.0	10,503.9	7,585.0	58.6	59.0	55.09	3,148.7	553.6	405.5	308.3	97.19	4.172	
10,800.0	7,817.0	10,603.9	7,585.0	60.3	60.7	55.30	3,248.6	554.5	407.6	307.4	100.22	4.067	
10,900.0	7,817.0	10,703.8	7,585.0	62.0	62.4	55.51	3,348.6	555.4	409.8	306.5	103.28	3.968	
11,000.0	7,817.0	10,803.8	7,585.0	63.7	64.1	55.71	3,448.5	556.2	411.9	305.6	106.34	3.874	
11,100.0	7,817.0	10,903.7	7,585.0	65.5	65.8	55.92	3,548.5	557.1	414.1	304.7	109.42	3.784	
11,200.0	7,817.0	11,003.7	7,585.0	67.2	67.5	56.12	3,648.5	558.0	416.3	303.8	112.51	3.700	
11,300.0	7,817.0	11,105.1	7,585.0	68.9	69.2	56.32	3,749.9	558.8	418.4	302.8	115.64	3.618	
11,400.0	7,817.0	11,211.6	7,585.0	70.6	71.0	56.42	3,856.3	558.3	419.5	300.7	118.73	3.533	
11,500.0	7,817.0	11,318.1	7,585.0	72.3	72.8	56.37	3,962.8	555.9	419.0	297.3	121.64	3.444	
11,600.0	7,817.0	11,424.5	7,585.0	74.1	74.7	56.18	4,069.1	551.4	417.0	292.6	124.35	3.353	
11,700.0	7,817.0	11,530.8	7,585.0	75.8	76.5	55.82	4,175.2	545.0	413.4	286.6	126.82	3.260	
11,800.0	7,817.0	11,636.9	7,585.0	77.5	78.3	55.31	4,281.0	536.6	408.3	279.3	129.04	3.164	
11,900.0	7,817.0	11,742.7	7,585.0	79.2	80.0	54.62	4,386.3	526.3	401.8	270.8	130.94	3.068	
12,000.0	7,817.0	11,848.2	7,585.0	81.0	81.8	53.75	4,491.1	514.1	393.8	261.3	132.48	2.972	
12,100.0	7,817.0	11,952.1	7,585.0	82.7	83.6	52.68	4,594.0	500.3	384.5	250.9	133.59	2.878	
12,200.0	7,817.0	12,051.3	7,585.0	84.4	85.3	51.55	4,692.3	486.5	374.8	240.4	134.43	2.788	
12,300.0	7,817.0	12,150.6	7,585.0	86.1	86.9	50.37	4,790.6	472.6	365.3	230.3	135.02	2.706	
12,400.0	7,817.0	12,249.0	7,585.0	87.9	88.6	49.13	4,888.1	459.0	356.0	220.6	135.38	2.630	
12,500.0	7,817.0	12,344.0	7,585.0	89.6	90.2	48.00	4,982.3	446.8	347.7	212.0	135.74	2.562	
12,600.0	7,817.0	12,439.3	7,585.0	91.3	91.9	46.99	5,077.0	436.2	340.8	204.5	136.23	2.501	
12,700.0	7,817.0	12,534.9	7,585.0	93.1	93.5	46.12	5,172.2	427.1	335.1	198.2	136.91	2.448	
12,800.0	7,817.0	12,630.8	7,585.0	94.8	95.2	45.42	5,267.7	419.6	330.8	192.9	137.86	2.399	
12,900.0	7,817.0	12,726.7	7,585.0	96.5	96.8	44.90	5,363.5	413.7	327.6	188.5	139.14	2.355	
13,000.0	7,817.0	12,822.9	7,585.0	98.3	98.5	44.57	5,459.5	409.4	325.7	184.9	140.80	2.313	
13,100.0	7,817.0	12,919.0	7,585.0	100.0	100.1	44.45	5,555.7	406.7	325.0	182.1	142.91	2.274	
13,113.0	7,817.0	12,931.5	7,585.0	100.2	100.4	44.44	5,568.2	406.5	325.0	181.7	143.22	2.269	
13,200.0	7,817.0	13,015.2	7,585.0	101.8	101.8	44.52	5,651.8	405.6	325.4	179.9	145.49	2.237	
13,300.0	7,817.0	13,111.3	7,585.0	103.5	103.5	44.80	5,748.0	406.2	327.0	178.5	148.56	2.201	
13,400.0	7,817.0	13,207.3	7,585.0	105.2	105.1	45.27	5,844.0	408.3	329.8	177.7	152.12	2.168	
13,500.0	7,817.0	13,305.9	7,585.0	107.0	106.9	45.90	5,942.4	411.8	333.6	177.5	156.13	2.137	
13,600.0	7,817.0	13,405.7	7,585.0	108.7	108.6	46.53	6,042.2	415.4	337.5	177.3	160.20	2.107	
13,700.0	7,817.0	13,505.6	7,585.0	110.5	110.3	47.15	6,142.0	419.0	341.4	177.1	164.28	2.078	
13,800.0	7,817.0	13,605.5	7,585.0	112.2	112.1	47.76	6,241.8	422.7	345.4	177.0	168.35	2.051	
13,900.0	7,817.0	13,705.3	7,585.0	113.9	113.8	48.35	6,341.6	426.3	349.4	176.9	172.43	2.026	
14,000.0	7,817.0	13,805.2	7,585.0	115.7	115.6	48.93	6,441.4	429.9	353.4	176.9	176.50	2.002	
14,100.0	7,817.0	13,905.0	7,585.0	117.4	117.3	49.49	6,541.2	433.5	357.5	176.9	180.57	1.980	
14,149.4	7,817.0	13,954.4	7,585.0	118.3	118.2	49.77	6,590.5	435.3	359.5	176.9	182.58	1.969	
14,200.0	7,817.0	14,004.9	7,585.0	119.2	119.0	50.05	6,641.0	437.2	361.7	177.1	184.58	1.960	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Becky 2D-7H-E168 - Hz - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
14,300.0	7,817.0	14,104.6	7,585.0	120.9	120.8	50.70	6,740.7	440.8	366.9	178.2	188.75	1.944	
14,400.0	7,817.0	14,204.3	7,585.0	122.6	122.5	51.46	6,840.3	444.4	373.3	180.1	193.18	1.932	
14,500.0	7,817.0	14,303.8	7,585.0	124.4	124.3	52.32	6,939.7	448.0	380.8	183.0	197.83	1.925	
14,545.4	7,817.0	14,349.0	7,585.0	125.2	125.1	52.74	6,984.8	449.6	384.6	184.6	200.01	1.923	
14,600.0	7,817.0	14,403.3	7,585.0	126.1	126.0	53.27	7,039.1	451.6	389.4	186.6	202.85	1.920	
14,704.3	7,817.0	14,506.9	7,585.0	127.9	127.8	54.24	7,142.7	455.4	398.6	190.4	208.19	1.914	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Becky 2E-7H-E168 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	22.4	22.4				
100.0	100.0	100.0	100.0	0.1	0.1	90.00	0.0	22.4	22.4	22.1	0.26	85.525	
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	22.4	22.4	21.8	0.61	36.654	
300.0	300.0	300.0	300.0	0.5	0.5	90.00	0.0	22.4	22.4	21.4	0.96	23.325	
400.0	400.0	400.0	400.0	0.7	0.7	90.00	0.0	22.4	22.4	21.1	1.31	17.105	CC, ES
500.0	500.0	499.6	499.6	0.8	0.8	90.02	0.0	23.3	23.3	21.6	1.66	14.029	
600.0	600.0	599.1	599.1	1.0	1.0	90.06	0.0	25.9	25.9	23.9	2.01	12.871	
700.0	700.0	698.6	698.5	1.2	1.2	6.64	-0.1	30.2	29.3	27.0	2.35	12.467	
800.0	800.0	798.0	797.7	1.4	1.4	7.19	-0.1	36.2	32.8	30.1	2.70	12.150	
823.5	823.4	821.3	820.9	1.4	1.4	7.35	-0.1	37.9	33.6	30.9	2.78	12.088	
900.0	899.9	897.3	896.7	1.5	1.6	7.85	-0.2	44.0	36.8	33.8	3.05	12.073	SF
1,000.0	999.8	996.5	995.4	1.7	1.8	8.32	-0.3	53.4	42.5	39.1	3.40	12.507	
1,100.0	1,099.7	1,095.4	1,093.7	1.9	2.1	8.62	-0.3	64.5	49.9	46.2	3.75	13.323	
1,200.0	1,199.7	1,194.1	1,191.6	2.1	2.3	8.78	-0.4	77.3	59.0	54.9	4.09	14.420	
1,300.0	1,299.6	1,293.6	1,290.2	2.3	2.6	8.88	-0.6	91.0	68.9	64.4	4.44	15.508	
1,400.0	1,399.5	1,393.1	1,388.7	2.5	2.9	8.95	-0.7	104.6	78.7	74.0	4.79	16.438	
1,500.0	1,499.4	1,492.7	1,487.3	2.6	3.1	9.01	-0.8	118.2	88.6	83.5	5.14	17.242	
1,600.0	1,599.4	1,592.2	1,585.9	2.8	3.4	9.05	-0.9	131.9	98.5	93.0	5.49	17.944	
1,700.0	1,699.3	1,691.7	1,684.4	3.0	3.7	9.09	-1.0	145.5	108.3	102.5	5.84	18.561	
1,800.0	1,799.2	1,791.2	1,783.0	3.2	4.0	9.12	-1.1	159.1	118.2	112.0	6.19	19.110	
1,900.0	1,899.1	1,890.7	1,881.6	3.4	4.3	9.14	-1.2	172.8	128.1	121.5	6.53	19.599	
2,000.0	1,999.0	1,990.2	1,980.2	3.6	4.6	9.17	-1.3	186.4	137.9	131.1	6.88	20.039	
2,100.0	2,099.0	2,089.7	2,078.7	3.8	4.8	9.19	-1.4	200.0	147.8	140.6	7.23	20.437	
2,200.0	2,198.9	2,189.2	2,177.3	3.9	5.1	9.20	-1.5	213.7	157.7	150.1	7.58	20.798	
2,300.0	2,298.8	2,288.7	2,275.9	4.1	5.4	9.22	-1.7	227.3	167.5	159.6	7.93	21.127	
2,400.0	2,398.7	2,388.3	2,374.5	4.3	5.7	9.23	-1.8	240.9	177.4	169.1	8.28	21.429	
2,500.0	2,498.7	2,487.8	2,473.0	4.5	6.0	9.24	-1.9	254.6	187.3	178.6	8.63	21.706	
2,600.0	2,598.6	2,587.3	2,571.6	4.7	6.3	9.25	-2.0	268.2	197.1	188.2	8.98	21.961	
2,700.0	2,698.5	2,686.8	2,670.2	4.9	6.6	9.26	-2.1	281.8	207.0	197.7	9.33	22.198	
2,800.0	2,798.4	2,786.3	2,768.8	5.1	6.9	9.27	-2.2	295.5	216.9	207.2	9.67	22.417	
2,900.0	2,898.4	2,885.8	2,867.3	5.2	7.2	9.28	-2.3	309.1	226.7	216.7	10.02	22.621	
3,000.0	2,998.3	2,985.3	2,965.9	5.4	7.5	9.29	-2.4	322.7	236.6	226.2	10.37	22.812	
3,100.0	3,098.2	3,084.8	3,064.5	5.6	7.8	9.29	-2.5	336.4	246.5	235.7	10.72	22.990	
3,200.0	3,198.1	3,184.4	3,163.1	5.8	8.1	9.30	-2.6	350.0	256.3	245.3	11.07	23.157	
3,300.0	3,298.1	3,283.9	3,261.6	6.0	8.4	9.30	-2.8	363.6	266.2	254.8	11.42	23.313	
3,400.0	3,398.0	3,383.4	3,360.2	6.2	8.7	9.31	-2.9	377.3	276.1	264.3	11.77	23.461	
3,500.0	3,497.9	3,482.9	3,458.8	6.4	8.9	9.32	-3.0	390.9	285.9	273.8	12.12	23.600	
3,600.0	3,597.8	3,582.4	3,557.3	6.6	9.2	9.32	-3.1	404.5	295.8	283.3	12.46	23.731	
3,700.0	3,697.8	3,681.9	3,655.9	6.7	9.5	9.32	-3.2	418.2	305.7	292.8	12.81	23.855	
3,800.0	3,797.7	3,781.4	3,754.5	6.9	9.8	9.33	-3.3	431.8	315.5	302.4	13.16	23.972	
3,900.0	3,897.6	3,880.9	3,853.1	7.1	10.1	9.33	-3.4	445.4	325.4	311.9	13.51	24.083	
4,000.0	3,997.5	3,980.5	3,951.6	7.3	10.4	9.34	-3.5	459.1	335.2	321.4	13.86	24.189	
4,100.0	4,097.5	4,080.0	4,050.2	7.5	10.7	9.34	-3.6	472.7	345.1	330.9	14.21	24.290	
4,200.0	4,197.4	4,179.5	4,148.8	7.7	11.0	9.34	-3.7	486.3	355.0	340.4	14.56	24.385	
4,300.0	4,297.3	4,279.0	4,247.4	7.9	11.3	9.35	-3.8	500.0	364.8	349.9	14.91	24.476	
4,400.0	4,397.2	4,378.5	4,345.9	8.0	11.6	9.35	-4.0	513.6	374.7	359.5	15.25	24.564	
4,500.0	4,497.1	4,478.0	4,444.5	8.2	11.9	9.35	-4.1	527.2	384.6	369.0	15.60	24.647	
4,600.0	4,597.1	4,577.5	4,543.1	8.4	12.2	9.35	-4.2	540.9	394.4	378.5	15.95	24.726	
4,700.0	4,697.0	4,677.0	4,641.7	8.6	12.5	9.36	-4.3	554.5	404.3	388.0	16.30	24.802	
4,800.0	4,796.9	4,776.6	4,740.2	8.8	12.8	9.36	-4.4	568.1	414.2	397.5	16.65	24.875	
4,900.0	4,896.8	4,876.1	4,838.8	9.0	13.1	9.36	-4.5	581.8	424.0	407.0	17.00	24.945	
5,000.0	4,996.8	4,975.6	4,937.4	9.2	13.4	9.36	-4.6	595.4	433.9	416.6	17.35	25.012	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Becky 2E-7H-E168 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,096.7	5,075.1	5,036.0	9.4	13.7	9.36	-4.7	609.0	443.8	426.1	17.70	25.077	
5,200.0	5,196.6	5,174.6	5,134.5	9.5	14.0	9.37	-4.8	622.7	453.6	435.6	18.05	25.139	
5,300.0	5,296.5	5,274.1	5,233.1	9.7	14.3	9.37	-4.9	636.3	463.5	445.1	18.39	25.199	
5,400.0	5,396.5	5,373.6	5,331.7	9.9	14.6	9.37	-5.1	649.9	473.4	454.6	18.74	25.256	
5,500.0	5,496.4	5,473.1	5,430.2	10.1	14.9	9.37	-5.2	663.6	483.2	464.1	19.09	25.311	
5,600.0	5,596.3	5,572.7	5,528.8	10.3	15.1	9.37	-5.3	677.2	493.1	473.7	19.44	25.365	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Becky 2F-7H-E168 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	1.0	1.0	0.0	0.0	73.87	7.3	25.2	26.2				
100.0	100.0	101.0	101.0	0.1	0.1	73.87	7.3	25.2	26.2	26.0	0.26	99.496	
200.0	200.0	201.0	201.0	0.3	0.3	73.87	7.3	25.2	26.2	25.6	0.61	42.803	
266.3	266.3	267.3	267.3	0.4	0.4	73.87	7.3	25.2	26.2	25.4	0.84	31.063	CC
300.0	300.0	301.0	301.0	0.5	0.5	73.87	7.3	25.2	26.2	25.3	0.96	27.267	ES
400.0	400.0	400.5	400.5	0.7	0.7	74.02	7.5	26.1	27.1	25.8	1.31	20.680	
500.0	500.0	500.0	500.0	0.8	0.8	74.43	8.0	28.6	29.7	28.1	1.66	17.870	
600.0	600.0	599.4	599.2	1.0	1.0	74.97	8.8	32.9	34.1	32.0	2.02	16.844	
700.0	700.0	698.6	698.3	1.2	1.2	-8.31	10.0	38.8	39.3	36.9	2.35	16.687	
800.0	800.0	797.7	797.1	1.4	1.4	-8.21	11.5	46.4	44.5	41.8	2.70	16.472	
823.5	823.4	821.0	820.3	1.4	1.5	-8.21	11.9	48.4	45.7	42.9	2.78	16.429	SF
900.0	899.9	896.8	895.7	1.5	1.6	-8.22	13.4	55.6	50.2	47.2	3.05	16.469	
1,000.0	999.8	995.6	993.8	1.7	1.9	-8.14	15.6	66.5	57.6	54.2	3.40	16.960	
1,100.0	1,099.7	1,094.1	1,091.5	1.9	2.2	-8.00	18.1	79.1	66.7	63.0	3.74	17.820	
1,200.0	1,199.7	1,192.2	1,188.6	2.1	2.4	-7.83	20.9	93.2	77.5	73.4	4.09	18.954	
1,300.0	1,299.6	1,290.0	1,285.1	2.3	2.8	-7.65	24.0	108.9	90.0	85.6	4.44	20.296	
1,400.0	1,399.5	1,388.1	1,381.6	2.5	3.1	-7.48	27.5	126.1	104.1	99.3	4.78	21.768	
1,500.0	1,499.4	1,487.0	1,478.9	2.6	3.4	-7.34	31.0	143.7	118.5	113.3	5.13	23.094	
1,600.0	1,599.4	1,586.0	1,576.2	2.8	3.8	-7.23	34.5	161.4	132.8	127.4	5.48	24.252	
1,700.0	1,699.3	1,685.0	1,673.5	3.0	4.1	-7.14	38.1	179.0	147.2	141.4	5.82	25.272	
1,800.0	1,799.2	1,783.9	1,770.8	3.2	4.5	-7.07	41.6	196.7	161.6	155.4	6.17	26.177	
1,900.0	1,899.1	1,882.9	1,868.1	3.4	4.8	-7.00	45.1	214.4	175.9	169.4	6.52	26.986	
2,000.0	1,999.0	1,981.9	1,965.4	3.6	5.2	-6.95	48.7	232.0	190.3	183.4	6.87	27.714	
2,100.0	2,099.0	2,080.8	2,062.7	3.8	5.5	-6.91	52.2	249.7	204.7	197.5	7.21	28.371	
2,200.0	2,198.9	2,179.8	2,160.1	3.9	5.9	-6.87	55.7	267.3	219.0	211.5	7.56	28.968	
2,300.0	2,298.8	2,278.7	2,257.4	4.1	6.2	-6.84	59.3	285.0	233.4	225.5	7.91	29.513	
2,400.0	2,398.7	2,377.7	2,354.7	4.3	6.6	-6.81	62.8	302.7	247.8	239.5	8.26	30.012	
2,500.0	2,498.7	2,476.7	2,452.0	4.5	7.0	-6.78	66.4	320.3	262.2	253.6	8.60	30.471	
2,600.0	2,598.6	2,575.6	2,549.3	4.7	7.3	-6.76	69.9	338.0	276.5	267.6	8.95	30.894	
2,700.0	2,698.5	2,674.6	2,646.6	4.9	7.7	-6.73	73.4	355.6	290.9	281.6	9.30	31.286	
2,800.0	2,798.4	2,773.6	2,743.9	5.1	8.0	-6.71	77.0	373.3	305.3	295.6	9.65	31.649	
2,900.0	2,898.4	2,872.5	2,841.2	5.2	8.4	-6.70	80.5	391.0	319.6	309.6	9.99	31.987	
3,000.0	2,998.3	2,971.5	2,938.5	5.4	8.7	-6.68	84.0	408.6	334.0	323.7	10.34	32.303	
3,100.0	3,098.2	3,070.4	3,035.8	5.6	9.1	-6.67	87.6	426.3	348.4	337.7	10.69	32.598	
3,200.0	3,198.1	3,169.4	3,133.1	5.8	9.5	-6.65	91.1	443.9	362.7	351.7	11.03	32.874	
3,300.0	3,298.1	3,268.4	3,230.5	6.0	9.8	-6.64	94.6	461.6	377.1	365.7	11.38	33.134	
3,400.0	3,398.0	3,367.3	3,327.8	6.2	10.2	-6.63	98.2	479.3	391.5	379.8	11.73	33.378	
3,500.0	3,497.9	3,466.3	3,425.1	6.4	10.5	-6.62	101.7	496.9	405.8	393.8	12.08	33.609	
3,600.0	3,597.8	3,565.2	3,522.4	6.6	10.9	-6.61	105.2	514.6	420.2	407.8	12.42	33.826	
3,700.0	3,697.8	3,664.2	3,619.7	6.7	11.3	-6.60	108.8	532.2	434.6	421.8	12.77	34.032	
3,800.0	3,797.7	3,763.2	3,717.0	6.9	11.6	-6.59	112.3	549.9	449.0	435.8	13.12	34.226	
3,900.0	3,897.6	3,862.1	3,814.3	7.1	12.0	-6.58	115.8	567.6	463.3	449.9	13.46	34.411	
4,000.0	3,997.5	3,961.1	3,911.6	7.3	12.4	-6.57	119.4	585.2	477.7	463.9	13.81	34.587	
4,100.0	4,097.5	4,060.1	4,008.9	7.5	12.7	-6.56	122.9	602.9	492.1	477.9	14.16	34.753	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Becky 2G-7H-E168 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	1.0	1.0	0.0	0.0	90.00	0.0	30.8	30.8				
100.0	100.0	101.0	101.0	0.1	0.1	90.00	0.0	30.8	30.8	30.5	0.26	116.818	
200.0	200.0	201.0	201.0	0.3	0.3	90.00	0.0	30.8	30.8	30.2	0.61	50.255	
232.0	232.0	233.0	233.0	0.4	0.4	90.00	0.0	30.8	30.8	30.1	0.72	42.509	CC
300.0	300.0	300.7	300.7	0.5	0.5	90.07	0.0	31.0	31.0	30.0	0.96	32.258	ES
400.0	400.0	400.0	400.0	0.7	0.7	90.60	-0.3	32.7	32.7	31.4	1.31	24.969	
500.0	500.0	499.5	499.4	0.8	0.8	91.50	-0.9	36.1	36.2	34.5	1.67	21.702	
600.0	600.0	598.7	598.5	1.0	1.0	92.56	-1.8	41.2	41.4	39.3	2.03	20.349	
700.0	700.0	697.8	697.3	1.2	1.2	10.12	-3.0	48.0	47.4	45.0	2.35	20.139	
800.0	800.0	796.7	795.9	1.4	1.4	11.59	-4.5	56.5	53.5	50.8	2.70	19.796	
823.5	823.4	819.9	819.0	1.4	1.5	11.97	-4.9	58.7	54.9	52.1	2.78	19.731	
900.0	899.9	895.5	894.1	1.5	1.7	13.13	-6.3	66.6	60.1	57.0	3.05	19.711	SF
1,000.0	999.8	994.0	992.0	1.7	1.9	14.42	-8.4	78.3	68.4	65.0	3.39	20.146	
1,100.0	1,099.7	1,092.3	1,089.2	1.9	2.2	15.45	-10.7	91.6	78.4	74.7	3.74	20.967	
1,200.0	1,199.7	1,190.1	1,185.9	2.1	2.5	16.24	-13.4	106.6	90.2	86.1	4.09	22.071	
1,300.0	1,299.6	1,287.6	1,281.9	2.3	2.8	16.84	-16.3	123.1	103.7	99.3	4.43	23.391	
1,400.0	1,399.5	1,384.5	1,377.1	2.5	3.2	17.29	-19.4	141.0	118.9	114.1	4.78	24.876	
1,500.0	1,499.4	1,481.0	1,471.5	2.6	3.6	17.62	-22.9	160.5	135.7	130.6	5.12	26.491	
1,600.0	1,599.4	1,576.8	1,565.0	2.8	4.0	17.86	-26.6	181.4	154.2	148.7	5.47	28.210	
1,700.0	1,699.3	1,672.0	1,657.5	3.0	4.4	18.03	-30.5	203.7	174.3	168.5	5.81	30.013	
1,800.0	1,799.2	1,766.6	1,748.9	3.2	4.8	18.15	-34.7	227.3	196.1	189.9	6.15	31.886	
1,900.0	1,899.1	1,860.9	1,839.7	3.4	5.3	18.23	-39.1	252.3	219.4	212.9	6.49	33.810	
2,000.0	1,999.0	1,958.5	1,933.6	3.6	5.8	18.05	-42.7	278.9	243.3	236.4	6.84	35.582	
2,100.0	2,099.0	2,056.2	2,027.6	3.8	6.3	17.53	-44.7	305.6	266.9	259.7	7.18	37.156	
2,200.0	2,198.9	2,153.9	2,121.5	3.9	6.8	16.77	-45.1	332.5	290.3	282.8	7.53	38.567	
2,300.0	2,298.8	2,251.2	2,215.0	4.1	7.3	15.89	-44.2	359.2	313.7	305.8	7.87	39.853	
2,400.0	2,398.7	2,348.3	2,308.4	4.3	7.8	15.13	-43.2	386.0	337.1	328.9	8.21	41.041	
2,500.0	2,498.7	2,445.4	2,401.7	4.5	8.3	14.47	-42.3	412.8	360.6	352.1	8.56	42.140	
2,600.0	2,598.6	2,542.6	2,495.1	4.7	8.8	13.88	-41.4	439.5	384.1	375.2	8.90	43.159	
2,700.0	2,698.5	2,639.7	2,588.5	4.9	9.3	13.37	-40.4	466.3	407.7	398.4	9.24	44.106	
2,800.0	2,798.4	2,736.8	2,681.8	5.1	9.8	12.91	-39.5	493.0	431.3	421.7	9.59	44.988	
2,900.0	2,898.4	2,833.9	2,775.2	5.2	10.3	12.50	-38.6	519.8	454.9	445.0	9.93	45.811	
3,000.0	2,998.3	2,931.1	2,868.6	5.4	10.8	12.13	-37.6	546.5	478.5	468.2	10.27	46.582	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Becky 2H-7H-E168 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	1.0	1.0	0.0	0.0	78.68	7.3	36.4	37.1				
100.0	100.0	101.0	101.0	0.1	0.1	78.68	7.3	36.4	37.1	36.8	0.26	140.798	
166.3	166.3	167.3	167.3	0.2	0.2	78.68	7.3	36.4	37.1	36.6	0.50	74.951	CC
200.0	200.0	201.0	201.0	0.3	0.3	78.68	7.3	36.4	37.1	36.5	0.61	60.572	ES
300.0	300.0	300.4	300.3	0.5	0.5	78.94	7.3	37.3	38.0	37.0	0.96	39.494	
400.0	400.0	399.7	399.6	0.7	0.7	79.64	7.3	39.9	40.5	39.2	1.31	30.841	
500.0	500.0	498.8	498.7	0.8	0.8	80.63	7.3	44.2	44.8	43.2	1.68	26.753	
600.0	600.0	597.8	597.5	1.0	1.0	81.74	7.3	50.2	50.8	48.8	2.05	24.822	
700.0	700.0	696.7	696.0	1.2	1.3	-0.85	7.3	57.9	57.7	55.3	2.35	24.532	
800.0	800.0	795.4	794.3	1.4	1.5	0.16	7.3	67.3	64.5	61.8	2.70	23.913	
823.5	823.4	818.5	817.3	1.4	1.5	0.39	7.3	69.7	66.1	63.4	2.78	23.790	
900.0	899.9	893.9	892.2	1.5	1.7	1.12	7.3	78.4	71.9	68.8	3.05	23.599	SF
1,000.0	999.8	992.2	989.7	1.7	2.0	1.99	7.3	91.1	80.9	77.5	3.39	23.846	
1,100.0	1,099.7	1,090.2	1,086.6	1.9	2.3	2.76	7.3	105.4	91.6	87.9	3.74	24.512	
1,200.0	1,199.7	1,187.7	1,182.8	2.1	2.6	3.41	7.3	121.3	104.1	100.0	4.08	25.487	
1,300.0	1,299.6	1,284.8	1,278.4	2.3	3.0	3.96	7.3	138.8	118.2	113.8	4.43	26.699	
1,400.0	1,399.5	1,381.4	1,373.1	2.5	3.3	4.41	7.3	157.8	134.0	129.2	4.77	28.093	
1,500.0	1,499.4	1,477.5	1,466.9	2.6	3.7	4.78	7.3	178.2	151.5	146.4	5.11	29.631	
1,600.0	1,599.4	1,573.0	1,559.9	2.8	4.1	5.09	7.3	200.1	170.6	165.1	5.45	31.285	
1,700.0	1,699.3	1,667.8	1,651.8	3.0	4.6	5.34	7.3	223.4	191.3	185.5	5.79	33.033	
1,800.0	1,799.2	1,761.9	1,742.7	3.2	5.0	5.55	7.3	248.0	213.7	207.6	6.13	34.858	
1,900.0	1,899.1	1,855.3	1,832.4	3.4	5.5	5.72	7.3	273.9	237.7	231.2	6.47	36.746	
2,000.0	1,999.0	1,948.4	1,921.4	3.6	6.0	5.87	7.3	301.1	263.2	256.4	6.80	38.682	
2,100.0	2,099.0	2,044.9	2,013.5	3.8	6.5	5.99	7.3	329.9	289.4	282.2	7.15	40.492	
2,200.0	2,198.9	2,141.4	2,105.6	3.9	7.1	6.09	7.3	358.8	315.5	308.0	7.49	42.137	
2,300.0	2,298.8	2,237.9	2,197.7	4.1	7.6	6.18	7.3	387.6	341.7	333.9	7.83	43.640	
2,400.0	2,398.7	2,334.4	2,289.8	4.3	8.1	6.26	7.3	416.5	367.9	359.7	8.17	45.016	
2,500.0	2,498.7	2,431.0	2,381.9	4.5	8.7	6.32	7.3	445.3	394.0	385.5	8.51	46.283	
2,600.0	2,598.6	2,527.5	2,474.0	4.7	9.2	6.38	7.3	474.2	420.2	411.3	8.86	47.452	
2,700.0	2,698.5	2,624.0	2,566.1	4.9	9.8	6.43	7.3	503.0	446.4	437.2	9.20	48.534	
2,800.0	2,798.4	2,720.5	2,658.2	5.1	10.3	6.47	7.3	531.9	472.5	463.0	9.54	49.539	
2,900.0	2,898.4	2,817.0	2,750.3	5.2	10.9	6.51	7.3	560.7	498.7	488.8	9.88	50.475	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Sosa 2A-7H-E168 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.44	-0.6	-75.2	75.2				
100.0	100.0	98.0	98.0	0.1	0.1	-90.44	-0.6	-75.2	75.2	74.9	0.26	290.035	
200.0	200.0	198.0	198.0	0.3	0.3	-90.44	-0.6	-75.2	75.2	74.6	0.61	123.765	CC, ES
300.0	300.0	297.2	297.2	0.5	0.5	-89.97	0.0	-75.7	75.7	74.8	0.96	79.244	
400.0	400.0	396.2	396.2	0.7	0.7	-88.56	2.0	-77.4	77.4	76.1	1.31	59.287	
500.0	500.0	495.2	495.1	0.8	0.8	-86.33	5.1	-80.2	80.4	78.7	1.66	48.386	
600.0	600.0	594.0	593.7	1.0	1.0	-83.47	9.6	-84.1	84.7	82.7	2.03	41.835	
700.0	700.0	692.5	691.9	1.2	1.2	-164.02	15.4	-89.1	91.4	89.1	2.38	38.479	
800.0	800.0	790.6	789.5	1.4	1.5	-161.06	22.3	-95.2	101.4	98.7	2.74	37.045	
823.5	823.4	813.5	812.4	1.4	1.5	-160.42	24.1	-96.8	104.2	101.4	2.82	36.931	
900.0	899.9	888.6	887.0	1.5	1.7	-158.42	30.5	-102.3	114.1	111.0	3.10	36.805	
1,000.0	999.8	987.6	985.3	1.7	2.0	-156.20	39.1	-109.8	127.3	123.9	3.46	36.775	SF
1,100.0	1,099.7	1,086.6	1,083.7	1.9	2.2	-154.41	47.6	-117.2	140.7	136.9	3.82	36.802	
1,200.0	1,199.7	1,185.7	1,182.0	2.1	2.5	-152.92	56.2	-124.7	154.3	150.1	4.19	36.860	
1,300.0	1,299.6	1,284.7	1,280.4	2.3	2.7	-151.68	64.7	-132.2	167.9	163.3	4.55	36.933	
1,400.0	1,399.5	1,383.7	1,378.8	2.5	3.0	-150.62	73.3	-139.7	181.6	176.7	4.91	37.012	
1,500.0	1,499.4	1,482.7	1,477.1	2.6	3.2	-149.71	81.8	-147.1	195.3	190.0	5.26	37.094	
1,600.0	1,599.4	1,581.7	1,575.5	2.8	3.5	-148.92	90.4	-154.6	209.1	203.4	5.62	37.174	
1,700.0	1,699.3	1,680.7	1,673.8	3.0	3.8	-148.23	98.9	-162.1	222.9	216.9	5.98	37.252	
1,800.0	1,799.2	1,779.7	1,772.2	3.2	4.0	-147.62	107.5	-169.5	236.7	230.4	6.34	37.326	
1,900.0	1,899.1	1,878.7	1,870.5	3.4	4.3	-147.08	116.1	-177.0	250.6	243.9	6.70	37.397	
2,000.0	1,999.0	1,977.7	1,968.9	3.6	4.5	-146.59	124.6	-184.5	264.4	257.4	7.06	37.464	
2,100.0	2,099.0	2,076.7	2,067.2	3.8	4.8	-146.15	133.2	-192.0	278.3	270.9	7.42	37.527	
2,200.0	2,198.9	2,175.7	2,165.6	3.9	5.1	-145.75	141.7	-199.4	292.2	284.5	7.77	37.586	
2,300.0	2,298.8	2,274.7	2,263.9	4.1	5.3	-145.39	150.3	-206.9	306.1	298.0	8.13	37.643	
2,400.0	2,398.7	2,373.8	2,362.3	4.3	5.6	-145.06	158.8	-214.4	320.1	311.6	8.49	37.695	
2,500.0	2,498.7	2,472.8	2,460.7	4.5	5.9	-144.76	167.4	-221.8	334.0	325.2	8.85	37.745	
2,600.0	2,598.6	2,571.8	2,559.0	4.7	6.1	-144.49	175.9	-229.3	348.0	338.8	9.21	37.792	
2,700.0	2,698.5	2,670.8	2,657.4	4.9	6.4	-144.23	184.5	-236.8	361.9	352.4	9.57	37.836	
2,800.0	2,798.4	2,769.8	2,755.7	5.1	6.6	-143.99	193.1	-244.3	375.9	366.0	9.92	37.878	
2,900.0	2,898.4	2,868.8	2,854.1	5.2	6.9	-143.77	201.6	-251.7	389.9	379.6	10.28	37.917	
3,000.0	2,998.3	2,967.8	2,952.4	5.4	7.2	-143.57	210.2	-259.2	403.8	393.2	10.64	37.955	
3,100.0	3,098.2	3,066.8	3,050.8	5.6	7.4	-143.38	218.7	-266.7	417.8	406.8	11.00	37.990	
3,200.0	3,198.1	3,165.8	3,149.1	5.8	7.7	-143.20	227.3	-274.1	431.8	420.4	11.36	38.023	
3,300.0	3,298.1	3,264.8	3,247.5	6.0	8.0	-143.03	235.8	-281.6	445.8	434.1	11.71	38.055	
3,400.0	3,398.0	3,363.8	3,345.9	6.2	8.2	-142.87	244.4	-289.1	459.8	447.7	12.07	38.086	
3,500.0	3,497.9	3,462.9	3,444.2	6.4	8.5	-142.72	253.0	-296.6	473.8	461.3	12.43	38.114	
3,600.0	3,597.8	3,561.9	3,542.6	6.6	8.7	-142.58	261.5	-304.0	487.8	475.0	12.79	38.142	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Sosa 2B-7H-E168 - HZ - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-85.60	5.4	-70.1	70.4				
100.0	100.0	98.0	98.0	0.1	0.1	-85.60	5.4	-70.1	70.3	70.1	0.26	271.417	
200.0	200.0	198.0	198.0	0.3	0.3	-85.60	5.4	-70.1	70.3	69.7	0.61	115.820	
300.0	300.0	298.0	298.0	0.5	0.5	-85.60	5.4	-70.1	70.3	69.4	0.96	73.550	CC
400.0	400.0	397.6	397.6	0.7	0.7	-84.97	6.2	-70.4	70.6	69.3	1.30	54.135	ES
500.0	500.0	497.1	497.0	0.8	0.8	-83.06	8.7	-71.1	71.6	69.9	1.65	43.287	
600.0	600.0	596.5	596.3	1.0	1.0	-79.98	12.8	-72.2	73.4	71.4	2.01	36.590	
700.0	700.0	695.7	695.3	1.2	1.2	-159.81	18.5	-73.9	77.0	74.7	2.38	32.413	
800.0	800.0	794.6	793.9	1.4	1.4	-155.81	25.9	-76.0	83.6	80.8	2.75	30.432	
823.5	823.4	817.7	817.0	1.4	1.5	-154.90	27.9	-76.6	85.5	82.7	2.83	30.192	
900.0	899.9	893.8	892.8	1.5	1.6	-152.16	34.5	-78.4	92.3	89.1	3.12	29.589	
1,000.0	999.8	993.3	991.9	1.7	1.9	-149.15	43.1	-80.9	101.3	97.8	3.49	29.031	
1,100.0	1,099.7	1,092.8	1,090.9	1.9	2.1	-146.63	51.7	-83.4	110.6	106.8	3.86	28.645	
1,200.0	1,199.7	1,192.2	1,190.0	2.1	2.3	-144.50	60.3	-85.8	120.1	115.9	4.23	28.375	
1,300.0	1,299.6	1,291.7	1,289.0	2.3	2.5	-142.69	68.9	-88.3	129.7	125.1	4.60	28.183	
1,400.0	1,399.5	1,391.1	1,388.1	2.5	2.8	-141.13	77.6	-90.8	139.4	134.5	4.97	28.045	
1,500.0	1,499.4	1,490.6	1,487.2	2.6	3.0	-139.77	86.2	-93.2	149.3	143.9	5.34	27.945	
1,600.0	1,599.4	1,590.1	1,586.2	2.8	3.2	-138.58	94.8	-95.7	159.1	153.4	5.71	27.873	
1,700.0	1,699.3	1,689.5	1,685.3	3.0	3.4	-137.54	103.4	-98.1	169.1	163.0	6.08	27.821	
1,800.0	1,799.2	1,789.0	1,784.3	3.2	3.7	-136.60	112.0	-100.6	179.1	172.7	6.45	27.784	
1,900.0	1,899.1	1,888.4	1,883.4	3.4	3.9	-135.77	120.6	-103.1	189.1	182.3	6.81	27.758	
2,000.0	1,999.0	1,987.9	1,982.4	3.6	4.1	-135.02	129.3	-105.5	199.2	192.0	7.18	27.741	
2,100.0	2,099.0	2,087.3	2,081.5	3.8	4.4	-134.34	137.9	-108.0	209.3	201.8	7.55	27.730	
2,200.0	2,198.9	2,186.8	2,180.5	3.9	4.6	-133.73	146.5	-110.5	219.5	211.5	7.92	27.723	
2,300.0	2,298.8	2,286.3	2,279.6	4.1	4.8	-133.17	155.1	-112.9	229.6	221.3	8.28	27.721	SF
2,400.0	2,398.7	2,385.7	2,378.6	4.3	5.1	-132.65	163.7	-115.4	239.8	231.1	8.65	27.721	
2,500.0	2,498.7	2,485.2	2,477.7	4.5	5.3	-132.18	172.3	-117.8	250.0	241.0	9.02	27.723	
2,600.0	2,598.6	2,584.6	2,576.7	4.7	5.5	-131.75	181.0	-120.3	260.2	250.8	9.38	27.727	
2,700.0	2,698.5	2,684.1	2,675.8	4.9	5.8	-131.35	189.6	-122.8	270.4	260.7	9.75	27.732	
2,800.0	2,798.4	2,783.6	2,774.9	5.1	6.0	-130.97	198.2	-125.2	280.7	270.5	10.12	27.739	
2,900.0	2,898.4	2,883.0	2,873.9	5.2	6.2	-130.63	206.8	-127.7	290.9	280.4	10.49	27.746	
3,000.0	2,998.3	2,982.5	2,973.0	5.4	6.5	-130.30	215.4	-130.2	301.2	290.3	10.85	27.753	
3,100.0	3,098.2	3,081.9	3,072.0	5.6	6.7	-130.00	224.0	-132.6	311.4	300.2	11.22	27.761	
3,200.0	3,198.1	3,181.4	3,171.1	5.8	6.9	-129.72	232.7	-135.1	321.7	310.1	11.59	27.769	
3,300.0	3,298.1	3,280.8	3,270.1	6.0	7.2	-129.46	241.3	-137.5	332.0	320.0	11.95	27.777	
3,400.0	3,398.0	3,380.3	3,369.2	6.2	7.4	-129.21	249.9	-140.0	342.3	330.0	12.32	27.786	
3,500.0	3,497.9	3,479.8	3,468.2	6.4	7.6	-128.97	258.5	-142.5	352.6	339.9	12.69	27.794	
3,600.0	3,597.8	3,579.2	3,567.3	6.6	7.9	-128.75	267.1	-144.9	362.9	349.8	13.05	27.803	
3,700.0	3,697.8	3,678.7	3,666.3	6.7	8.1	-128.54	275.8	-147.4	373.2	359.8	13.42	27.811	
3,800.0	3,797.7	3,778.1	3,765.4	6.9	8.3	-128.35	284.4	-149.9	383.5	369.7	13.78	27.819	
3,900.0	3,897.6	3,877.6	3,864.4	7.1	8.6	-128.16	293.0	-152.3	393.8	379.7	14.15	27.828	
4,000.0	3,997.5	3,977.1	3,963.5	7.3	8.8	-127.98	301.6	-154.8	404.1	389.6	14.52	27.836	
4,100.0	4,097.5	4,076.5	4,062.6	7.5	9.0	-127.81	310.2	-157.3	414.4	399.6	14.88	27.844	
4,200.0	4,197.4	4,176.0	4,161.6	7.7	9.3	-127.65	318.8	-159.7	424.8	409.5	15.25	27.851	
4,300.0	4,297.3	4,275.4	4,260.7	7.9	9.5	-127.50	327.5	-162.2	435.1	419.5	15.62	27.859	
4,400.0	4,397.2	4,374.9	4,359.7	8.0	9.7	-127.35	336.1	-164.6	445.4	429.4	15.98	27.866	
4,500.0	4,497.1	4,474.4	4,458.8	8.2	10.0	-127.21	344.7	-167.1	455.8	439.4	16.35	27.874	
4,600.0	4,597.1	4,573.8	4,557.8	8.4	10.2	-127.08	353.3	-169.6	466.1	449.4	16.72	27.881	
4,700.0	4,697.0	4,673.3	4,656.9	8.6	10.4	-126.95	361.9	-172.0	476.4	459.3	17.08	27.888	
4,800.0	4,796.9	4,772.7	4,755.9	8.8	10.7	-126.83	370.5	-174.5	486.8	469.3	17.45	27.895	
4,900.0	4,896.8	4,872.2	4,855.0	9.0	10.9	-126.72	379.2	-177.0	497.1	479.3	17.82	27.902	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.55	-0.6	-65.2	65.2				
100.0	100.0	98.0	98.0	0.1	0.1	-90.55	-0.6	-65.2	65.2	64.9	0.26	251.455	
200.0	200.0	198.0	198.0	0.3	0.3	-90.55	-0.6	-65.2	65.2	64.6	0.61	107.302	
300.0	300.0	298.0	298.0	0.5	0.5	-90.55	-0.6	-65.2	65.2	64.2	0.96	68.141	
400.0	400.0	398.0	398.0	0.7	0.7	-90.55	-0.6	-65.2	65.2	63.9	1.31	49.921	
500.0	500.0	498.3	498.3	0.8	0.8	-89.84	0.2	-64.9	64.9	63.3	1.66	39.235	
600.0	600.0	598.6	598.5	1.0	1.0	-87.61	2.7	-64.2	64.3	62.3	2.00	32.066	
652.2	652.2	650.8	650.8	1.1	1.1	-169.53	4.6	-63.7	64.1	61.9	2.20	29.178	CC, ES
700.0	700.0	698.7	698.6	1.2	1.2	-167.63	6.9	-63.0	64.3	61.9	2.37	27.144	
800.0	800.0	798.7	798.4	1.4	1.4	-162.90	12.7	-61.4	66.0	63.3	2.74	24.123	
823.5	823.4	822.1	821.8	1.4	1.4	-161.68	14.3	-60.9	66.7	63.9	2.83	23.605	
900.0	899.9	898.5	897.9	1.5	1.6	-157.40	20.2	-59.2	69.3	66.2	3.12	22.221	
1,000.0	999.8	998.1	997.1	1.7	1.8	-151.44	28.9	-56.7	73.3	69.8	3.51	20.901	
1,100.0	1,099.7	1,097.8	1,096.3	1.9	2.0	-146.10	37.8	-54.2	78.1	74.2	3.90	20.016	
1,200.0	1,199.7	1,197.4	1,195.5	2.1	2.2	-141.41	46.6	-51.7	83.5	79.2	4.30	19.433	
1,300.0	1,299.6	1,297.0	1,294.7	2.3	2.5	-137.30	55.4	-49.2	89.3	84.7	4.69	19.057	
1,400.0	1,399.5	1,396.7	1,393.9	2.5	2.7	-133.72	64.2	-46.7	95.6	90.5	5.08	18.824	
1,500.0	1,499.4	1,496.3	1,493.1	2.6	2.9	-130.58	73.0	-44.1	102.2	96.7	5.47	18.691	
1,600.0	1,599.4	1,595.9	1,592.4	2.8	3.2	-127.84	81.8	-41.6	109.1	103.2	5.86	18.627	
1,700.0	1,699.3	1,695.6	1,691.6	3.0	3.4	-125.42	90.6	-39.1	116.1	109.9	6.24	18.612	
1,800.0	1,799.2	1,795.2	1,790.8	3.2	3.6	-123.28	99.5	-36.6	123.4	116.8	6.62	18.630	
1,900.0	1,899.1	1,894.8	1,890.0	3.4	3.9	-121.38	108.3	-34.1	130.8	123.8	7.01	18.671	
2,000.0	1,999.0	1,994.5	1,989.2	3.6	4.1	-119.69	117.1	-31.6	138.4	131.0	7.39	18.729	
2,100.0	2,099.0	2,094.1	2,088.4	3.8	4.3	-118.17	125.9	-29.0	146.0	138.2	7.77	18.797	
2,200.0	2,198.9	2,193.7	2,187.6	3.9	4.6	-116.80	134.7	-26.5	153.8	145.6	8.15	18.872	
2,300.0	2,298.8	2,293.4	2,286.8	4.1	4.8	-115.57	143.5	-24.0	161.6	153.0	8.53	18.950	
2,400.0	2,398.7	2,393.0	2,386.1	4.3	5.0	-114.45	152.3	-21.5	169.5	160.6	8.90	19.032	
2,500.0	2,498.7	2,492.7	2,485.3	4.5	5.3	-113.43	161.2	-19.0	177.4	168.1	9.28	19.114	
2,600.0	2,598.6	2,592.3	2,584.5	4.7	5.5	-112.50	170.0	-16.5	185.4	175.8	9.66	19.195	
2,700.0	2,698.5	2,691.9	2,683.7	4.9	5.7	-111.64	178.8	-13.9	193.5	183.4	10.04	19.276	
2,800.0	2,798.4	2,791.6	2,782.9	5.1	6.0	-110.86	187.6	-11.4	201.5	191.1	10.41	19.355	
2,900.0	2,898.4	2,891.2	2,882.1	5.2	6.2	-110.13	196.4	-8.9	209.7	198.9	10.79	19.433	
3,000.0	2,998.3	2,990.8	2,981.3	5.4	6.4	-109.46	205.2	-6.4	217.8	206.6	11.16	19.509	
3,100.0	3,098.2	3,090.5	3,080.6	5.6	6.7	-108.83	214.0	-3.9	226.0	214.4	11.54	19.582	
3,200.0	3,198.1	3,190.1	3,179.8	5.8	6.9	-108.25	222.9	-1.4	234.2	222.3	11.92	19.653	
3,300.0	3,298.1	3,289.7	3,279.0	6.0	7.1	-107.71	231.7	1.2	242.4	230.1	12.29	19.722	
3,400.0	3,398.0	3,389.4	3,378.2	6.2	7.4	-107.21	240.5	3.7	250.6	238.0	12.67	19.789	
3,500.0	3,497.9	3,489.0	3,477.4	6.4	7.6	-106.74	249.3	6.2	258.9	245.9	13.04	19.853	
3,600.0	3,597.8	3,588.7	3,576.6	6.6	7.8	-106.29	258.1	8.7	267.2	253.8	13.42	19.915	
3,700.0	3,697.8	3,688.3	3,675.8	6.7	8.1	-105.88	266.9	11.2	275.5	261.7	13.79	19.975	
3,800.0	3,797.7	3,787.9	3,775.1	6.9	8.3	-105.48	275.7	13.7	283.8	269.6	14.17	20.033	
3,900.0	3,897.6	3,887.6	3,874.3	7.1	8.5	-105.11	284.5	16.3	292.1	277.6	14.54	20.089	
4,000.0	3,997.5	3,987.2	3,973.5	7.3	8.8	-104.76	293.4	18.8	300.4	285.5	14.91	20.143	
4,100.0	4,097.5	4,086.8	4,072.7	7.5	9.0	-104.43	302.2	21.3	308.8	293.5	15.29	20.196	
4,200.0	4,197.4	4,186.5	4,171.9	7.7	9.3	-104.12	311.0	23.8	317.1	301.5	15.66	20.246	
4,300.0	4,297.3	4,286.1	4,271.1	7.9	9.5	-103.82	319.8	26.3	325.5	309.4	16.04	20.295	
4,400.0	4,397.2	4,385.7	4,370.3	8.0	9.7	-103.54	328.6	28.8	333.8	317.4	16.41	20.342	
4,500.0	4,497.1	4,485.4	4,469.5	8.2	10.0	-103.27	337.4	31.4	342.2	325.4	16.79	20.387	
4,600.0	4,597.1	4,585.0	4,568.8	8.4	10.2	-103.01	346.2	33.9	350.6	333.4	17.16	20.431	
4,700.0	4,697.0	4,684.7	4,668.0	8.6	10.4	-102.77	355.1	36.4	359.0	341.5	17.53	20.473	
4,800.0	4,796.9	4,784.3	4,767.2	8.8	10.7	-102.54	363.9	38.9	367.4	349.5	17.91	20.514	
4,900.0	4,896.8	4,883.9	4,866.4	9.0	10.9	-102.32	372.7	41.4	375.8	357.5	18.28	20.554	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,996.8	4,983.6	4,965.6	9.2	11.1	-102.10	381.5	43.9	384.2	365.5	18.66	20.593	
5,100.0	5,096.7	5,083.2	5,064.8	9.4	11.4	-101.90	390.3	46.5	392.6	373.6	19.03	20.630	
5,200.0	5,196.6	5,182.8	5,164.0	9.5	11.6	-101.70	399.1	49.0	401.0	381.6	19.41	20.666	
5,300.0	5,296.5	5,282.5	5,263.3	9.7	11.8	-101.52	407.9	51.5	409.4	389.7	19.78	20.701	
5,400.0	5,396.5	5,382.1	5,362.5	9.9	12.1	-101.34	416.8	54.0	417.9	397.7	20.15	20.735	
5,500.0	5,496.4	5,481.7	5,461.7	10.1	12.3	-101.17	425.6	56.5	426.3	405.8	20.53	20.768	
5,600.0	5,596.3	5,581.4	5,560.9	10.3	12.6	-101.00	434.4	59.0	434.7	413.8	20.90	20.799	
5,700.0	5,696.2	5,681.0	5,660.1	10.5	12.8	-100.84	443.2	61.6	443.2	421.9	21.28	20.830	
5,800.0	5,796.2	5,780.6	5,759.3	10.7	13.0	-100.69	452.0	64.1	451.6	430.0	21.65	20.860	
5,900.0	5,896.1	5,880.3	5,858.5	10.9	13.3	-100.54	460.8	66.6	460.0	438.0	22.02	20.890	
6,000.0	5,996.0	5,979.9	5,957.8	11.0	13.5	-100.40	469.6	69.1	468.5	446.1	22.40	20.918	
6,100.0	6,095.9	6,079.6	6,057.0	11.2	13.7	-100.26	478.5	71.6	476.9	454.2	22.77	20.946	
6,200.0	6,195.9	6,179.2	6,156.2	11.4	14.0	-100.13	487.3	74.2	485.4	462.2	23.14	20.972	
6,300.0	6,295.8	6,278.8	6,255.4	11.6	14.2	-100.00	496.1	76.7	493.8	470.3	23.52	20.998	
7,300.0	7,295.0	7,977.2	7,742.9	13.5	14.4	-89.35	138.6	114.4	483.7	456.6	27.13	17.828	
7,350.0	7,344.5	7,995.6	7,746.9	13.6	14.4	-97.02	120.6	114.5	436.9	410.1	26.88	16.252	
7,400.0	7,393.2	7,993.7	7,746.5	13.7	14.4	-104.47	122.5	114.5	390.7	363.8	26.85	14.550	
7,450.0	7,440.8	7,983.1	7,744.2	13.8	14.4	-108.98	132.9	114.4	345.6	318.8	26.86	12.869	
7,500.0	7,487.0	7,967.9	7,740.6	13.9	14.4	-111.05	147.6	114.3	302.3	275.5	26.86	11.257	
7,550.0	7,531.2	7,950.0	7,735.8	14.1	14.4	-111.16	164.8	114.2	261.5	234.7	26.88	9.730	
7,600.0	7,573.3	7,930.5	7,730.0	14.2	14.4	-109.57	183.5	114.1	224.5	197.5	27.01	8.310	
7,650.0	7,612.9	7,909.8	7,723.2	14.4	14.5	-106.39	203.0	113.9	192.8	165.5	27.28	7.066	
7,700.0	7,649.7	7,888.3	7,715.3	14.7	14.5	-101.64	223.0	113.7	168.9	141.1	27.72	6.091	
7,750.0	7,683.4	7,866.2	7,706.5	14.9	14.6	-95.38	243.2	113.5	155.7	127.4	28.30	5.502	
7,777.0	7,700.3	7,854.1	7,701.3	15.1	14.6	-91.41	254.2	113.3	153.8	125.2	28.62	5.374	SF
7,800.0	7,713.8	7,843.7	7,696.7	15.2	14.6	-87.76	263.5	113.2	155.1	126.3	28.86	5.376	
7,850.0	7,740.6	7,820.8	7,685.9	15.6	14.7	-79.20	283.7	113.0	166.5	137.3	29.17	5.706	
7,900.0	7,763.6	7,800.0	7,675.4	16.0	14.8	-70.91	301.6	112.7	186.7	157.6	29.07	6.422	
7,950.0	7,782.7	7,774.3	7,661.6	16.4	14.9	-61.65	323.2	112.3	212.5	184.2	28.36	7.494	
8,000.0	7,797.6	7,750.0	7,647.5	16.9	15.0	-53.67	343.2	112.0	241.5	214.2	27.24	8.866	
8,050.0	7,808.4	7,727.2	7,633.6	17.4	15.1	-47.04	361.3	111.6	271.9	245.9	25.94	10.481	
8,100.0	7,814.9	7,700.0	7,616.2	17.9	15.2	-40.97	382.1	111.2	302.7	278.2	24.49	12.362	
8,149.4	7,817.0	7,679.8	7,602.6	18.5	15.2	-36.70	397.0	110.8	332.9	309.6	23.36	14.253	
8,200.0	7,817.0	7,650.0	7,581.6	19.1	15.4	-34.18	418.1	110.3	364.7	341.7	23.04	15.831	
8,300.0	7,817.0	7,615.6	7,556.0	20.3	15.5	-31.50	441.1	109.7	432.7	409.7	22.97	18.833	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Sosa 2D-7H-E168 - HZ - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-84.92	5.3	-60.1	60.4				
100.0	100.0	98.0	98.0	0.1	0.1	-84.92	5.3	-60.1	60.4	60.1	0.26	232.950	
200.0	200.0	198.0	198.0	0.3	0.3	-84.92	5.3	-60.1	60.4	59.8	0.61	99.406	
300.0	300.0	298.0	298.0	0.5	0.5	-84.92	5.3	-60.1	60.4	59.4	0.96	63.126	
400.0	400.0	398.0	398.0	0.7	0.7	-84.92	5.3	-60.1	60.4	59.1	1.31	46.248	
500.0	500.0	498.0	498.0	0.8	0.8	-84.92	5.3	-60.1	60.4	58.7	1.65	36.491	
600.0	600.0	598.6	598.6	1.0	1.0	-84.25	6.0	-59.6	59.9	57.9	2.00	29.887	
700.0	700.0	699.1	699.1	1.2	1.2	-165.98	8.0	-58.0	59.4	57.0	2.36	25.198	
710.3	710.3	709.5	709.4	1.2	1.2	-165.72	8.3	-57.7	59.4	57.0	2.39	24.809	CC, ES
800.0	800.0	799.6	799.4	1.4	1.4	-162.99	11.5	-55.3	59.8	57.1	2.71	22.028	
823.5	823.4	823.1	823.0	1.4	1.4	-162.15	12.5	-54.5	60.0	57.2	2.80	21.441	
900.0	899.9	899.9	899.6	1.5	1.6	-158.95	16.2	-51.4	60.7	57.7	3.08	19.725	
1,000.0	999.8	1,000.2	999.5	1.7	1.8	-153.55	22.4	-46.5	61.5	58.0	3.46	17.765	
1,100.0	1,099.7	1,100.2	1,099.1	1.9	2.0	-146.77	29.9	-40.5	62.3	58.5	3.86	16.148	
1,200.0	1,199.7	1,199.9	1,198.2	2.1	2.2	-138.84	38.6	-33.6	63.9	59.7	4.28	14.938	
1,300.0	1,299.6	1,299.5	1,297.1	2.3	2.5	-131.15	47.6	-26.4	66.7	62.0	4.70	14.180	
1,400.0	1,399.5	1,399.0	1,396.0	2.5	2.7	-124.18	56.6	-19.2	70.6	65.4	5.13	13.769	
1,500.0	1,499.4	1,498.6	1,494.9	2.6	2.9	-118.01	65.5	-12.0	75.4	69.8	5.54	13.603	
1,600.0	1,599.4	1,598.2	1,593.8	2.8	3.2	-112.63	74.5	-4.9	81.0	75.0	5.95	13.608	
1,700.0	1,699.3	1,697.7	1,692.7	3.0	3.5	-107.97	83.5	2.3	87.1	80.8	6.35	13.727	
1,800.0	1,799.2	1,797.3	1,791.6	3.2	3.7	-103.95	92.5	9.5	93.8	87.1	6.74	13.919	
1,900.0	1,899.1	1,896.9	1,890.5	3.4	4.0	-100.48	101.4	16.7	100.9	93.8	7.13	14.157	
2,000.0	1,999.0	1,996.5	1,989.4	3.6	4.2	-97.48	110.4	23.8	108.3	100.8	7.51	14.422	
2,100.0	2,099.0	2,096.0	2,088.3	3.8	4.5	-94.86	119.4	31.0	116.0	108.1	7.89	14.701	
2,200.0	2,198.9	2,195.6	2,187.2	3.9	4.7	-92.57	128.4	38.2	123.9	115.6	8.27	14.984	
2,300.0	2,298.8	2,295.2	2,286.1	4.1	5.0	-90.56	137.4	45.4	132.0	123.3	8.64	15.266	
2,400.0	2,398.7	2,394.8	2,385.1	4.3	5.3	-88.78	146.3	52.5	140.2	131.1	9.02	15.544	
2,500.0	2,498.7	2,494.3	2,484.0	4.5	5.5	-87.20	155.3	59.7	148.5	139.1	9.39	15.814	
2,600.0	2,598.6	2,593.9	2,582.9	4.7	5.8	-85.78	164.3	66.9	156.9	147.1	9.76	16.076	
2,700.0	2,698.5	2,693.5	2,681.8	4.9	6.0	-84.52	173.3	74.1	165.4	155.3	10.13	16.328	
2,800.0	2,798.4	2,793.1	2,780.7	5.1	6.3	-83.37	182.2	81.2	174.0	163.5	10.50	16.570	
2,900.0	2,898.4	2,892.6	2,879.6	5.2	6.6	-82.33	191.2	88.4	182.6	171.7	10.87	16.803	
3,000.0	2,998.3	2,992.2	2,978.5	5.4	6.8	-81.39	200.2	95.6	191.3	180.1	11.24	17.025	
3,100.0	3,098.2	3,091.8	3,077.4	5.6	7.1	-80.53	209.2	102.8	200.0	188.4	11.61	17.237	
3,200.0	3,198.1	3,191.4	3,176.3	5.8	7.4	-79.74	218.1	109.9	208.8	196.9	11.97	17.440	
3,300.0	3,298.1	3,290.9	3,275.2	6.0	7.6	-79.02	227.1	117.1	217.6	205.3	12.34	17.635	
3,400.0	3,398.0	3,390.5	3,374.1	6.2	7.9	-78.35	236.1	124.3	226.5	213.8	12.71	17.820	
3,500.0	3,497.9	3,490.1	3,473.1	6.4	8.2	-77.73	245.1	131.5	235.4	222.3	13.08	17.998	
3,600.0	3,597.8	3,589.7	3,572.0	6.6	8.4	-77.16	254.1	138.6	244.3	230.8	13.45	18.168	
3,700.0	3,697.8	3,689.2	3,670.9	6.7	8.7	-76.63	263.0	145.8	253.2	239.4	13.81	18.330	
3,800.0	3,797.7	3,788.8	3,769.8	6.9	8.9	-76.13	272.0	153.0	262.2	248.0	14.18	18.486	
3,900.0	3,897.6	3,888.4	3,868.7	7.1	9.2	-75.67	281.0	160.2	271.1	256.6	14.55	18.635	
4,000.0	3,997.5	3,988.0	3,967.6	7.3	9.5	-75.23	290.0	167.3	280.1	265.2	14.92	18.777	
4,100.0	4,097.5	4,087.5	4,066.5	7.5	9.7	-74.83	298.9	174.5	289.1	273.8	15.28	18.914	
4,200.0	4,197.4	4,187.1	4,165.4	7.7	10.0	-74.44	307.9	181.7	298.1	282.4	15.65	19.045	
4,300.0	4,297.3	4,286.7	4,264.3	7.9	10.3	-74.08	316.9	188.9	307.1	291.1	16.02	19.172	
4,400.0	4,397.2	4,386.3	4,363.2	8.0	10.5	-73.74	325.9	196.0	316.2	299.8	16.39	19.293	
4,500.0	4,497.1	4,485.8	4,462.1	8.2	10.8	-73.42	334.9	203.2	325.2	308.4	16.75	19.409	
4,600.0	4,597.1	4,585.4	4,561.1	8.4	11.1	-73.12	343.8	210.4	334.3	317.1	17.12	19.521	
4,700.0	4,697.0	4,685.0	4,660.0	8.6	11.3	-72.83	352.8	217.6	343.3	325.8	17.49	19.629	
4,800.0	4,796.9	4,784.5	4,758.9	8.8	11.6	-72.56	361.8	224.7	352.4	334.5	17.86	19.732	
4,900.0	4,896.8	4,884.1	4,857.8	9.0	11.9	-72.30	370.8	231.9	361.5	343.2	18.23	19.832	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Sosa 2D-7H-E168 - HZ - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,996.8	4,983.7	4,956.7	9.2	12.1	-72.06	379.7	239.1	370.5	352.0	18.59	19.929	
5,100.0	5,096.7	5,083.3	5,055.6	9.4	12.4	-71.82	388.7	246.3	379.6	360.7	18.96	20.022	
5,200.0	5,196.6	5,182.8	5,154.5	9.5	12.6	-71.60	397.7	253.4	388.7	369.4	19.33	20.112	
5,300.0	5,296.5	5,282.4	5,253.4	9.7	12.9	-71.39	406.7	260.6	397.8	378.1	19.70	20.198	
5,400.0	5,396.5	5,382.0	5,352.3	9.9	13.2	-71.18	415.6	267.8	406.9	386.9	20.06	20.282	
5,500.0	5,496.4	5,481.6	5,451.2	10.1	13.4	-70.99	424.6	275.0	416.1	395.6	20.43	20.363	
5,600.0	5,596.3	5,581.1	5,550.1	10.3	13.7	-70.80	433.6	282.1	425.2	404.4	20.80	20.441	
5,700.0	5,696.2	5,680.7	5,649.0	10.5	14.0	-70.62	442.6	289.3	434.3	413.1	21.17	20.517	
5,800.0	5,796.2	5,780.3	5,748.0	10.7	14.2	-70.45	451.6	296.5	443.4	421.9	21.54	20.590	
5,900.0	5,896.1	5,879.9	5,846.9	10.9	14.5	-70.29	460.5	303.7	452.5	430.6	21.90	20.661	
6,000.0	5,996.0	5,979.4	5,945.8	11.0	14.8	-70.13	469.5	310.8	461.7	439.4	22.27	20.730	
6,100.0	6,095.9	6,079.0	6,044.7	11.2	15.0	-69.98	478.5	318.0	470.8	448.2	22.64	20.797	
6,200.0	6,195.9	6,178.6	6,143.6	11.4	15.3	-69.83	487.5	325.2	480.0	456.9	23.01	20.862	
6,300.0	6,295.8	6,278.2	6,242.5	11.6	15.6	-69.69	496.4	332.4	489.1	465.7	23.37	20.924	
6,400.0	6,395.7	6,377.7	6,341.4	11.8	15.8	-69.56	505.4	339.5	498.2	474.5	23.74	20.985	
7,300.0	7,295.0	7,990.1	7,742.2	13.5	16.6	43.71	144.8	441.2	499.5	472.7	26.77	18.660	
7,350.0	7,344.5	8,011.6	7,747.0	13.6	16.6	73.90	123.9	441.5	453.0	426.2	26.78	16.913	
7,400.0	7,393.2	8,009.5	7,746.5	13.7	16.6	88.79	126.0	441.5	407.1	379.9	27.13	15.002	
7,450.0	7,440.8	7,998.2	7,744.1	13.8	16.6	96.91	137.0	441.3	362.5	335.0	27.47	13.196	
7,500.0	7,487.0	7,982.2	7,740.2	13.9	16.6	101.18	152.5	441.0	319.7	292.0	27.71	11.537	
7,550.0	7,531.2	7,963.7	7,735.3	14.1	16.6	102.86	170.3	440.6	279.6	251.7	27.88	10.028	
7,600.0	7,573.3	7,943.6	7,729.2	14.2	16.6	102.54	189.5	440.2	243.2	215.1	28.02	8.678	
7,650.0	7,612.9	7,922.4	7,722.1	14.4	16.7	100.52	209.4	439.7	212.0	183.8	28.18	7.524	
7,700.0	7,649.7	7,900.5	7,714.0	14.7	16.7	96.93	229.8	439.1	188.1	159.8	28.36	6.635	
7,750.0	7,683.4	7,878.1	7,704.9	14.9	16.7	91.86	250.3	438.4	174.0	145.5	28.55	6.094	
7,786.8	7,706.1	7,861.3	7,697.5	15.2	16.8	87.27	265.4	437.9	170.8	142.2	28.67	5.959	SF
7,800.0	7,713.8	7,855.2	7,694.8	15.2	16.8	85.47	270.8	437.7	171.2	142.6	28.69	5.969	
7,850.0	7,740.6	7,832.0	7,683.7	15.6	16.8	78.05	291.1	436.9	179.6	150.9	28.65	6.268	
7,900.0	7,763.6	7,808.6	7,671.7	16.0	16.9	70.06	311.2	436.0	196.9	168.5	28.32	6.950	
7,950.0	7,782.7	7,785.0	7,658.8	16.4	17.0	62.03	330.9	435.1	220.2	192.5	27.68	7.955	
8,000.0	7,797.6	7,761.3	7,645.0	16.9	17.1	54.45	350.2	434.1	247.3	220.5	26.80	9.227	
8,050.0	7,808.4	7,737.4	7,630.4	17.4	17.1	47.64	369.1	433.0	276.3	250.5	25.82	10.700	
8,100.0	7,814.9	7,713.4	7,614.9	17.9	17.2	41.74	387.3	431.9	306.1	281.2	24.91	12.290	
8,149.4	7,817.0	7,689.6	7,598.8	18.5	17.3	36.78	404.8	430.7	335.7	311.5	24.19	13.874	
8,200.0	7,817.0	7,666.2	7,582.2	19.1	17.4	34.63	421.3	429.5	366.8	342.9	23.96	15.308	
8,300.0	7,817.0	7,625.2	7,551.6	20.3	17.5	31.12	448.5	427.3	434.1	410.4	23.63	18.371	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Sosa 2E-7H-E168 - HZ - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.93	-0.7	-45.2	45.2				
100.0	100.0	98.0	98.0	0.1	0.1	-90.93	-0.7	-45.2	45.2	44.9	0.26	174.301	
200.0	200.0	198.0	198.0	0.3	0.3	-90.93	-0.7	-45.2	45.2	44.6	0.61	74.379	
300.0	300.0	298.0	298.0	0.5	0.5	-90.93	-0.7	-45.2	45.2	44.2	0.96	47.233	
400.0	400.0	398.0	398.0	0.7	0.7	-90.93	-0.7	-45.2	45.2	43.9	1.31	34.604	
500.0	500.0	498.0	498.0	0.8	0.8	-90.93	-0.7	-45.2	45.2	43.5	1.65	27.304	
600.0	600.0	598.0	598.0	1.0	1.0	-90.93	-0.7	-45.2	45.2	43.2	2.00	22.547	CC, ES
700.0	700.0	698.0	698.0	1.2	1.2	-174.70	-0.7	-45.2	46.0	43.7	2.35	19.573	
800.0	800.0	798.0	798.0	1.4	1.3	-174.98	-0.7	-45.2	48.7	46.0	2.70	18.014	
823.5	823.4	821.4	821.4	1.4	1.4	-175.07	-0.7	-45.2	49.5	46.7	2.78	17.796	
900.0	899.9	897.9	897.9	1.5	1.5	-175.35	-0.7	-45.2	52.5	49.4	3.05	17.213	
1,000.0	999.8	997.8	997.8	1.7	1.7	-175.67	-0.7	-45.2	56.4	53.0	3.40	16.589	
1,100.0	1,099.7	1,098.6	1,098.6	1.9	1.9	-175.47	-0.2	-44.5	59.6	55.8	3.75	15.894	
1,200.0	1,199.7	1,199.4	1,199.4	2.1	2.1	-174.32	1.4	-42.4	61.4	57.3	4.10	14.971	
1,300.0	1,299.6	1,300.2	1,300.1	2.3	2.2	-172.21	4.1	-39.0	61.8	57.4	4.45	13.886	
1,400.0	1,399.5	1,401.0	1,400.6	2.5	2.4	-169.03	7.9	-34.1	61.1	56.3	4.81	12.694	
1,500.0	1,499.4	1,501.6	1,501.0	2.6	2.6	-164.56	12.8	-27.9	59.3	54.1	5.18	11.451	
1,600.0	1,599.4	1,602.0	1,600.9	2.8	2.8	-158.46	18.7	-20.3	56.8	51.2	5.56	10.219	
1,700.0	1,699.3	1,702.2	1,700.5	3.0	3.1	-150.30	25.7	-11.3	54.1	48.2	5.97	9.075	
1,800.0	1,799.2	1,802.1	1,799.5	3.2	3.3	-139.73	33.8	-1.0	52.1	45.7	6.41	8.128	
1,866.3	1,865.4	1,868.1	1,864.8	3.3	3.5	-131.42	39.7	6.6	51.6	44.9	6.73	7.673	
1,900.0	1,899.1	1,901.6	1,897.9	3.4	3.6	-126.87	42.9	10.6	51.8	44.9	6.89	7.514	
2,000.0	1,999.0	2,000.8	1,995.8	3.6	3.8	-113.22	52.6	23.1	54.2	46.8	7.36	7.360	SF
2,100.0	2,099.0	2,099.9	2,093.6	3.8	4.1	-101.28	62.5	35.7	59.4	51.6	7.80	7.620	
2,200.0	2,198.9	2,199.1	2,191.5	3.9	4.4	-91.59	72.3	48.3	66.8	58.6	8.19	8.154	
2,300.0	2,298.8	2,298.2	2,289.4	4.1	4.7	-83.98	82.1	60.9	75.7	67.1	8.55	8.844	
2,400.0	2,398.7	2,397.4	2,387.2	4.3	5.0	-78.03	91.9	73.4	85.6	76.7	8.91	9.610	
2,500.0	2,498.7	2,496.5	2,485.1	4.5	5.3	-73.35	101.8	86.0	96.2	87.0	9.25	10.403	
2,600.0	2,598.6	2,595.7	2,582.9	4.7	5.6	-69.62	111.6	98.6	107.4	97.8	9.60	11.194	
2,700.0	2,698.5	2,694.9	2,680.8	4.9	5.9	-66.60	121.4	111.2	118.9	109.0	9.94	11.967	
2,800.0	2,798.4	2,794.0	2,778.7	5.1	6.2	-64.12	131.2	123.7	130.7	120.5	10.28	12.714	
2,900.0	2,898.4	2,893.2	2,876.5	5.2	6.5	-62.05	141.1	136.3	142.7	132.1	10.63	13.430	
3,000.0	2,998.3	2,992.3	2,974.4	5.4	6.8	-60.30	150.9	148.9	154.9	143.9	10.98	14.113	
3,100.0	3,098.2	3,091.5	3,072.3	5.6	7.2	-58.81	160.7	161.5	167.2	155.9	11.32	14.764	
3,200.0	3,198.1	3,190.6	3,170.1	5.8	7.5	-57.52	170.5	174.0	179.6	167.9	11.67	15.383	
3,300.0	3,298.1	3,289.8	3,268.0	6.0	7.8	-56.40	180.3	186.6	192.0	180.0	12.02	15.972	
3,400.0	3,398.0	3,388.9	3,365.9	6.2	8.1	-55.41	190.2	199.2	204.5	192.2	12.37	16.531	
3,500.0	3,497.9	3,488.1	3,463.7	6.4	8.4	-54.54	200.0	211.7	217.1	204.4	12.72	17.062	
3,600.0	3,597.8	3,587.3	3,561.6	6.6	8.7	-53.76	209.8	224.3	229.7	216.6	13.08	17.567	
3,700.0	3,697.8	3,686.4	3,659.4	6.7	9.1	-53.07	219.6	236.9	242.4	228.9	13.43	18.048	
3,800.0	3,797.7	3,785.6	3,757.3	6.9	9.4	-52.44	229.5	249.5	255.1	241.3	13.78	18.506	
3,900.0	3,897.6	3,884.7	3,855.2	7.1	9.7	-51.88	239.3	262.0	267.8	253.6	14.14	18.942	
4,000.0	3,997.5	3,983.9	3,953.0	7.3	10.0	-51.36	249.1	274.6	280.5	266.0	14.49	19.358	
4,100.0	4,097.5	4,083.0	4,050.9	7.5	10.4	-50.89	258.9	287.2	293.2	278.4	14.84	19.756	
4,200.0	4,197.4	4,182.2	4,148.8	7.7	10.7	-50.46	268.8	299.8	306.0	290.8	15.20	20.135	
4,300.0	4,297.3	4,281.3	4,246.6	7.9	11.0	-50.06	278.6	312.3	318.8	303.3	15.55	20.498	
4,400.0	4,397.2	4,380.5	4,344.5	8.0	11.3	-49.70	288.4	324.9	331.6	315.7	15.91	20.845	
4,500.0	4,497.1	4,479.7	4,442.4	8.2	11.6	-49.36	298.2	337.5	344.4	328.2	16.26	21.178	
4,600.0	4,597.1	4,578.8	4,540.2	8.4	12.0	-49.04	308.0	350.1	357.2	340.6	16.62	21.496	
4,700.0	4,697.0	4,678.0	4,638.1	8.6	12.3	-48.75	317.9	362.6	370.1	353.1	16.97	21.802	
4,800.0	4,796.9	4,777.1	4,735.9	8.8	12.6	-48.48	327.7	375.2	382.9	365.6	17.33	22.095	
4,900.0	4,896.8	4,876.3	4,833.8	9.0	12.9	-48.22	337.5	387.8	395.8	378.1	17.69	22.377	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Sosa 2E-7H-E168 - HZ - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,996.8	4,975.4	4,931.7	9.2	13.3	-47.98	347.3	400.3	408.6	390.6	18.04	22.648	
5,100.0	5,096.7	5,074.6	5,029.5	9.4	13.6	-47.76	357.2	412.9	421.5	403.1	18.40	22.909	
5,200.0	5,196.6	5,173.7	5,127.4	9.5	13.9	-47.55	367.0	425.5	434.4	415.6	18.76	23.160	
5,300.0	5,296.5	5,272.9	5,225.3	9.7	14.3	-47.35	376.8	438.1	447.3	428.1	19.11	23.402	
5,400.0	5,396.5	5,372.1	5,323.1	9.9	14.6	-47.16	386.6	450.6	460.1	440.7	19.47	23.635	
5,500.0	5,496.4	5,471.2	5,421.0	10.1	14.9	-46.98	396.5	463.2	473.0	453.2	19.82	23.860	
5,600.0	5,596.3	5,570.4	5,518.9	10.3	15.2	-46.81	406.3	475.8	485.9	465.7	20.18	24.077	
5,700.0	5,696.2	5,669.5	5,616.7	10.5	15.6	-46.65	416.1	488.4	498.8	478.3	20.54	24.286	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-82.56	5.2	-40.1	40.5				
100.0	100.0	98.0	98.0	0.1	0.1	-82.56	5.2	-40.1	40.5	40.2	0.26	156.187	
200.0	200.0	198.0	198.0	0.3	0.3	-82.56	5.2	-40.1	40.5	39.9	0.61	66.649	
300.0	300.0	298.0	298.0	0.5	0.5	-82.56	5.2	-40.1	40.5	39.5	0.96	42.324	
400.0	400.0	398.6	398.6	0.7	0.7	-81.85	5.6	-39.4	39.8	38.5	1.31	30.452	
500.0	500.0	499.1	499.0	0.8	0.8	-79.51	6.9	-37.1	37.7	36.1	1.66	22.744	
600.0	600.0	599.5	599.3	1.0	1.0	-74.98	8.9	-33.2	34.4	32.4	2.01	17.103	
700.0	700.0	699.7	699.4	1.2	1.2	-151.53	11.8	-27.8	31.0	28.6	2.38	13.041	
800.0	800.0	799.9	799.2	1.4	1.4	-141.95	15.5	-20.9	28.7	25.9	2.76	10.385	
823.5	823.4	823.3	822.6	1.4	1.5	-139.37	16.5	-19.0	28.3	25.5	2.86	9.919	
900.0	899.9	899.9	898.8	1.5	1.7	-129.55	20.0	-12.4	27.5	24.3	3.18	8.665	
947.4	947.2	947.2	945.8	1.6	1.8	-122.25	22.4	-7.9	27.3	23.9	3.39	8.073	CC, ES
1,000.0	999.8	999.6	997.9	1.7	1.9	-113.24	25.3	-2.5	27.6	24.0	3.62	7.637	
1,100.0	1,099.7	1,099.1	1,096.5	1.9	2.2	-95.11	31.4	9.0	30.3	26.3	4.05	7.489	SF
1,200.0	1,199.7	1,198.2	1,194.6	2.1	2.5	-78.77	38.2	21.9	36.4	31.9	4.43	8.211	
1,300.0	1,299.6	1,296.9	1,291.9	2.3	2.8	-66.17	45.8	36.3	45.7	40.9	4.77	9.582	
1,400.0	1,399.5	1,395.2	1,388.5	2.5	3.1	-57.09	54.2	52.0	57.9	52.8	5.09	11.360	
1,500.0	1,499.4	1,494.0	1,485.5	2.6	3.5	-50.86	63.0	68.6	71.7	66.3	5.42	13.245	
1,600.0	1,599.4	1,592.7	1,582.5	2.8	3.8	-46.67	71.9	85.2	86.2	80.4	5.75	14.997	
1,700.0	1,699.3	1,691.5	1,679.5	3.0	4.2	-43.69	80.7	101.8	100.9	94.9	6.08	16.597	
1,800.0	1,799.2	1,790.3	1,776.4	3.2	4.5	-41.48	89.5	118.4	115.9	109.5	6.42	18.051	
1,900.0	1,899.1	1,889.1	1,873.4	3.4	4.9	-39.77	98.3	135.0	131.0	124.2	6.76	19.370	
2,000.0	1,999.0	1,987.9	1,970.4	3.6	5.3	-38.41	107.1	151.6	146.2	139.1	7.11	20.569	
2,100.0	2,099.0	2,086.7	2,067.4	3.8	5.6	-37.32	116.0	168.2	161.4	154.0	7.45	21.662	
2,200.0	2,198.9	2,185.5	2,164.4	3.9	6.0	-36.41	124.8	184.8	176.7	168.9	7.80	22.662	
2,300.0	2,298.8	2,284.3	2,261.4	4.1	6.4	-35.64	133.6	201.4	192.0	183.9	8.15	23.578	
2,400.0	2,398.7	2,383.0	2,358.3	4.3	6.7	-34.99	142.4	218.0	207.4	198.9	8.49	24.421	
2,500.0	2,498.7	2,481.8	2,455.3	4.5	7.1	-34.43	151.2	234.6	222.8	213.9	8.84	25.199	
2,600.0	2,598.6	2,580.6	2,552.3	4.7	7.5	-33.94	160.1	251.2	238.2	229.0	9.19	25.918	
2,700.0	2,698.5	2,679.4	2,649.3	4.9	7.8	-33.51	168.9	267.8	253.6	244.1	9.54	26.585	
2,800.0	2,798.4	2,778.2	2,746.3	5.1	8.2	-33.13	177.7	284.4	269.0	259.1	9.89	27.206	
2,900.0	2,898.4	2,877.0	2,843.3	5.2	8.6	-32.79	186.5	301.0	284.5	274.2	10.24	27.785	
3,000.0	2,998.3	2,975.8	2,940.2	5.4	9.0	-32.48	195.3	317.6	299.9	289.3	10.59	28.326	
3,100.0	3,098.2	3,074.6	3,037.2	5.6	9.3	-32.21	204.2	334.2	315.4	304.4	10.94	28.832	
3,200.0	3,198.1	3,173.3	3,134.2	5.8	9.7	-31.96	213.0	350.8	330.8	319.5	11.29	29.307	
3,300.0	3,298.1	3,272.1	3,231.2	6.0	10.1	-31.73	221.8	367.4	346.3	334.7	11.64	29.754	
3,400.0	3,398.0	3,370.9	3,328.2	6.2	10.4	-31.53	230.6	384.0	361.8	349.8	11.99	30.174	
3,500.0	3,497.9	3,469.7	3,425.2	6.4	10.8	-31.34	239.5	400.6	377.2	364.9	12.34	30.571	
3,600.0	3,597.8	3,568.5	3,522.1	6.6	11.2	-31.16	248.3	417.2	392.7	380.0	12.69	30.946	
3,700.0	3,697.8	3,667.3	3,619.1	6.7	11.6	-31.00	257.1	433.8	408.2	395.2	13.04	31.301	
3,800.0	3,797.7	3,766.1	3,716.1	6.9	11.9	-30.85	265.9	450.4	423.7	410.3	13.39	31.637	
3,900.0	3,897.6	3,864.9	3,813.1	7.1	12.3	-30.71	274.7	467.0	439.2	425.4	13.74	31.957	
4,000.0	3,997.5	3,963.7	3,910.1	7.3	12.7	-30.58	283.6	483.6	454.7	440.6	14.09	32.260	
4,100.0	4,097.5	4,062.4	4,007.1	7.5	13.0	-30.46	292.4	500.2	470.1	455.7	14.44	32.549	
4,200.0	4,197.4	4,161.2	4,104.0	7.7	13.4	-30.34	301.2	516.8	485.6	470.8	14.80	32.824	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-91.27	-0.8	-35.2	35.2				
100.0	100.0	98.0	98.0	0.1	0.1	-91.27	-0.8	-35.2	35.2	34.9	0.26	135.729	
200.0	200.0	198.0	198.0	0.3	0.3	-91.27	-0.8	-35.2	35.2	34.6	0.61	57.919	
300.0	300.0	298.6	298.6	0.5	0.5	-90.76	-0.5	-34.4	34.4	33.4	0.96	35.895	
400.0	400.0	399.1	399.0	0.7	0.7	-89.05	0.5	-32.0	32.0	30.7	1.31	24.382	
500.0	500.0	499.4	499.3	0.8	0.8	-85.51	2.2	-27.9	28.0	26.4	1.67	16.786	
600.0	600.0	599.6	599.3	1.0	1.0	-78.55	4.5	-22.3	22.8	20.7	2.03	11.201	
700.0	700.0	699.7	699.0	1.2	1.3	-148.75	7.5	-15.0	17.6	15.2	2.40	7.310	
800.0	800.0	799.6	798.5	1.4	1.5	-125.64	11.1	-6.2	14.4	11.6	2.83	5.097	
823.5	823.4	823.0	821.8	1.4	1.6	-118.97	12.1	-3.9	14.2	11.3	2.94	4.827	
839.5	839.4	839.0	837.7	1.4	1.6	-114.23	12.7	-2.2	14.2	11.1	3.02	4.693	CC, ES
900.0	899.9	899.3	897.5	1.5	1.7	-95.39	15.4	4.3	14.9	11.6	3.28	4.554	SF
1,000.0	999.8	998.7	996.1	1.7	2.0	-68.64	20.3	16.2	19.8	16.2	3.62	5.471	
1,100.0	1,099.7	1,097.8	1,094.1	1.9	2.3	-52.19	25.9	29.8	28.6	24.6	3.93	7.269	
1,200.0	1,199.7	1,196.5	1,191.5	2.1	2.6	-42.66	32.1	44.8	40.1	35.8	4.24	9.440	
1,300.0	1,299.6	1,294.7	1,288.0	2.3	3.0	-36.79	38.8	61.3	53.7	49.2	4.57	11.766	
1,400.0	1,399.5	1,392.4	1,383.8	2.5	3.4	-32.91	46.2	79.2	69.4	64.5	4.90	14.163	
1,500.0	1,499.4	1,489.5	1,478.6	2.6	3.8	-30.19	54.1	98.5	86.8	81.6	5.23	16.593	
1,600.0	1,599.4	1,586.6	1,573.2	2.8	4.2	-28.19	62.6	119.2	105.9	100.4	5.57	19.017	
1,700.0	1,699.3	1,684.7	1,668.5	3.0	4.6	-26.76	71.3	140.3	125.4	119.5	5.91	21.217	
1,800.0	1,799.2	1,782.7	1,763.8	3.2	5.0	-25.72	80.0	161.5	145.0	138.7	6.26	23.179	
1,900.0	1,899.1	1,880.8	1,859.2	3.4	5.4	-24.92	88.7	182.7	164.6	158.0	6.60	24.938	
2,000.0	1,999.0	1,978.8	1,954.5	3.6	5.9	-24.30	97.4	203.8	184.2	177.3	6.94	26.523	
2,100.0	2,099.0	2,076.8	2,049.8	3.8	6.3	-23.79	106.1	225.0	203.8	196.5	7.29	27.959	
2,200.0	2,198.9	2,174.9	2,145.2	3.9	6.7	-23.37	114.8	246.1	223.5	215.8	7.64	29.265	
2,300.0	2,298.8	2,272.9	2,240.5	4.1	7.2	-23.02	123.5	267.3	243.1	235.1	7.98	30.458	
2,400.0	2,398.7	2,371.0	2,335.8	4.3	7.6	-22.73	132.2	288.5	262.8	254.4	8.33	31.552	
2,500.0	2,498.7	2,469.0	2,431.2	4.5	8.0	-22.47	140.8	309.6	282.4	273.8	8.68	32.558	
2,600.0	2,598.6	2,567.0	2,526.5	4.7	8.5	-22.25	149.5	330.8	302.1	293.1	9.02	33.487	
2,700.0	2,698.5	2,665.1	2,621.9	4.9	8.9	-22.05	158.2	352.0	321.8	312.4	9.37	34.348	
2,800.0	2,798.4	2,763.1	2,717.2	5.1	9.4	-21.88	166.9	373.1	341.5	331.7	9.72	35.147	
2,900.0	2,898.4	2,861.2	2,812.5	5.2	9.8	-21.73	175.6	394.3	361.1	351.1	10.06	35.891	
3,000.0	2,998.3	2,959.2	2,907.9	5.4	10.2	-21.59	184.3	415.4	380.8	370.4	10.41	36.585	
3,100.0	3,098.2	3,057.3	3,003.2	5.6	10.7	-21.46	193.0	436.6	400.5	389.8	10.76	37.235	
3,200.0	3,198.1	3,155.3	3,098.5	5.8	11.1	-21.35	201.7	457.8	420.2	409.1	11.10	37.844	
3,300.0	3,298.1	3,253.3	3,193.9	6.0	11.6	-21.25	210.4	478.9	439.9	428.4	11.45	38.416	
3,400.0	3,398.0	3,351.4	3,289.2	6.2	12.0	-21.15	219.1	500.1	459.6	447.8	11.80	38.955	
3,500.0	3,497.9	3,449.4	3,384.5	6.4	12.4	-21.07	227.8	521.2	479.3	467.1	12.14	39.463	
3,600.0	3,597.8	3,547.5	3,479.9	6.6	12.9	-20.99	236.5	542.4	498.9	486.5	12.49	39.942	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Woolley-Becky 2C-7H-E168
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky)	**MD Reference:**	WELL @ 5021.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Woolley-Becky 2C-7H-E168	**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 #3	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 5021.0ft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Woolley-Becky 2C-7H-E168
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.29°