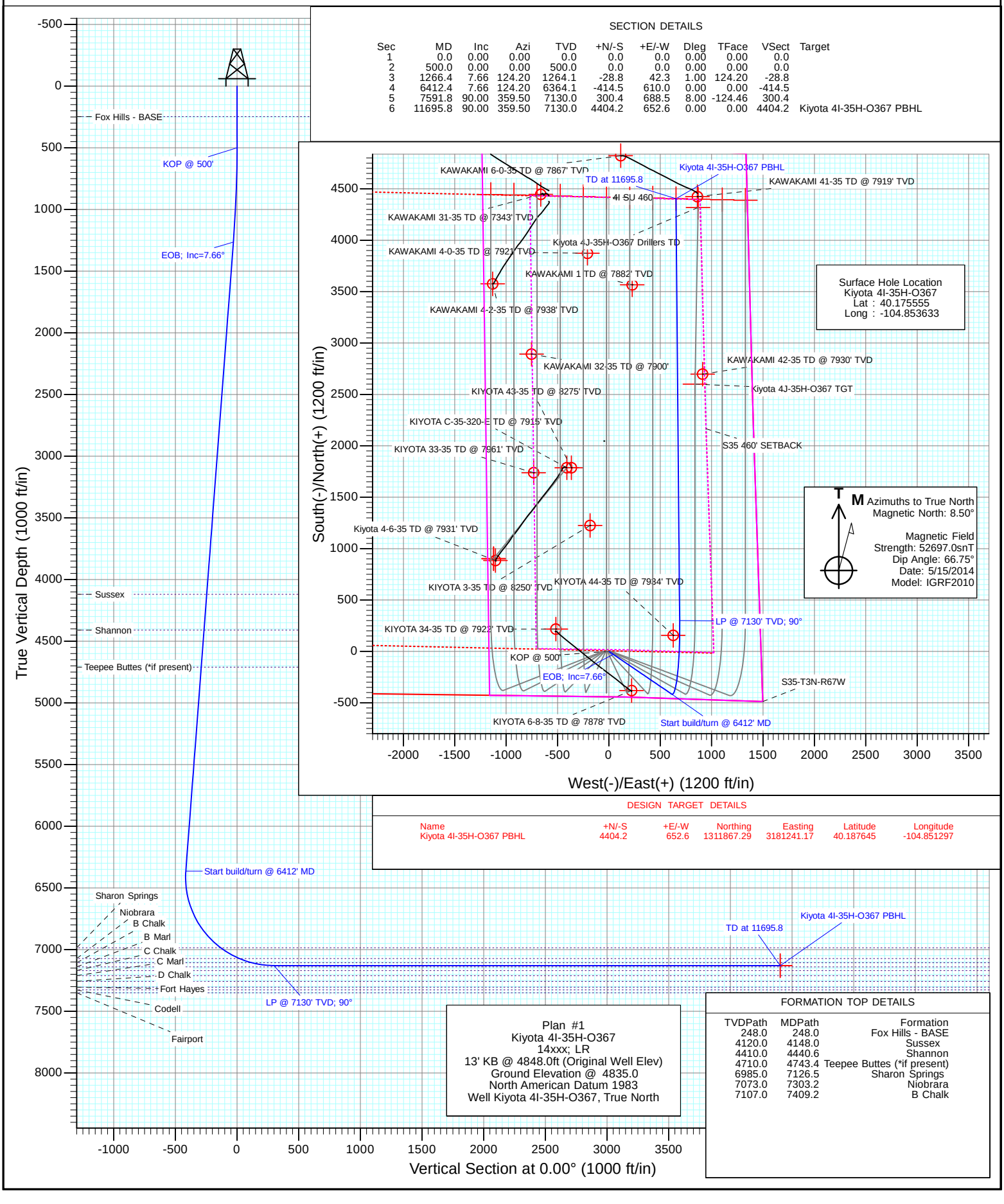
encana natural gas

Project: DJ Wattenberg
Site: S35-T3N-R67W (Kiyota)
Well: Kiyota 4I-35H-O367
Wellbore: Hz
Design: Plan #1

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	500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0	
3	1266.4	7.66	124.20	1264.1	-28.8	42.3	1.00	124.20	-28.8	
4	6412.4	7.66	124.20	6364.1	-414.5	610.0	0.00	0.00	-414.5	
5	7591.8	90.00	359.50	7130.0	300.4	688.5	8.00	-124.46	300.4	
6	11695.8	90.00	359.50	7130.0	4404.2	652.6	0.00	0.00	4404.2	Kiyota 4I-35H-O367 PBHL



DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Kiyota 4I-35H-O367 PBHL	4404.2	652.6	1311867.29	3181241.17	40.187645	-104.851297

Plan #1
Kiyota 4I-35H-O367
14xxx; LR
13' KB @ 4848.0ft (Original Well Elev)
Ground Elevation @ 4835.0
North American Datum 1983
Well Kiyota 4I-35H-O367, True North

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
248.0	248.0	Fox Hills - BASE
4120.0	4148.0	Sussex
4410.0	4440.6	Shannon
4710.0	4743.4	Teepee Buttes (*if present)
6985.0	7126.5	Sharon Springs
7073.0	7303.2	Niobrara
7107.0	7409.2	B Chalk

Planning Report

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site:	S35-T3N-R67W (Kiyota)	**North Reference:**	True
Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Project DJ Wattenberg

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

Site S35-T3N-R67W (Kiyota)

Site Position:		**Northing:**	1,309,242.22 ft	**Latitude:**	40.180460
From:	Lat/Long	**Easting:**	3,180,197.74 ft	**Longitude:**	-104.855100
Position Uncertainty:	0.0 ft	**Slot Radius:**	13.200 in	**Grid Convergence:**	0.42 °

Well Kiyota 4I-35H-O367

Well Position	**+N/-S**	0.0 ft	**Northing:**	1,307,458.44 ft	**Latitude:**	40.175555
	+E/-W	0.0 ft	**Easting:**	3,180,620.65 ft	**Longitude:**	-104.853633
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,835.0 ft

Wellbore Hz

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/15/2014	8.50	66.75	52,697

Design Plan #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	0.00

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,266.4	7.66	124.20	1,264.1	-28.8	42.3	1.00	1.00	0.00	124.20	
6,412.4	7.66	124.20	6,364.1	-414.5	610.0	0.00	0.00	0.00	0.00	
7,591.8	90.00	359.50	7,130.0	300.4	688.5	8.00	6.98	-10.57	-124.46	
11,695.8	90.00	359.50	7,130.0	4,404.2	652.6	0.00	0.00	0.00	0.00	Kiyota 4I-35H-O367 F

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
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Project:	DJ Wattenberg	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site:	S35-T3N-R67W (Kiyota)	**North Reference:**	True
Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
248.0	0.00	0.00	248.0	0.0	0.0	0.0	0.00	0.00	Fox Hills - BASE
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	KOP @ 500'
600.0	1.00	124.20	600.0	-0.5	0.7	-0.5	1.00	1.00	
700.0	2.00	124.20	700.0	-2.0	2.9	-2.0	1.00	1.00	
800.0	3.00	124.20	799.9	-4.4	6.5	-4.4	1.00	1.00	
900.0	4.00	124.20	899.7	-7.8	11.5	-7.8	1.00	1.00	
1,000.0	5.00	124.20	999.4	-12.3	18.0	-12.3	1.00	1.00	
1,100.0	6.00	124.20	1,098.9	-17.6	26.0	-17.6	1.00	1.00	
1,200.0	7.00	124.20	1,198.3	-24.0	35.3	-24.0	1.00	1.00	
1,266.4	7.66	124.20	1,264.1	-28.8	42.3	-28.8	1.00	1.00	EOB; Inc=7.66°
1,300.0	7.66	124.20	1,297.4	-31.3	46.0	-31.3	0.00	0.00	
1,400.0	7.66	124.20	1,396.5	-38.8	57.1	-38.8	0.00	0.00	
1,500.0	7.66	124.20	1,495.6	-46.3	68.1	-46.3	0.00	0.00	
1,600.0	7.66	124.20	1,594.7	-53.8	79.1	-53.8	0.00	0.00	
1,700.0	7.66	124.20	1,693.8	-61.3	90.2	-61.3	0.00	0.00	
1,800.0	7.66	124.20	1,793.0	-68.8	101.2	-68.8	0.00	0.00	
1,900.0	7.66	124.20	1,892.1	-76.3	112.2	-76.3	0.00	0.00	
2,000.0	7.66	124.20	1,991.2	-83.8	123.3	-83.8	0.00	0.00	
2,100.0	7.66	124.20	2,090.3	-91.3	134.3	-91.3	0.00	0.00	
2,200.0	7.66	124.20	2,189.4	-98.7	145.3	-98.7	0.00	0.00	
2,300.0	7.66	124.20	2,288.5	-106.2	156.3	-106.2	0.00	0.00	
2,400.0	7.66	124.20	2,387.6	-113.7	167.4	-113.7	0.00	0.00	
2,500.0	7.66	124.20	2,486.7	-121.2	178.4	-121.2	0.00	0.00	
2,600.0	7.66	124.20	2,585.8	-128.7	189.4	-128.7	0.00	0.00	
2,700.0	7.66	124.20	2,684.9	-136.2	200.5	-136.2	0.00	0.00	
2,800.0	7.66	124.20	2,784.0	-143.7	211.5	-143.7	0.00	0.00	
2,900.0	7.66	124.20	2,883.1	-151.2	222.5	-151.2	0.00	0.00	
3,000.0	7.66	124.20	2,982.2	-158.7	233.6	-158.7	0.00	0.00	
3,100.0	7.66	124.20	3,081.3	-166.2	244.6	-166.2	0.00	0.00	
3,200.0	7.66	124.20	3,180.4	-173.7	255.6	-173.7	0.00	0.00	
3,300.0	7.66	124.20	3,279.6	-181.2	266.6	-181.2	0.00	0.00	
3,400.0	7.66	124.20	3,378.7	-188.7	277.7	-188.7	0.00	0.00	
3,500.0	7.66	124.20	3,477.8	-196.2	288.7	-196.2	0.00	0.00	
3,600.0	7.66	124.20	3,576.9	-203.7	299.7	-203.7	0.00	0.00	
3,700.0	7.66	124.20	3,676.0	-211.2	310.8	-211.2	0.00	0.00	
3,800.0	7.66	124.20	3,775.1	-218.7	321.8	-218.7	0.00	0.00	
3,900.0	7.66	124.20	3,874.2	-226.2	332.8	-226.2	0.00	0.00	
4,000.0	7.66	124.20	3,973.3	-233.7	343.9	-233.7	0.00	0.00	
4,100.0	7.66	124.20	4,072.4	-241.2	354.9	-241.2	0.00	0.00	
4,148.0	7.66	124.20	4,120.0	-244.8	360.2	-244.8	0.00	0.00	Sussex
4,200.0	7.66	124.20	4,171.5	-248.7	365.9	-248.7	0.00	0.00	
4,300.0	7.66	124.20	4,270.6	-256.2	377.0	-256.2	0.00	0.00	
4,400.0	7.66	124.20	4,369.7	-263.7	388.0	-263.7	0.00	0.00	
4,440.6	7.66	124.20	4,410.0	-266.7	392.5	-266.7	0.00	0.00	Shannon
4,500.0	7.66	124.20	4,468.8	-271.1	399.0	-271.1	0.00	0.00	
4,600.0	7.66	124.20	4,567.9	-278.6	410.0	-278.6	0.00	0.00	
4,700.0	7.66	124.20	4,667.0	-286.1	421.1	-286.1	0.00	0.00	

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Site:	S35-T3N-R67W (Kiyota)	**North Reference:**	True
Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,743.4	7.66	124.20	4,710.0	-289.4	425.9	-289.4	0.00	0.00	Teepee Buttes (*if present)
4,800.0	7.66	124.20	4,766.2	-293.6	432.1	-293.6	0.00	0.00	
4,900.0	7.66	124.20	4,865.3	-301.1	443.1	-301.1	0.00	0.00	
5,000.0	7.66	124.20	4,964.4	-308.6	454.2	-308.6	0.00	0.00	
5,100.0	7.66	124.20	5,063.5	-316.1	465.2	-316.1	0.00	0.00	
5,200.0	7.66	124.20	5,162.6	-323.6	476.2	-323.6	0.00	0.00	
5,300.0	7.66	124.20	5,261.7	-331.1	487.3	-331.1	0.00	0.00	
5,400.0	7.66	124.20	5,360.8	-338.6	498.3	-338.6	0.00	0.00	
5,500.0	7.66	124.20	5,459.9	-346.1	509.3	-346.1	0.00	0.00	
5,600.0	7.66	124.20	5,559.0	-353.6	520.3	-353.6	0.00	0.00	
5,700.0	7.66	124.20	5,658.1	-361.1	531.4	-361.1	0.00	0.00	
5,800.0	7.66	124.20	5,757.2	-368.6	542.4	-368.6	0.00	0.00	
5,900.0	7.66	124.20	5,856.3	-376.1	553.4	-376.1	0.00	0.00	
6,000.0	7.66	124.20	5,955.4	-383.6	564.5	-383.6	0.00	0.00	
6,100.0	7.66	124.20	6,054.5	-391.1	575.5	-391.1	0.00	0.00	
6,200.0	7.66	124.20	6,153.6	-398.6	586.5	-398.6	0.00	0.00	
6,300.0	7.66	124.20	6,252.8	-406.1	597.6	-406.1	0.00	0.00	
6,400.0	7.66	124.20	6,351.9	-413.6	608.6	-413.6	0.00	0.00	
6,412.4	7.66	124.20	6,364.1	-414.5	610.0	-414.5	0.00	0.00	Start build/turn @ 6412' MD
6,500.0	6.85	66.62	6,451.2	-415.7	619.6	-415.7	8.00	-0.93	
6,600.0	12.37	29.80	6,549.8	-404.0	630.4	-404.0	8.00	5.52	
6,700.0	19.66	17.54	6,645.9	-378.7	640.8	-378.7	8.00	7.29	
6,800.0	27.34	11.86	6,737.5	-340.1	650.6	-340.1	8.00	7.68	
6,900.0	35.16	8.54	6,823.0	-289.0	659.6	-289.0	8.00	7.82	
7,000.0	43.03	6.31	6,900.5	-226.6	667.7	-226.6	8.00	7.88	
7,100.0	50.94	4.65	6,968.7	-153.8	674.6	-153.8	8.00	7.91	
7,126.5	53.04	4.27	6,985.0	-133.0	676.2	-133.0	8.00	7.92	Sharon Springs
7,200.0	58.87	3.33	7,026.1	-72.3	680.2	-72.3	8.00	7.93	
7,300.0	66.81	2.22	7,071.7	16.5	684.5	16.5	8.00	7.94	
7,303.2	67.06	2.18	7,073.0	19.5	684.6	19.5	8.00	7.94	Niobrara
7,400.0	74.75	1.23	7,104.6	110.8	687.3	110.8	8.00	7.95	
7,409.2	75.49	1.14	7,107.0	119.8	687.5	119.8	8.00	7.95	B Chalk
7,500.0	82.70	0.31	7,124.2	208.8	688.6	208.8	8.00	7.95	
7,591.8	90.00	359.50	7,130.0	300.4	688.5	300.4	8.00	7.95	LP @ 7130' TVD; 90°
7,600.0	90.00	359.50	7,130.0	308.6	688.4	308.6	0.00	0.00	
7,700.0	90.00	359.50	7,130.0	408.6	687.5	408.6	0.00	0.00	
7,800.0	90.00	359.50	7,130.0	508.6	686.6	508.6	0.00	0.00	
7,900.0	90.00	359.50	7,130.0	608.5	685.8	608.5	0.00	0.00	
8,000.0	90.00	359.50	7,130.0	708.5	684.9	708.5	0.00	0.00	
8,100.0	90.00	359.50	7,130.0	808.5	684.0	808.5	0.00	0.00	
8,200.0	90.00	359.50	7,130.0	908.5	683.1	908.5	0.00	0.00	
8,300.0	90.00	359.50	7,130.0	1,008.5	682.3	1,008.5	0.00	0.00	
8,400.0	90.00	359.50	7,130.0	1,108.5	681.4	1,108.5	0.00	0.00	
8,500.0	90.00	359.50	7,130.0	1,208.5	680.5	1,208.5	0.00	0.00	
8,600.0	90.00	359.50	7,130.0	1,308.5	679.7	1,308.5	0.00	0.00	
8,700.0	90.00	359.50	7,130.0	1,408.5	678.8	1,408.5	0.00	0.00	
8,800.0	90.00	359.50	7,130.0	1,508.5	677.9	1,508.5	0.00	0.00	
8,900.0	90.00	359.50	7,130.0	1,608.5	677.0	1,608.5	0.00	0.00	
9,000.0	90.00	359.50	7,130.0	1,708.5	676.2	1,708.5	0.00	0.00	
9,100.0	90.00	359.50	7,130.0	1,808.5	675.3	1,808.5	0.00	0.00	
9,200.0	90.00	359.50	7,130.0	1,908.5	674.4	1,908.5	0.00	0.00	
9,300.0	90.00	359.50	7,130.0	2,008.5	673.5	2,008.5	0.00	0.00	

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Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
9,400.0	90.00	359.50	7,130.0	2,108.5	672.7	2,108.5	0.00	0.00	
9,500.0	90.00	359.50	7,130.0	2,208.5	671.8	2,208.5	0.00	0.00	
9,600.0	90.00	359.50	7,130.0	2,308.5	670.9	2,308.5	0.00	0.00	
9,700.0	90.00	359.50	7,130.0	2,408.5	670.1	2,408.5	0.00	0.00	
9,800.0	90.00	359.50	7,130.0	2,508.5	669.2	2,508.5	0.00	0.00	
9,900.0	90.00	359.50	7,130.0	2,608.5	668.3	2,608.5	0.00	0.00	
10,000.0	90.00	359.50	7,130.0	2,708.5	667.4	2,708.5	0.00	0.00	
10,100.0	90.00	359.50	7,130.0	2,808.5	666.6	2,808.5	0.00	0.00	
10,200.0	90.00	359.50	7,130.0	2,908.5	665.7	2,908.5	0.00	0.00	
10,300.0	90.00	359.50	7,130.0	3,008.5	664.8	3,008.5	0.00	0.00	
10,400.0	90.00	359.50	7,130.0	3,108.5	663.9	3,108.5	0.00	0.00	
10,500.0	90.00	359.50	7,130.0	3,208.4	663.1	3,208.4	0.00	0.00	
10,600.0	90.00	359.50	7,130.0	3,308.4	662.2	3,308.4	0.00	0.00	
10,700.0	90.00	359.50	7,130.0	3,408.4	661.3	3,408.4	0.00	0.00	
10,800.0	90.00	359.50	7,130.0	3,508.4	660.5	3,508.4	0.00	0.00	
10,900.0	90.00	359.50	7,130.0	3,608.4	659.6	3,608.4	0.00	0.00	
11,000.0	90.00	359.50	7,130.0	3,708.4	658.7	3,708.4	0.00	0.00	
11,100.0	90.00	359.50	7,130.0	3,808.4	657.8	3,808.4	0.00	0.00	
11,200.0	90.00	359.50	7,130.0	3,908.4	657.0	3,908.4	0.00	0.00	
11,300.0	90.00	359.50	7,130.0	4,008.4	656.1	4,008.4	0.00	0.00	
11,400.0	90.00	359.50	7,130.0	4,108.4	655.2	4,108.4	0.00	0.00	
11,500.0	90.00	359.50	7,130.0	4,208.4	654.3	4,208.4	0.00	0.00	
11,600.0	90.00	359.50	7,130.0	4,308.4	653.5	4,308.4	0.00	0.00	
11,695.8	90.00	359.50	7,130.0	4,404.2	652.6	4,404.2	0.00	0.00	TD at 11695.8

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
Kiyota 4I-35H-O367 PBH - plan hits target center - Point	0.00	0.00	7,130.0	4,404.2	652.6	1,311,867.29	3,181,241.17	40.187645	-104.851297

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
248.0	248.0	Fox Hills - BASE			
4,148.0	4,120.0	Sussex			
4,440.6	4,410.0	Shannon			
4,743.4	4,710.0	Teepee Buttes (*if present)			
7,126.5	6,985.0	Sharon Springs			
7,303.2	7,073.0	Niobrara			
7,409.2	7,107.0	B Chalk			

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site:	S35-T3N-R67W (Kiyota)	**North Reference:**	True
Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
500.0	500.0	0.0	0.0	KOP @ 500'
1,266.4	1,264.1	-28.8	42.3	EOB; Inc=7.66°
6,412.4	6,364.1	-414.5	610.0	Start build/turn @ 6412' MD
7,591.8	7,130.0	300.4	688.5	LP @ 7130' TVD; 90°
11,695.8	7,130.0	4,404.2	652.6	TD at 11695.8

EnCana Oil & Gas (USA) Inc

DJ Wattenberg
S35-T3N-R67W (Kiyota)
Kiyota 4I-35H-O367
Hz
Plan #1

Anticollision Report

16 May, 2014

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Reference	Plan #1

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	**Error Model:**	Systematic Ellipse
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0ft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**		

Survey Tool Program **Date** 5/16/2014

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	11,691.3	Plan #1 (Hz)	Geolink MWD	Geolink MWD

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
S35-T3N-R67W (Kiyota)						
KAWAKAMI 1 (EXISTING) - ENCANA WELL - NO SURV	10,861.0	7,102.0	433.4	355.6	5.571	CC, ES
KAWAKAMI 1 (EXISTING) - ENCANA WELL - NO SURV	10,900.0	7,102.0	435.1	356.7	5.546	SF
KAWAKAMI 31-35 (EXISTING) - ENCANA WELL - SURV						Out of range
KAWAKAMI 32-35 (EXISTING) - ENCANA WELL - NO S						Out of range
KAWAKAMI 4-0-35 (EXISTING) - ENCANA WELL - SUR						Out of range
KAWAKAMI 41-35 (EXISTING) - ENCANA WELL - NO S	11,695.8	7,093.0	209.7	117.5	2.274	CC, ES, SF
KAWAKAMI 42-35 (EXISTING) - ENCANA WELL - NO S	9,986.9	7,092.0	243.9	181.1	3.883	CC, ES
KAWAKAMI 42-35 (EXISTING) - ENCANA WELL - NO S	10,000.0	7,092.0	244.2	181.2	3.875	SF
KAWAKAMI 4-2-35 (EXISTING) - ENCANA WELL - SUR						Out of range
KAWAKAMI 6-0-35 (EXISTING) - ENCANA WELL - SUR	11,695.8	7,170.3	671.7	577.8	7.154	CC, ES, SF
KIYOTA 33-35 (EXISTING) - ENCANA WELL - NO SURV						Out of range
KIYOTA 3-35 (EXISTING) - ENCANA WELL - NO SURVE	8,524.1	7,106.0	863.4	824.6	22.266	CC, ES
KIYOTA 3-35 (EXISTING) - ENCANA WELL - NO SURVE	8,800.0	7,106.0	906.4	863.3	21.024	SF
KIYOTA 34-35 (EXISTING) - ENCANA WELL - NO SURV	500.0	486.0	559.8	558.1	329.595	CC, ES
KIYOTA 34-35 (EXISTING) - ENCANA WELL - NO SURV	4,200.0	4,157.5	997.3	982.7	68.389	SF
KIYOTA 43-35 (EXISTING) - ENCANA WELL - NO SURV						Out of range
KIYOTA 44-35 (EXISTING) - ENCANA WELL - NO SURV	7,445.9	7,090.3	62.4	36.7	2.425	CC, ES, SF
KIYOTA 4-6-35 (EXISTING) - ENCANA WELL - Plan #2						Out of range
KIYOTA 4-6-35 (EXISTING) - ENCANA WELL - SURVEY						Out of range
Kiyota 4A-35H-O367 - Hz - Plan #1	200.0	200.0	60.1	59.4	92.040	CC, ES
Kiyota 4A-35H-O367 - Hz - Plan #1	700.0	693.7	83.2	80.8	34.743	SF
Kiyota 4B-35H-O367 - Hz - Plan #1	300.0	300.0	52.5	51.5	52.439	CC, ES
Kiyota 4B-35H-O367 - Hz - Plan #1	700.0	696.0	67.9	65.5	28.329	SF
Kiyota 4C-35H-O367 - Hz - Plan #1	400.0	400.0	45.0	43.6	33.304	CC, ES
Kiyota 4C-35H-O367 - Hz - Plan #1	700.0	697.7	54.4	52.0	22.672	SF
Kiyota 4D-35H-O367 - Hz - Plan #1	500.0	500.0	37.4	35.7	22.027	CC, ES
Kiyota 4D-35H-O367 - Hz - Plan #1	700.0	699.0	42.8	40.4	17.828	SF
Kiyota 4E-35H-O367 - Hz - Plan #1	500.0	500.0	29.9	28.2	17.589	CC, ES
Kiyota 4E-35H-O367 - Hz - Plan #1	11,695.8	11,862.6	927.2	771.7	5.962	SF
Kiyota 4F-35H-O367 - Hz - Plan #1	500.0	500.0	22.4	20.7	13.152	CC, ES
Kiyota 4F-35H-O367 - Hz - Plan #1	11,695.8	11,647.8	675.5	515.9	4.231	SF
Kiyota 4G-35H-O367 - Hz - Plan #1	500.0	500.0	15.1	13.4	8.879	CC, ES
Kiyota 4G-35H-O367 - Hz - Plan #1	11,695.8	11,722.1	455.8	297.8	2.886	SF
Kiyota 4H-35H-O367 - Hz - Plan #1	500.0	500.0	7.5	5.8	4.438	CC, ES
Kiyota 4H-35H-O367 - Hz - Plan #1	11,695.8	11,887.6	314.8	197.6	2.685	SF
Kiyota 4J-35H-O367 - Hz - Plan #1	400.0	400.0	7.5	6.2	5.585	CC, ES
Kiyota 4J-35H-O367 - Hz - Plan #1	11,600.0	11,681.2	225.3	76.5	1.514	SF
Kiyota 4K-35H-O367 - Hz - Plan #1	300.0	300.0	15.1	14.1	15.062	CC, ES
Kiyota 4K-35H-O367 - Hz - Plan #1	11,695.8	11,965.4	501.3	357.3	3.481	SF
Kiyota 4L-35H-O367 - Hz - Plan #1	200.0	200.0	22.6	22.0	34.675	CC, ES
Kiyota 4L-35H-O367 - Hz - Plan #1	11,695.8	11,786.9	676.0	516.7	4.244	SF
KIYOTA 6-8-35 (EXISTING) - ENCANA WELL - SURVEY	5,072.0	5,162.1	319.3	295.3	13.298	CC
KIYOTA 6-8-35 (EXISTING) - ENCANA WELL - SURVEY	5,100.0	5,189.4	319.4	295.3	13.232	ES
KIYOTA 6-8-35 (EXISTING) - ENCANA WELL - SURVEY	5,700.0	5,778.2	332.9	306.5	12.603	SF
KIYOTA C-35-320-E (EXISTING) - ENCANA WELL - NO	9,343.2	7,098.0	720.4	668.4	13.858	CC, ES
KIYOTA C-35-320-E (EXISTING) - ENCANA WELL - NO	9,500.0	7,098.0	737.3	682.7	13.503	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KAWAKAMI 1 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 7882-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
10,000.0	7,130.0	7,102.0	7,102.0	52.1	12.4	-90.00	3,565.6	226.6	963.9	900.8	63.05	15.288	
10,100.0	7,130.0	7,102.0	7,102.0	53.7	12.4	-90.00	3,565.6	226.6	875.7	810.9	64.75	13.525	
10,200.0	7,130.0	7,102.0	7,102.0	55.4	12.4	-90.00	3,565.6	226.6	790.4	723.9	66.45	11.894	
10,300.0	7,130.0	7,102.0	7,102.0	57.1	12.4	-90.00	3,565.6	226.6	708.8	640.7	68.16	10.400	
10,400.0	7,130.0	7,102.0	7,102.0	58.7	12.4	-90.00	3,565.6	226.6	632.7	562.8	69.87	9.055	
10,500.0	7,130.0	7,102.0	7,102.0	60.4	12.4	-90.00	3,565.6	226.6	564.0	492.4	71.58	7.879	
10,600.0	7,130.0	7,102.0	7,102.0	62.1	12.4	-90.00	3,565.6	226.6	505.9	432.6	73.30	6.902	
10,700.0	7,130.0	7,102.0	7,102.0	63.8	12.4	-90.00	3,565.6	226.6	462.3	387.3	75.01	6.163	
10,800.0	7,130.0	7,102.0	7,102.0	65.5	12.4	-90.00	3,565.6	226.6	437.6	360.9	76.73	5.703	
10,861.0	7,130.0	7,102.0	7,102.0	66.5	12.4	-90.00	3,565.6	226.6	433.4	355.6	77.78	5.571	CC, ES
10,900.0	7,130.0	7,102.0	7,102.0	67.2	12.4	-90.00	3,565.6	226.6	435.1	356.7	78.45	5.546	SF
11,000.0	7,130.0	7,102.0	7,102.0	68.9	12.4	-90.00	3,565.6	226.6	455.1	374.9	80.18	5.676	
11,100.0	7,130.0	7,102.0	7,102.0	70.6	12.4	-90.00	3,565.6	226.6	494.9	413.0	81.90	6.043	
11,200.0	7,130.0	7,102.0	7,102.0	72.3	12.4	-90.00	3,565.6	226.6	550.2	466.6	83.63	6.580	
11,300.0	7,130.0	7,102.0	7,102.0	74.0	12.4	-90.00	3,565.6	226.6	616.9	531.5	85.35	7.228	
11,400.0	7,130.0	7,102.0	7,102.0	75.7	12.4	-90.00	3,565.6	226.6	691.6	604.6	87.08	7.942	
11,500.0	7,130.0	7,102.0	7,102.0	77.4	12.4	-90.00	3,565.6	226.6	772.1	683.3	88.81	8.694	
11,600.0	7,130.0	7,102.0	7,102.0	79.1	12.4	-90.00	3,565.6	226.6	856.7	766.2	90.54	9.462	
11,695.8	7,130.0	7,102.0	7,102.0	80.7	12.4	-90.00	3,565.6	226.6	940.6	848.4	92.20	10.202	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KAWAKAMI 41-35 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 7919-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
10,800.0	7,130.0	7,093.0	7,093.0	65.5	12.4	90.00	4,424.2	861.3	937.6	860.9	76.72	12.221	
10,900.0	7,130.0	7,093.0	7,093.0	67.2	12.4	90.00	4,424.2	861.3	840.4	761.9	78.44	10.714	
11,000.0	7,130.0	7,093.0	7,093.0	68.9	12.4	90.00	4,424.2	861.3	743.9	663.8	80.16	9.281	
11,100.0	7,130.0	7,093.0	7,093.0	70.6	12.4	90.00	4,424.2	861.3	648.6	566.7	81.88	7.920	
11,200.0	7,130.0	7,093.0	7,093.0	72.3	12.4	90.00	4,424.2	861.3	554.8	471.2	83.61	6.636	
11,300.0	7,130.0	7,093.0	7,093.0	74.0	12.4	90.00	4,424.2	861.3	463.7	378.4	85.34	5.434	
11,400.0	7,130.0	7,093.0	7,093.0	75.7	12.4	90.00	4,424.2	861.3	377.1	290.1	87.07	4.332	
11,500.0	7,130.0	7,093.0	7,093.0	77.4	12.4	90.00	4,424.2	861.3	299.0	210.2	88.80	3.368	
11,600.0	7,130.0	7,093.0	7,093.0	79.1	12.4	90.00	4,424.2	861.3	238.0	147.4	90.53	2.629	
11,695.8	7,130.0	7,093.0	7,093.0	80.7	12.4	90.00	4,424.2	861.3	209.7	117.5	92.19	2.274	CC, ES, SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KAWAKAMI 42-35 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 7930-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
9,100.0	7,130.0	7,092.0	7,092.0	37.6	12.4	90.00	2,697.5	911.4	919.9	871.9	47.95	19.182	
9,200.0	7,130.0	7,092.0	7,092.0	39.2	12.4	90.00	2,697.5	911.4	823.9	774.3	49.60	16.610	
9,300.0	7,130.0	7,092.0	7,092.0	40.7	12.4	90.00	2,697.5	911.4	728.9	677.7	51.25	14.222	
9,400.0	7,130.0	7,092.0	7,092.0	42.3	12.4	90.00	2,697.5	911.4	635.6	582.7	52.92	12.011	
9,500.0	7,130.0	7,092.0	7,092.0	43.9	12.4	90.00	2,697.5	911.4	544.6	490.0	54.59	9.976	
9,600.0	7,130.0	7,092.0	7,092.0	45.5	12.4	90.00	2,697.5	911.4	457.4	401.1	56.27	8.129	
9,700.0	7,130.0	7,092.0	7,092.0	47.2	12.4	90.00	2,697.5	911.4	376.6	318.6	57.95	6.498	
9,800.0	7,130.0	7,092.0	7,092.0	48.8	12.4	90.00	2,697.5	911.4	307.3	247.6	59.64	5.152	
9,900.0	7,130.0	7,092.0	7,092.0	50.4	12.4	90.00	2,697.5	911.4	258.9	197.6	61.33	4.221	
9,986.9	7,130.0	7,092.0	7,092.0	51.9	12.4	90.00	2,697.5	911.4	243.9	181.1	62.81	3.883	CC, ES
10,000.0	7,130.0	7,092.0	7,092.0	52.1	12.4	90.00	2,697.5	911.4	244.2	181.2	63.03	3.875	SF
10,100.0	7,130.0	7,092.0	7,092.0	53.7	12.4	90.00	2,697.5	911.4	268.8	204.1	64.73	4.153	
10,200.0	7,130.0	7,092.0	7,092.0	55.4	12.4	90.00	2,697.5	911.4	323.8	257.4	66.43	4.875	
10,300.0	7,130.0	7,092.0	7,092.0	57.1	12.4	90.00	2,697.5	911.4	396.8	328.7	68.14	5.824	
10,400.0	7,130.0	7,092.0	7,092.0	58.7	12.4	90.00	2,697.5	911.4	479.7	409.8	69.85	6.867	
10,500.0	7,130.0	7,092.0	7,092.0	60.4	12.4	90.00	2,697.5	911.4	568.1	496.5	71.56	7.938	
10,600.0	7,130.0	7,092.0	7,092.0	62.1	12.4	90.00	2,697.5	911.4	659.8	586.5	73.28	9.004	
10,700.0	7,130.0	7,092.0	7,092.0	63.8	12.4	90.00	2,697.5	911.4	753.6	678.6	75.00	10.049	
10,800.0	7,130.0	7,092.0	7,092.0	65.5	12.4	90.00	2,697.5	911.4	848.8	772.1	76.72	11.065	
10,900.0	7,130.0	7,092.0	7,092.0	67.2	12.4	90.00	2,697.5	911.4	945.1	866.6	78.44	12.049	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KAWAKAMI 6-0-35 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 528-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
11,300.0	7,130.0	7,173.2	7,107.9	74.0	19.2	-89.62	4,822.1	126.8	970.7	883.7	87.05	11.152	
11,400.0	7,130.0	7,172.5	7,107.1	75.7	19.2	-89.53	4,822.1	126.8	888.1	799.3	88.77	10.004	
11,500.0	7,130.0	7,171.7	7,106.4	77.4	19.2	-89.45	4,822.1	126.8	809.3	718.8	90.50	8.943	
11,600.0	7,130.0	7,171.0	7,105.6	79.1	19.2	-89.37	4,822.1	126.8	735.8	643.5	92.23	7.977	
11,695.8	7,130.0	7,170.3	7,104.9	80.7	19.2	-89.29	4,822.1	126.8	671.7	577.8	93.89	7.154	CC, ES, SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KIYOTA 3-35 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 8250-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	7,130.0	7,106.0	7,106.0	23.5	12.4	-90.00	1,225.1	-183.0	961.9	929.4	32.55	29.550	
8,200.0	7,130.0	7,106.0	7,106.0	24.7	12.4	-90.00	1,225.1	-183.0	922.2	888.2	33.95	27.164	
8,300.0	7,130.0	7,106.0	7,106.0	26.0	12.4	-90.00	1,225.1	-183.0	892.0	856.6	35.40	25.200	
8,400.0	7,130.0	7,106.0	7,106.0	27.3	12.4	-90.00	1,225.1	-183.0	872.2	835.4	36.88	23.649	
8,500.0	7,130.0	7,106.0	7,106.0	28.7	12.4	-90.00	1,225.1	-183.0	863.7	825.3	38.40	22.491	
8,524.1	7,130.0	7,106.0	7,106.0	29.0	12.4	-90.00	1,225.1	-183.0	863.4	824.6	38.78	22.266	CC, ES
8,600.0	7,130.0	7,106.0	7,106.0	30.1	12.4	-90.00	1,225.1	-183.0	866.7	826.7	39.95	21.694	
8,700.0	7,130.0	7,106.0	7,106.0	31.6	12.4	-90.00	1,225.1	-183.0	881.1	839.6	41.52	21.220	
8,800.0	7,130.0	7,106.0	7,106.0	33.0	12.4	-90.00	1,225.1	-183.0	906.4	863.3	43.11	21.024	SF
8,900.0	7,130.0	7,106.0	7,106.0	34.5	12.4	-90.00	1,225.1	-183.0	941.7	896.9	44.72	21.056	
9,000.0	7,130.0	7,106.0	7,106.0	36.1	12.4	-90.00	1,225.1	-183.0	985.8	939.5	46.34	21.273	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KIYOTA 34-35 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 7922-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	-67.22	216.8	-516.1	560.0				
100.0	100.0	86.0	86.0	0.2	0.2	-67.22	216.8	-516.1	559.8	559.5	0.30	1,852.815	
200.0	200.0	186.0	186.0	0.3	0.3	-67.22	216.8	-516.1	559.8	559.1	0.65	859.628	
300.0	300.0	286.0	286.0	0.5	0.5	-67.22	216.8	-516.1	559.8	558.8	1.00	559.638	
400.0	400.0	386.0	386.0	0.7	0.7	-67.22	216.8	-516.1	559.8	558.4	1.35	414.862	
500.0	500.0	486.0	486.0	0.8	0.8	-67.22	216.8	-516.1	559.8	558.1	1.70	329.595	CC, ES
600.0	600.0	586.0	586.0	1.0	1.0	168.60	216.8	-516.1	560.6	558.6	2.05	273.846	
700.0	700.0	685.9	685.9	1.2	1.2	168.65	216.8	-516.1	563.2	560.8	2.40	235.085	
800.0	799.9	785.9	785.9	1.4	1.4	168.73	216.8	-516.1	567.5	564.7	2.74	206.825	
900.0	899.7	885.7	885.7	1.6	1.5	168.83	216.8	-516.1	573.5	570.4	3.09	185.512	
1,000.0	999.4	985.4	985.4	1.8	1.7	168.97	216.8	-516.1	581.2	577.7	3.44	169.032	
1,100.0	1,098.9	1,084.9	1,084.9	2.0	1.9	169.13	216.8	-516.1	590.6	586.8	3.78	156.052	
1,200.0	1,198.3	1,184.3	1,184.3	2.2	2.1	169.31	216.8	-516.1	601.7	597.6	4.13	145.689	
1,300.0	1,297.4	1,283.4	1,283.4	2.5	2.2	169.52	216.8	-516.1	614.4	610.0	4.48	137.259	
1,400.0	1,396.5	1,382.5	1,382.5	2.8	2.4	169.74	216.8	-516.1	627.6	622.7	4.83	130.027	
1,500.0	1,495.6	1,481.6	1,481.6	3.0	2.6	169.95	216.8	-516.1	640.7	635.5	5.18	123.776	
1,600.0	1,594.7	1,580.7	1,580.7	3.3	2.8	170.16	216.8	-516.1	653.8	648.3	5.53	118.319	
1,700.0	1,693.8	1,679.8	1,679.8	3.6	2.9	170.35	216.8	-516.1	667.0	661.1	5.88	113.515	
1,800.0	1,793.0	1,778.9	1,778.9	3.9	3.1	170.54	216.8	-516.1	680.1	673.9	6.23	109.254	
1,900.0	1,892.1	1,878.0	1,878.0	4.1	3.3	170.72	216.8	-516.1	693.3	686.7	6.57	105.449	
2,000.0	1,991.2	1,977.2	1,977.2	4.4	3.5	170.90	216.8	-516.1	706.5	699.5	6.92	102.031	
2,100.0	2,090.3	2,076.3	2,076.3	4.7	3.6	171.06	216.8	-516.1	719.6	712.4	7.27	98.944	
2,200.0	2,189.4	2,175.4	2,175.4	5.0	3.8	171.23	216.8	-516.1	732.8	725.2	7.62	96.142	
2,300.0	2,288.5	2,274.5	2,274.5	5.3	4.0	171.38	216.8	-516.1	746.0	738.0	7.97	93.588	
2,400.0	2,387.6	2,373.6	2,373.6	5.5	4.1	171.53	216.8	-516.1	759.2	750.9	8.32	91.250	
2,500.0	2,486.7	2,472.7	2,472.7	5.8	4.3	171.68	216.8	-516.1	772.4	763.7	8.67	89.102	
2,600.0	2,585.8	2,571.8	2,571.8	6.1	4.5	171.82	216.8	-516.1	785.6	776.6	9.02	87.122	
2,700.0	2,684.9	2,670.9	2,670.9	6.4	4.7	171.96	216.8	-516.1	798.8	789.4	9.37	85.291	
2,800.0	2,784.0	2,770.0	2,770.0	6.7	4.8	172.09	216.8	-516.1	812.0	802.3	9.71	83.592	
2,900.0	2,883.1	2,869.1	2,869.1	7.0	5.0	172.22	216.8	-516.1	825.2	815.2	10.06	82.012	
3,000.0	2,982.2	2,968.2	2,968.2	7.3	5.2	172.34	216.8	-516.1	838.4	828.0	10.41	80.539	
3,100.0	3,081.3	3,067.3	3,067.3	7.6	5.4	172.46	216.8	-516.1	851.7	840.9	10.76	79.162	
3,200.0	3,180.4	3,166.4	3,166.4	7.8	5.5	172.57	216.8	-516.1	864.9	853.8	11.11	77.873	
3,300.0	3,279.6	3,265.5	3,265.5	8.1	5.7	172.69	216.8	-516.1	878.1	866.7	11.45	76.662	
3,400.0	3,378.7	3,364.6	3,364.6	8.4	5.9	172.80	216.8	-516.1	891.3	879.5	11.80	75.524	
3,500.0	3,477.8	3,463.8	3,463.8	8.7	6.0	172.90	216.8	-516.1	904.6	892.4	12.15	74.452	
3,600.0	3,576.9	3,562.9	3,562.9	9.0	6.2	173.00	216.8	-516.1	917.8	905.3	12.50	73.439	
3,700.0	3,676.0	3,662.0	3,662.0	9.3	6.4	173.10	216.8	-516.1	931.1	918.2	12.85	72.483	
3,800.0	3,775.1	3,761.1	3,761.1	9.6	6.6	173.20	216.8	-516.1	944.3	931.1	13.19	71.577	
3,900.0	3,874.2	3,860.2	3,860.2	9.9	6.7	173.30	216.8	-516.1	957.5	944.0	13.54	70.718	
4,000.0	3,973.3	3,959.3	3,959.3	10.2	6.9	173.39	216.8	-516.1	970.8	956.9	13.89	69.902	
4,100.0	4,072.4	4,058.4	4,058.4	10.5	7.1	173.48	216.8	-516.1	984.0	969.8	14.24	69.127	
4,200.0	4,171.5	4,157.5	4,157.5	10.7	7.3	173.56	216.8	-516.1	997.3	982.7	14.58	68.389	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KIYOTA 44-35 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 7934-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	75.97	156.3	625.6	645.4				
100.0	100.0	75.0	75.0	0.2	0.1	75.97	156.3	625.6	644.9	644.6	0.28	2,279.306	
200.0	200.0	175.0	175.0	0.3	0.3	75.97	156.3	625.6	644.9	644.2	0.63	1,020.386	
300.0	300.0	275.0	275.0	0.5	0.5	75.97	156.3	625.6	644.9	643.9	0.98	657.327	
400.0	400.0	375.0	375.0	0.7	0.7	75.97	156.3	625.6	644.9	643.5	1.33	484.824	
500.0	500.0	475.0	475.0	0.8	0.8	75.97	156.3	625.6	644.9	643.2	1.68	384.039	
600.0	600.0	575.0	575.0	1.0	1.0	-48.29	156.3	625.6	644.3	642.3	2.03	317.635	
700.0	700.0	674.9	674.9	1.2	1.2	-48.47	156.3	625.6	642.6	640.2	2.38	270.115	
800.0	799.9	774.9	774.9	1.4	1.4	-48.79	156.3	625.6	639.7	636.9	2.73	234.132	
900.0	899.7	874.7	874.7	1.6	1.5	-49.23	156.3	625.6	635.7	632.6	3.09	205.698	
1,000.0	999.4	974.4	974.4	1.8	1.7	-49.81	156.3	625.6	630.6	627.1	3.46	182.472	
1,100.0	1,098.9	1,073.9	1,073.9	2.0	1.9	-50.53	156.3	625.6	624.4	620.6	3.83	162.996	
1,200.0	1,198.3	1,173.3	1,173.3	2.2	2.0	-51.39	156.3	625.6	617.2	613.0	4.22	146.316	
1,300.0	1,297.4	1,272.4	1,272.4	2.5	2.2	-52.38	156.3	625.6	609.2	604.6	4.62	131.867	
1,400.0	1,396.5	1,371.5	1,371.5	2.8	2.4	-53.38	156.3	625.6	601.1	596.1	5.03	119.499	
1,500.0	1,495.6	1,470.6	1,470.6	3.0	2.6	-54.41	156.3	625.6	593.2	587.8	5.45	108.891	
1,600.0	1,594.7	1,569.7	1,569.7	3.3	2.7	-55.46	156.3	625.6	585.5	579.6	5.87	99.719	
1,700.0	1,693.8	1,668.8	1,668.8	3.6	2.9	-56.55	156.3	625.6	578.0	571.7	6.30	91.729	
1,800.0	1,793.0	1,767.9	1,767.9	3.9	3.1	-57.66	156.3	625.6	570.7	564.0	6.74	84.722	
1,900.0	1,892.1	1,867.0	1,867.0	4.1	3.3	-58.79	156.3	625.6	563.6	556.5	7.18	78.540	
2,000.0	1,991.2	1,966.2	1,966.2	4.4	3.4	-59.96	156.3	625.6	556.8	549.2	7.62	73.057	
2,100.0	2,090.3	2,065.3	2,065.3	4.7	3.6	-61.15	156.3	625.6	550.2	542.1	8.07	68.169	
2,200.0	2,189.4	2,164.4	2,164.4	5.0	3.8	-62.38	156.3	625.6	543.8	535.3	8.53	63.794	
2,300.0	2,288.5	2,263.5	2,263.5	5.3	4.0	-63.63	156.3	625.6	537.7	528.8	8.98	59.862	
2,400.0	2,387.6	2,362.6	2,362.6	5.5	4.1	-64.90	156.3	625.6	531.9	522.5	9.44	56.317	
2,500.0	2,486.7	2,461.7	2,461.7	5.8	4.3	-66.21	156.3	625.6	526.4	516.4	9.91	53.111	
2,600.0	2,585.8	2,560.8	2,560.8	6.1	4.5	-67.54	156.3	625.6	521.1	510.7	10.38	50.204	
2,700.0	2,684.9	2,659.9	2,659.9	6.4	4.6	-68.90	156.3	625.6	516.1	505.2	10.85	47.562	
2,800.0	2,784.0	2,759.0	2,759.0	6.7	4.8	-70.28	156.3	625.6	511.4	500.1	11.32	45.157	
2,900.0	2,883.1	2,858.1	2,858.1	7.0	5.0	-71.69	156.3	625.6	507.0	495.2	11.80	42.962	
3,000.0	2,982.2	2,957.2	2,957.2	7.3	5.2	-73.12	156.3	625.6	503.0	490.7	12.28	40.958	
3,100.0	3,081.3	3,056.3	3,056.3	7.6	5.3	-74.57	156.3	625.6	499.2	486.5	12.76	39.126	
3,200.0	3,180.4	3,155.4	3,155.4	7.8	5.5	-76.05	156.3	625.6	495.8	482.6	13.24	37.448	
3,300.0	3,279.6	3,254.5	3,254.5	8.1	5.7	-77.54	156.3	625.6	492.7	479.0	13.72	35.912	
3,400.0	3,378.7	3,353.6	3,353.6	8.4	5.9	-79.05	156.3	625.6	490.0	475.8	14.20	34.504	
3,500.0	3,477.8	3,452.8	3,452.8	8.7	6.0	-80.57	156.3	625.6	487.6	472.9	14.68	33.213	
3,600.0	3,576.9	3,551.9	3,551.9	9.0	6.2	-82.11	156.3	625.6	485.6	470.4	15.16	32.030	
3,700.0	3,676.0	3,651.0	3,651.0	9.3	6.4	-83.66	156.3	625.6	483.9	468.3	15.64	30.946	
3,800.0	3,775.1	3,750.1	3,750.1	9.6	6.5	-85.22	156.3	625.6	482.6	466.5	16.11	29.953	
3,900.0	3,874.2	3,849.2	3,849.2	9.9	6.7	-86.79	156.3	625.6	481.7	465.1	16.59	29.043	
4,000.0	3,973.3	3,948.3	3,948.3	10.2	6.9	-88.36	156.3	625.6	481.1	464.1	17.05	28.211	
4,100.0	4,072.4	4,047.4	4,047.4	10.5	7.1	-89.93	156.3	625.6	480.9	463.4	17.52	27.450	
4,104.2	4,076.5	4,051.5	4,051.5	10.5	7.1	-90.00	156.3	625.6	480.9	463.4	17.54	27.420	
4,200.0	4,171.5	4,146.5	4,146.5	10.7	7.2	-91.51	156.3	625.6	481.1	463.1	17.98	26.755	
4,300.0	4,270.6	4,245.6	4,245.6	11.0	7.4	-93.08	156.3	625.6	481.6	463.2	18.44	26.122	
4,400.0	4,369.7	4,344.7	4,344.7	11.3	7.6	-94.65	156.3	625.6	482.5	463.6	18.89	25.545	
4,500.0	4,468.8	4,443.8	4,443.8	11.6	7.8	-96.21	156.3	625.6	483.8	464.5	19.34	25.021	
4,600.0	4,567.9	4,542.9	4,542.9	11.9	7.9	-97.76	156.3	625.6	485.4	465.7	19.78	24.546	
4,700.0	4,667.0	4,642.0	4,642.0	12.2	8.1	-99.30	156.3	625.6	487.4	467.2	20.21	24.116	
4,800.0	4,766.2	4,741.1	4,741.1	12.5	8.3	-100.83	156.3	625.6	489.8	469.1	20.64	23.729	
4,900.0	4,865.3	4,840.2	4,840.2	12.8	8.4	-102.34	156.3	625.6	492.5	471.4	21.06	23.381	
5,000.0	4,964.4	4,939.4	4,939.4	13.1	8.6	-103.83	156.3	625.6	495.5	474.1	21.48	23.069	

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 Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KIYOTA 44-35 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 7934-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	5,063.5	5,038.5	5,038.5	13.4	8.8	-105.31	156.3	625.6	498.9	477.0	21.89	22.791	
5,200.0	5,162.6	5,137.6	5,137.6	13.7	9.0	-106.76	156.3	625.6	502.6	480.3	22.29	22.545	
5,300.0	5,261.7	5,236.7	5,236.7	13.9	9.1	-108.19	156.3	625.6	506.7	484.0	22.69	22.328	
5,400.0	5,360.8	5,335.8	5,335.8	14.2	9.3	-109.60	156.3	625.6	511.0	487.9	23.08	22.138	
5,500.0	5,459.9	5,434.9	5,434.9	14.5	9.5	-110.99	156.3	625.6	515.7	492.2	23.47	21.973	
5,600.0	5,559.0	5,534.0	5,534.0	14.8	9.7	-112.35	156.3	625.6	520.6	496.8	23.85	21.831	
5,700.0	5,658.1	5,633.1	5,633.1	15.1	9.8	-113.68	156.3	625.6	525.9	501.7	24.22	21.711	
5,800.0	5,757.2	5,732.2	5,732.2	15.4	10.0	-114.99	156.3	625.6	531.4	506.8	24.59	21.610	
5,900.0	5,856.3	5,831.3	5,831.3	15.7	10.2	-116.27	156.3	625.6	537.2	512.3	24.96	21.529	
6,000.0	5,955.4	5,930.4	5,930.4	16.0	10.4	-117.52	156.3	625.6	543.3	518.0	25.31	21.464	
6,100.0	6,054.5	6,029.5	6,029.5	16.3	10.5	-118.75	156.3	625.6	549.7	524.0	25.67	21.415	
6,200.0	6,153.6	6,128.6	6,128.6	16.6	10.7	-119.94	156.3	625.6	556.2	530.2	26.02	21.380	
6,300.0	6,252.8	6,227.7	6,227.7	16.9	10.9	-121.11	156.3	625.6	563.1	536.7	26.36	21.359	
6,400.0	6,351.9	6,326.9	6,326.9	17.1	11.0	-122.25	156.3	625.6	570.1	543.4	26.70	21.351	
6,500.0	6,451.2	6,426.1	6,426.1	17.4	11.2	-66.17	156.3	625.6	572.0	545.1	26.96	21.218	
6,600.0	6,549.8	6,524.8	6,524.8	17.5	11.4	-30.88	156.3	625.6	560.3	533.5	26.84	20.878	
6,700.0	6,645.9	6,620.9	6,620.9	17.5	11.6	-20.26	156.3	625.6	535.2	508.8	26.33	20.326	
6,800.0	6,737.5	6,712.5	6,712.5	17.5	11.7	-16.49	156.3	625.6	497.0	471.5	25.45	19.526	
6,900.0	6,823.0	6,798.0	6,798.0	17.4	11.9	-15.65	156.3	625.6	446.6	422.4	24.26	18.406	
7,000.0	6,900.5	6,875.5	6,875.5	17.4	12.0	-16.96	156.3	625.6	385.1	362.3	22.87	16.844	
7,100.0	6,968.7	6,943.7	6,943.7	17.3	12.1	-21.03	156.3	625.6	314.0	292.5	21.48	14.613	
7,200.0	7,026.1	7,001.1	7,001.1	17.4	12.2	-30.22	156.3	625.6	235.0	214.2	20.76	11.322	
7,300.0	7,071.7	7,046.7	7,046.7	17.5	12.3	-49.88	156.3	625.6	151.6	129.4	22.23	6.821	
7,400.0	7,104.6	7,079.6	7,079.6	17.8	12.4	-79.50	156.3	625.6	76.6	51.4	25.21	3.038	
7,445.9	7,115.3	7,090.3	7,090.3	18.0	12.4	-90.00	156.3	625.6	62.4	36.7	25.76	2.425	CC, ES, SF
7,500.0	7,124.2	7,099.2	7,099.2	18.3	12.4	-96.12	156.3	625.6	82.0	56.0	26.00	3.153	
7,600.0	7,130.0	7,105.0	7,105.0	18.9	12.4	-90.00	156.3	625.6	164.7	137.9	26.79	6.148	
7,700.0	7,130.0	7,105.0	7,105.0	19.6	12.4	-90.00	156.3	625.6	259.7	232.0	27.71	9.373	
7,800.0	7,130.0	7,105.0	7,105.0	20.4	12.4	-90.00	156.3	625.6	357.5	328.7	28.77	12.424	
7,900.0	7,130.0	7,105.0	7,105.0	21.4	12.4	-90.00	156.3	625.6	456.2	426.3	29.95	15.234	
8,000.0	7,130.0	7,105.0	7,105.0	22.4	12.4	-90.00	156.3	625.6	555.4	524.2	31.21	17.795	
8,100.0	7,130.0	7,105.0	7,105.0	23.5	12.4	-90.00	156.3	625.6	654.9	622.3	32.55	20.119	
8,200.0	7,130.0	7,105.0	7,105.0	24.7	12.4	-90.00	156.3	625.6	754.4	720.5	33.95	22.224	
8,300.0	7,130.0	7,105.0	7,105.0	26.0	12.4	-90.00	156.3	625.6	854.1	818.7	35.39	24.132	
8,400.0	7,130.0	7,105.0	7,105.0	27.3	12.4	-90.00	156.3	625.6	953.9	917.0	36.88	25.864	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4A-35H-O367 - 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	-89.64	0.4	-60.1	60.1				
100.0	100.0	100.0	100.0	0.2	0.2	-89.64	0.4	-60.1	60.1	59.8	0.30	197.832	
200.0	200.0	200.0	200.0	0.3	0.3	-89.64	0.4	-60.1	60.1	59.4	0.65	92.040	CC, ES
300.0	300.0	299.0	299.0	0.5	0.5	-89.94	0.1	-60.9	60.9	59.9	1.00	60.822	
400.0	400.0	398.0	398.0	0.7	0.7	-90.80	-0.9	-63.3	63.3	61.9	1.35	46.782	
500.0	500.0	496.8	496.7	0.8	0.9	-92.08	-2.4	-67.2	67.4	65.6	1.71	39.339	
600.0	600.0	595.5	595.2	1.0	1.1	142.54	-4.6	-72.8	73.8	71.7	2.05	36.068	
700.0	700.0	693.7	693.1	1.2	1.3	141.91	-7.4	-79.9	83.2	80.8	2.39	34.743	SF
800.0	799.9	791.5	790.5	1.4	1.5	141.73	-10.8	-88.5	95.6	92.9	2.75	34.814	
900.0	899.7	888.7	887.0	1.6	1.7	141.85	-14.8	-98.5	111.0	107.9	3.10	35.783	
1,000.0	999.4	985.0	982.6	1.8	2.0	142.15	-19.3	-110.0	129.4	125.9	3.46	37.347	
1,100.0	1,098.9	1,080.5	1,077.1	2.0	2.3	142.53	-24.4	-122.9	150.6	146.8	3.83	39.313	
1,200.0	1,198.3	1,175.0	1,170.3	2.2	2.6	142.94	-29.9	-137.1	174.8	170.6	4.21	41.551	
1,300.0	1,297.4	1,269.9	1,263.8	2.5	2.9	143.41	-36.0	-152.6	201.5	196.9	4.59	43.895	
1,400.0	1,396.5	1,366.1	1,358.4	2.8	3.2	143.90	-42.3	-168.5	228.8	223.8	4.99	45.878	
1,500.0	1,495.6	1,462.3	1,453.1	3.0	3.6	144.29	-48.6	-184.4	256.0	250.7	5.39	47.542	
1,600.0	1,594.7	1,558.5	1,547.8	3.3	3.9	144.60	-54.8	-200.3	283.3	277.5	5.79	48.957	
1,700.0	1,693.8	1,654.7	1,642.4	3.6	4.2	144.86	-61.1	-216.2	310.6	304.4	6.19	50.173	
1,800.0	1,793.0	1,750.9	1,737.1	3.9	4.6	145.07	-67.3	-232.0	337.9	331.3	6.60	51.227	
1,900.0	1,892.1	1,847.1	1,831.8	4.1	4.9	145.26	-73.6	-247.9	365.2	358.2	7.00	52.149	
2,000.0	1,991.2	1,943.3	1,926.4	4.4	5.2	145.41	-79.8	-263.8	392.5	385.1	7.41	52.962	
2,100.0	2,090.3	2,039.5	2,021.1	4.7	5.6	145.55	-86.1	-279.7	419.8	412.0	7.82	53.684	
2,200.0	2,189.4	2,135.7	2,115.8	5.0	5.9	145.67	-92.4	-295.6	447.1	438.8	8.23	54.329	
2,300.0	2,288.5	2,231.9	2,210.4	5.3	6.3	145.78	-98.6	-311.5	474.4	465.7	8.64	54.908	
2,400.0	2,387.6	2,328.1	2,305.1	5.5	6.6	145.87	-104.9	-327.4	501.7	492.6	9.05	55.432	
2,500.0	2,486.7	2,424.3	2,399.8	5.8	6.9	145.96	-111.1	-343.3	529.0	519.5	9.46	55.906	
2,600.0	2,585.8	2,520.5	2,494.5	6.1	7.3	146.04	-117.4	-359.2	556.3	546.4	9.87	56.339	
2,700.0	2,684.9	2,616.7	2,589.1	6.4	7.6	146.11	-123.6	-375.1	583.6	573.3	10.29	56.735	
2,800.0	2,784.0	2,712.9	2,683.8	6.7	8.0	146.17	-129.9	-391.0	610.9	600.2	10.70	57.098	
2,900.0	2,883.1	2,809.1	2,778.5	7.0	8.3	146.23	-136.2	-406.9	638.2	627.1	11.11	57.433	
3,000.0	2,982.2	2,905.3	2,873.1	7.3	8.7	146.28	-142.4	-422.8	665.5	654.0	11.53	57.743	
3,100.0	3,081.3	3,001.5	2,967.8	7.6	9.0	146.33	-148.7	-438.6	692.8	680.9	11.94	58.029	
3,200.0	3,180.4	3,097.7	3,062.5	7.8	9.3	146.38	-154.9	-454.5	720.1	707.8	12.35	58.296	
3,300.0	3,279.6	3,193.9	3,157.1	8.1	9.7	146.42	-161.2	-470.4	747.4	734.7	12.77	58.544	
3,400.0	3,378.7	3,290.1	3,251.8	8.4	10.0	146.46	-167.4	-486.3	774.7	761.6	13.18	58.776	
3,500.0	3,477.8	3,386.3	3,346.5	8.7	10.4	146.49	-173.7	-502.2	802.1	788.5	13.60	58.993	
3,600.0	3,576.9	3,482.5	3,441.1	9.0	10.7	146.53	-180.0	-518.1	829.4	815.4	14.01	59.197	
3,700.0	3,676.0	3,578.7	3,535.8	9.3	11.1	146.56	-186.2	-534.0	856.7	842.3	14.43	59.388	
3,800.0	3,775.1	3,674.9	3,630.5	9.6	11.4	146.59	-192.5	-549.9	884.0	869.2	14.84	59.568	
3,900.0	3,874.2	3,771.1	3,725.2	9.9	11.8	146.62	-198.7	-565.8	911.3	896.0	15.25	59.738	
4,000.0	3,973.3	3,867.3	3,819.8	10.2	12.1	146.64	-205.0	-581.7	938.6	922.9	15.67	59.899	
4,100.0	4,072.4	3,963.5	3,914.5	10.5	12.4	146.67	-211.2	-597.6	965.9	949.8	16.09	60.051	
4,200.0	4,171.5	4,059.7	4,009.2	10.7	12.8	146.69	-217.5	-613.5	993.2	976.7	16.50	60.195	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4B-35H-O367 - 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	-89.60	0.4	-52.5	52.5				
100.0	100.0	100.0	100.0	0.2	0.2	-89.60	0.4	-52.5	52.5	52.2	0.30	172.988	
200.0	200.0	200.0	200.0	0.3	0.3	-89.60	0.4	-52.5	52.5	51.9	0.65	80.482	
300.0	300.0	300.0	300.0	0.5	0.5	-89.60	0.4	-52.5	52.5	51.5	1.00	52.439	CC, ES
400.0	400.0	399.2	399.2	0.7	0.7	-90.02	0.0	-53.3	53.3	52.0	1.35	39.484	
500.0	500.0	498.3	498.2	0.8	0.9	-91.20	-1.2	-55.6	55.6	53.9	1.70	32.701	
600.0	600.0	597.3	597.1	1.0	1.0	143.32	-3.1	-59.4	60.3	58.2	2.05	29.452	
700.0	700.0	696.0	695.6	1.2	1.2	142.53	-5.7	-64.8	67.9	65.5	2.40	28.329	SF
800.0	799.9	794.2	793.6	1.4	1.4	142.18	-9.1	-71.6	78.5	75.7	2.75	28.541	
900.0	899.7	892.0	890.9	1.6	1.7	142.14	-13.2	-79.9	92.0	88.9	3.11	29.607	
1,000.0	999.4	989.1	987.4	1.8	1.9	142.28	-18.0	-89.6	108.5	105.0	3.47	31.241	
1,100.0	1,098.9	1,085.3	1,082.9	2.0	2.2	142.53	-23.5	-100.7	127.8	123.9	3.84	33.255	
1,200.0	1,198.3	1,181.8	1,178.4	2.2	2.4	142.85	-29.7	-113.0	149.8	145.6	4.22	35.476	
1,300.0	1,297.4	1,279.0	1,274.5	2.5	2.7	143.40	-35.9	-125.7	173.3	168.7	4.61	37.568	
1,400.0	1,396.5	1,376.1	1,370.6	2.8	3.0	143.96	-42.2	-138.3	197.1	192.1	5.01	39.339	
1,500.0	1,495.6	1,473.2	1,466.7	3.0	3.3	144.40	-48.5	-150.9	220.9	215.5	5.41	40.829	
1,600.0	1,594.7	1,570.3	1,562.8	3.3	3.6	144.75	-54.7	-163.5	244.8	238.9	5.81	42.096	
1,700.0	1,693.8	1,667.4	1,658.9	3.6	3.9	145.04	-61.0	-176.2	268.6	262.4	6.22	43.187	
1,800.0	1,793.0	1,764.6	1,754.9	3.9	4.1	145.29	-67.3	-188.8	292.5	285.8	6.63	44.134	
1,900.0	1,892.1	1,861.7	1,851.0	4.1	4.4	145.50	-73.5	-201.4	316.3	309.3	7.03	44.964	
2,000.0	1,991.2	1,958.8	1,947.1	4.4	4.7	145.67	-79.8	-214.0	340.2	332.7	7.44	45.697	
2,100.0	2,090.3	2,055.9	2,043.2	4.7	5.0	145.83	-86.0	-226.7	364.0	356.2	7.85	46.348	
2,200.0	2,189.4	2,153.0	2,139.3	5.0	5.3	145.96	-92.3	-239.3	387.9	379.6	8.27	46.930	
2,300.0	2,288.5	2,250.1	2,235.3	5.3	5.6	146.08	-98.6	-251.9	411.8	403.1	8.68	47.454	
2,400.0	2,387.6	2,347.2	2,331.4	5.5	5.9	146.19	-104.8	-264.5	435.6	426.5	9.09	47.928	
2,500.0	2,486.7	2,444.3	2,427.5	5.8	6.2	146.29	-111.1	-277.2	459.5	450.0	9.50	48.357	
2,600.0	2,585.8	2,541.4	2,523.6	6.1	6.5	146.37	-117.4	-289.8	483.4	473.4	9.92	48.750	
2,700.0	2,684.9	2,638.5	2,619.6	6.4	6.8	146.45	-123.6	-302.4	507.2	496.9	10.33	49.109	
2,800.0	2,784.0	2,735.6	2,715.7	6.7	7.1	146.52	-129.9	-315.0	531.1	520.4	10.74	49.438	
2,900.0	2,883.1	2,832.7	2,811.8	7.0	7.4	146.59	-136.2	-327.6	555.0	543.8	11.16	49.742	
3,000.0	2,982.2	2,929.8	2,907.9	7.3	7.7	146.65	-142.4	-340.3	578.8	567.3	11.57	50.024	
3,100.0	3,081.3	3,026.9	3,004.0	7.6	8.0	146.70	-148.7	-352.9	602.7	590.7	11.99	50.284	
3,200.0	3,180.4	3,124.1	3,100.0	7.8	8.3	146.75	-155.0	-365.5	626.6	614.2	12.40	50.527	
3,300.0	3,279.6	3,221.2	3,196.1	8.1	8.6	146.80	-161.2	-378.1	650.5	637.7	12.82	50.753	
3,400.0	3,378.7	3,318.3	3,292.2	8.4	8.9	146.84	-167.5	-390.8	674.3	661.1	13.23	50.964	
3,500.0	3,477.8	3,415.4	3,388.3	8.7	9.2	146.88	-173.8	-403.4	698.2	684.6	13.65	51.162	
3,600.0	3,576.9	3,512.5	3,484.4	9.0	9.5	146.92	-180.0	-416.0	722.1	708.0	14.06	51.348	
3,700.0	3,676.0	3,609.6	3,580.4	9.3	9.8	146.96	-186.3	-428.6	746.0	731.5	14.48	51.522	
3,800.0	3,775.1	3,706.7	3,676.5	9.6	10.1	146.99	-192.5	-441.3	769.8	754.9	14.89	51.686	
3,900.0	3,874.2	3,803.8	3,772.6	9.9	10.4	147.02	-198.8	-453.9	793.7	778.4	15.31	51.842	
4,000.0	3,973.3	3,900.9	3,868.7	10.2	10.7	147.05	-205.1	-466.5	817.6	801.9	15.73	51.988	
4,100.0	4,072.4	3,998.0	3,964.8	10.5	11.0	147.08	-211.3	-479.1	841.5	825.3	16.14	52.127	
4,200.0	4,171.5	4,095.1	4,060.8	10.7	11.3	147.10	-217.6	-491.8	865.3	848.8	16.56	52.258	
4,300.0	4,270.6	4,192.2	4,156.9	11.0	11.6	147.13	-223.9	-504.4	889.2	872.2	16.98	52.383	
4,400.0	4,369.7	4,289.3	4,253.0	11.3	11.9	147.15	-230.1	-517.0	913.1	895.7	17.39	52.501	
4,500.0	4,468.8	4,386.4	4,349.1	11.6	12.2	147.18	-236.4	-529.6	937.0	919.2	17.81	52.614	
4,600.0	4,567.9	4,483.6	4,445.2	11.9	12.5	147.20	-242.7	-542.3	960.9	942.6	18.23	52.722	
4,700.0	4,667.0	4,580.7	4,541.2	12.2	12.8	147.22	-248.9	-554.9	984.7	966.1	18.64	52.824	

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 Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4C-35H-O367 - 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	-89.55	0.4	-45.0	45.0				
100.0	100.0	100.0	100.0	0.2	0.2	-89.55	0.4	-45.0	45.0	44.7	0.30	148.146	
200.0	200.0	200.0	200.0	0.3	0.3	-89.55	0.4	-45.0	45.0	44.3	0.65	68.924	
300.0	300.0	300.0	300.0	0.5	0.5	-89.55	0.4	-45.0	45.0	44.0	1.00	44.908	
400.0	400.0	400.0	400.0	0.7	0.7	-89.55	0.4	-45.0	45.0	43.6	1.35	33.304	CC, ES
500.0	500.0	499.3	499.3	0.8	0.8	-90.16	-0.1	-45.7	45.7	44.0	1.70	26.897	
600.0	600.0	598.6	598.6	1.0	1.0	144.51	-1.6	-47.8	48.6	46.5	2.05	23.732	
700.0	700.0	697.7	697.6	1.2	1.2	143.62	-4.0	-51.4	54.4	52.0	2.40	22.672	SF
800.0	799.9	796.5	796.1	1.4	1.4	143.02	-7.3	-56.4	63.0	60.3	2.75	22.900	
900.0	899.7	894.8	894.2	1.6	1.6	142.67	-11.6	-62.7	74.5	71.4	3.11	23.953	
1,000.0	999.4	992.6	991.5	1.8	1.8	142.51	-16.8	-70.4	88.9	85.4	3.48	25.553	
1,100.0	1,098.9	1,089.7	1,088.0	2.0	2.1	142.46	-22.8	-79.4	106.0	102.2	3.85	27.514	
1,200.0	1,198.3	1,187.5	1,185.1	2.2	2.3	142.61	-29.5	-89.3	125.4	121.2	4.24	29.595	
1,300.0	1,297.4	1,285.3	1,282.2	2.5	2.6	143.12	-36.2	-99.2	146.2	141.5	4.63	31.551	
1,400.0	1,396.5	1,383.1	1,379.2	2.8	2.8	143.65	-42.9	-109.2	167.2	162.2	5.03	33.214	
1,500.0	1,495.6	1,480.8	1,476.2	3.0	3.1	144.06	-49.6	-119.1	188.3	182.8	5.44	34.613	
1,600.0	1,594.7	1,578.6	1,573.2	3.3	3.3	144.39	-56.3	-129.1	209.3	203.5	5.85	35.803	
1,700.0	1,693.8	1,676.3	1,670.2	3.6	3.6	144.66	-63.0	-139.0	230.4	224.1	6.26	36.827	
1,800.0	1,793.0	1,774.1	1,767.3	3.9	3.8	144.88	-69.7	-148.9	251.5	244.8	6.67	37.716	
1,900.0	1,892.1	1,871.8	1,864.3	4.1	4.1	145.07	-76.5	-158.9	272.5	265.4	7.08	38.494	
2,000.0	1,991.2	1,969.6	1,961.3	4.4	4.4	145.23	-83.2	-168.8	293.6	286.1	7.49	39.182	
2,100.0	2,090.3	2,067.3	2,058.3	4.7	4.6	145.37	-89.9	-178.8	314.7	306.8	7.91	39.792	
2,200.0	2,189.4	2,165.1	2,155.3	5.0	4.9	145.49	-96.6	-188.7	335.8	327.4	8.32	40.338	
2,300.0	2,288.5	2,262.8	2,252.3	5.3	5.2	145.60	-103.3	-198.7	356.8	348.1	8.74	40.829	
2,400.0	2,387.6	2,360.6	2,349.3	5.5	5.4	145.70	-110.0	-208.6	377.9	368.8	9.16	41.273	
2,500.0	2,486.7	2,458.3	2,446.3	5.8	5.7	145.78	-116.7	-218.5	399.0	389.4	9.57	41.676	
2,600.0	2,585.8	2,556.1	2,543.4	6.1	6.0	145.86	-123.4	-228.5	420.1	410.1	9.99	42.043	
2,700.0	2,684.9	2,653.8	2,640.4	6.4	6.2	145.93	-130.1	-238.4	441.2	430.8	10.41	42.379	
2,800.0	2,784.0	2,751.6	2,737.4	6.7	6.5	145.99	-136.8	-248.4	462.3	451.4	10.83	42.688	
2,900.0	2,883.1	2,849.3	2,834.4	7.0	6.8	146.05	-143.5	-258.3	483.3	472.1	11.25	42.973	
3,000.0	2,982.2	2,947.1	2,931.4	7.3	7.0	146.10	-150.2	-268.2	504.4	492.8	11.67	43.236	
3,100.0	3,081.3	3,044.8	3,028.4	7.6	7.3	146.15	-156.9	-278.2	525.5	513.4	12.09	43.480	
3,200.0	3,180.4	3,142.6	3,125.4	7.8	7.6	146.20	-163.6	-288.1	546.6	534.1	12.51	43.707	
3,300.0	3,279.6	3,240.3	3,222.4	8.1	7.8	146.24	-170.3	-298.1	567.7	554.8	12.93	43.919	
3,400.0	3,378.7	3,338.1	3,319.5	8.4	8.1	146.28	-177.0	-308.0	588.8	575.4	13.35	44.116	
3,500.0	3,477.8	3,435.8	3,416.5	8.7	8.4	146.31	-183.7	-317.9	609.9	596.1	13.77	44.301	
3,600.0	3,576.9	3,533.6	3,513.5	9.0	8.7	146.35	-190.4	-327.9	631.0	616.8	14.19	44.475	
3,700.0	3,676.0	3,631.3	3,610.5	9.3	8.9	146.38	-197.1	-337.8	652.0	637.4	14.61	44.638	
3,800.0	3,775.1	3,729.1	3,707.5	9.6	9.2	146.41	-203.8	-347.8	673.1	658.1	15.03	44.792	
3,900.0	3,874.2	3,826.8	3,804.5	9.9	9.5	146.44	-210.5	-357.7	694.2	678.8	15.45	44.937	
4,000.0	3,973.3	3,924.6	3,901.5	10.2	9.7	146.46	-217.2	-367.6	715.3	699.4	15.87	45.074	
4,100.0	4,072.4	4,022.3	3,998.5	10.5	10.0	146.49	-223.9	-377.6	736.4	720.1	16.29	45.204	
4,200.0	4,171.5	4,120.1	4,095.6	10.7	10.3	146.51	-230.6	-387.5	757.5	740.8	16.71	45.327	
4,300.0	4,270.6	4,217.8	4,192.6	11.0	10.5	146.53	-237.3	-397.5	778.6	761.4	17.13	45.443	
4,400.0	4,369.7	4,315.6	4,289.6	11.3	10.8	146.55	-244.0	-407.4	799.7	782.1	17.55	45.554	
4,500.0	4,468.8	4,413.3	4,386.6	11.6	11.1	146.57	-250.7	-417.3	820.7	802.8	17.98	45.660	
4,600.0	4,567.9	4,511.1	4,483.6	11.9	11.3	146.59	-257.5	-427.3	841.8	823.4	18.40	45.760	
4,700.0	4,667.0	4,608.9	4,580.6	12.2	11.6	146.61	-264.2	-437.2	862.9	844.1	18.82	45.856	
4,800.0	4,766.2	4,706.6	4,677.6	12.5	11.9	146.63	-270.9	-447.2	884.0	864.8	19.24	45.948	
4,900.0	4,865.3	4,804.4	4,774.6	12.8	12.2	146.64	-277.6	-457.1	905.1	885.4	19.66	46.035	
5,000.0	4,964.4	4,902.1	4,871.7	13.1	12.4	146.66	-284.3	-467.1	926.2	906.1	20.08	46.119	
5,100.0	5,063.5	4,999.9	4,968.7	13.4	12.7	146.67	-291.0	-477.0	947.3	926.8	20.50	46.199	

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 Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4C-35H-O367 - 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
5,200.0	5,162.6	5,097.6	5,065.7	13.7	13.0	146.69	-297.7	-486.9	968.4	947.4	20.93	46.275	
5,300.0	5,261.7	5,195.4	5,162.7	13.9	13.2	146.70	-304.4	-496.9	989.5	968.1	21.35	46.349	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4D-35H-O367 - 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	-89.47	0.3	-37.4	37.4				
100.0	100.0	100.0	100.0	0.2	0.2	-89.47	0.3	-37.4	37.4	37.1	0.30	123.303	
200.0	200.0	200.0	200.0	0.3	0.3	-89.47	0.3	-37.4	37.4	36.8	0.65	57.366	
300.0	300.0	300.0	300.0	0.5	0.5	-89.47	0.3	-37.4	37.4	36.4	1.00	37.378	
400.0	400.0	400.0	400.0	0.7	0.7	-89.47	0.3	-37.4	37.4	36.1	1.35	27.719	
500.0	500.0	500.0	500.0	0.8	0.8	-89.47	0.3	-37.4	37.4	35.7	1.70	22.027	CC, ES
600.0	600.0	599.5	599.5	1.0	1.0	146.12	-0.3	-38.0	38.8	36.7	2.05	18.929	
700.0	700.0	699.0	698.9	1.2	1.2	145.55	-2.1	-39.9	42.8	40.4	2.40	17.828	SF
800.0	799.9	798.2	798.0	1.4	1.4	144.79	-5.2	-42.9	49.4	46.7	2.75	17.951	
900.0	899.7	897.1	896.7	1.6	1.6	144.02	-9.5	-47.1	58.7	55.6	3.11	18.863	
1,000.0	999.4	995.5	994.9	1.8	1.8	143.32	-15.0	-52.4	70.7	67.2	3.48	20.298	
1,100.0	1,098.9	1,093.9	1,092.9	2.0	2.0	142.77	-21.5	-58.9	85.1	81.3	3.86	22.059	
1,200.0	1,198.3	1,192.6	1,191.1	2.2	2.2	142.84	-28.3	-65.5	101.2	97.0	4.25	23.828	
1,300.0	1,297.4	1,291.1	1,289.1	2.5	2.4	143.37	-35.1	-72.2	118.6	113.9	4.64	25.537	
1,400.0	1,396.5	1,389.5	1,387.1	2.8	2.6	143.92	-41.9	-78.8	136.3	131.2	5.05	27.003	
1,500.0	1,495.6	1,487.9	1,485.0	3.0	2.9	144.35	-48.7	-85.5	154.0	148.5	5.45	28.238	
1,600.0	1,594.7	1,586.3	1,583.0	3.3	3.1	144.68	-55.5	-92.1	171.7	165.8	5.86	29.290	
1,700.0	1,693.8	1,684.8	1,681.0	3.6	3.3	144.95	-62.3	-98.8	189.4	183.1	6.27	30.195	
1,800.0	1,793.0	1,783.2	1,778.9	3.9	3.6	145.18	-69.1	-105.4	207.1	200.4	6.68	30.982	
1,900.0	1,892.1	1,881.6	1,876.9	4.1	3.8	145.37	-75.9	-112.1	224.8	217.7	7.10	31.671	
2,000.0	1,991.2	1,980.0	1,974.8	4.4	4.0	145.53	-82.6	-118.7	242.5	235.0	7.51	32.281	
2,100.0	2,090.3	2,078.4	2,072.8	4.7	4.3	145.67	-89.4	-125.4	260.2	252.3	7.93	32.822	
2,200.0	2,189.4	2,176.8	2,170.7	5.0	4.5	145.80	-96.2	-132.0	278.0	269.6	8.35	33.306	
2,300.0	2,288.5	2,275.3	2,268.7	5.3	4.7	145.90	-103.0	-138.7	295.7	286.9	8.76	33.742	
2,400.0	2,387.6	2,373.7	2,366.6	5.5	5.0	146.00	-109.8	-145.3	313.4	304.2	9.18	34.136	
2,500.0	2,486.7	2,472.1	2,464.6	5.8	5.2	146.08	-116.6	-151.9	331.1	321.5	9.60	34.494	
2,600.0	2,585.8	2,570.5	2,562.6	6.1	5.4	146.16	-123.4	-158.6	348.8	338.8	10.02	34.821	
2,700.0	2,684.9	2,668.9	2,660.5	6.4	5.7	146.23	-130.2	-165.2	366.6	356.1	10.44	35.120	
2,800.0	2,784.0	2,767.3	2,758.5	6.7	5.9	146.29	-136.9	-171.9	384.3	373.4	10.86	35.394	
2,900.0	2,883.1	2,865.8	2,856.4	7.0	6.1	146.35	-143.7	-178.5	402.0	390.7	11.28	35.648	
3,000.0	2,982.2	2,964.2	2,954.4	7.3	6.4	146.40	-150.5	-185.2	419.7	408.0	11.70	35.882	
3,100.0	3,081.3	3,062.6	3,052.3	7.6	6.6	146.45	-157.3	-191.8	437.5	425.3	12.12	36.099	
3,200.0	3,180.4	3,161.0	3,150.3	7.8	6.9	146.50	-164.1	-198.5	455.2	442.7	12.54	36.301	
3,300.0	3,279.6	3,259.4	3,248.3	8.1	7.1	146.54	-170.9	-205.1	472.9	460.0	12.96	36.490	
3,400.0	3,378.7	3,357.8	3,346.2	8.4	7.3	146.58	-177.7	-211.8	490.6	477.3	13.38	36.666	
3,500.0	3,477.8	3,456.2	3,444.2	8.7	7.6	146.61	-184.5	-218.4	508.4	494.6	13.80	36.831	
3,600.0	3,576.9	3,554.7	3,542.1	9.0	7.8	146.64	-191.3	-225.1	526.1	511.9	14.22	36.986	
3,700.0	3,676.0	3,653.1	3,640.1	9.3	8.0	146.68	-198.0	-231.7	543.8	529.2	14.65	37.131	
3,800.0	3,775.1	3,751.5	3,738.0	9.6	8.3	146.70	-204.8	-238.4	561.6	546.5	15.07	37.268	
3,900.0	3,874.2	3,849.9	3,836.0	9.9	8.5	146.73	-211.6	-245.0	579.3	563.8	15.49	37.398	
4,000.0	3,973.3	3,948.3	3,933.9	10.2	8.8	146.76	-218.4	-251.7	597.0	581.1	15.91	37.520	
4,100.0	4,072.4	4,046.7	4,031.9	10.5	9.0	146.78	-225.2	-258.3	614.7	598.4	16.33	37.635	
4,200.0	4,171.5	4,145.2	4,129.9	10.7	9.2	146.80	-232.0	-264.9	632.5	615.7	16.76	37.745	
4,300.0	4,270.6	4,243.6	4,227.8	11.0	9.5	146.83	-238.8	-271.6	650.2	633.0	17.18	37.849	
4,400.0	4,369.7	4,342.0	4,325.8	11.3	9.7	146.85	-245.6	-278.2	667.9	650.3	17.60	37.948	
4,500.0	4,468.8	4,440.4	4,423.7	11.6	9.9	146.87	-252.3	-284.9	685.6	667.6	18.02	38.042	
4,600.0	4,567.9	4,538.8	4,521.7	11.9	10.2	146.88	-259.1	-291.5	703.4	684.9	18.45	38.132	
4,700.0	4,667.0	4,637.2	4,619.6	12.2	10.4	146.90	-265.9	-298.2	721.1	702.2	18.87	38.217	
4,800.0	4,766.2	4,735.7	4,717.6	12.5	10.7	146.92	-272.7	-304.8	738.8	719.5	19.29	38.299	
4,900.0	4,865.3	4,834.1	4,815.6	12.8	10.9	146.93	-279.5	-311.5	756.6	736.8	19.71	38.377	
5,000.0	4,964.4	4,932.5	4,913.5	13.1	11.1	146.95	-286.3	-318.1	774.3	754.1	20.14	38.452	
5,100.0	5,063.5	5,030.9	5,011.5	13.4	11.4	146.96	-293.1	-324.8	792.0	771.5	20.56	38.523	

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 Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4D-35H-O367 - 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
5,200.0	5,162.6	5,129.3	5,109.4	13.7	11.6	146.98	-299.9	-331.4	809.7	788.8	20.98	38.592	
5,300.0	5,261.7	5,227.7	5,207.4	13.9	11.9	146.99	-306.6	-338.1	827.5	806.1	21.40	38.658	
5,400.0	5,360.8	5,326.1	5,305.3	14.2	12.1	147.00	-313.4	-344.7	845.2	823.4	21.83	38.721	
5,500.0	5,459.9	5,424.6	5,403.3	14.5	12.3	147.02	-320.2	-351.4	862.9	840.7	22.25	38.782	
5,600.0	5,559.0	5,523.0	5,501.2	14.8	12.6	147.03	-327.0	-358.0	880.7	858.0	22.67	38.840	
5,700.0	5,658.1	5,621.4	5,599.2	15.1	12.8	147.04	-333.8	-364.7	898.4	875.3	23.10	38.896	
5,800.0	5,757.2	5,719.8	5,697.2	15.4	13.0	147.05	-340.6	-371.3	916.1	892.6	23.52	38.950	
5,900.0	5,856.3	5,818.2	5,795.1	15.7	13.3	147.06	-347.4	-377.9	933.8	909.9	23.94	39.002	
6,000.0	5,955.4	5,916.6	5,893.1	16.0	13.5	147.07	-354.2	-384.6	951.6	927.2	24.37	39.053	
6,100.0	6,054.5	6,015.1	5,991.0	16.3	13.8	147.08	-361.0	-391.2	969.3	944.5	24.79	39.101	
6,200.0	6,153.6	6,113.5	6,089.0	16.6	14.0	147.09	-367.7	-397.9	987.0	961.8	25.21	39.148	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4E-35H-O367 - 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	-89.35	0.3	-29.9	29.9				
100.0	100.0	100.0	100.0	0.2	0.2	-89.35	0.3	-29.9	29.9	29.6	0.30	98.461	
200.0	200.0	200.0	200.0	0.3	0.3	-89.35	0.3	-29.9	29.9	29.2	0.65	45.808	
300.0	300.0	300.0	300.0	0.5	0.5	-89.35	0.3	-29.9	29.9	28.9	1.00	29.847	
400.0	400.0	400.0	400.0	0.7	0.7	-89.35	0.3	-29.9	29.9	28.6	1.35	22.135	
500.0	500.0	500.0	500.0	0.8	0.8	-89.35	0.3	-29.9	29.9	28.2	1.70	17.589	CC, ES
600.0	600.0	600.0	600.0	1.0	1.0	147.35	0.3	-29.9	30.6	28.6	2.05	14.950	
700.0	700.0	699.7	699.7	1.2	1.2	148.40	-0.4	-30.3	33.2	30.8	2.40	13.844	
800.0	799.9	799.4	799.3	1.4	1.4	148.21	-2.8	-31.4	37.9	35.2	2.75	13.797	
900.0	899.7	898.8	898.7	1.6	1.6	147.19	-6.7	-33.3	44.9	41.8	3.11	14.433	
1,000.0	999.4	998.1	997.7	1.8	1.7	145.78	-12.1	-35.9	54.0	50.5	3.48	15.526	
1,100.0	1,098.9	1,097.2	1,096.6	2.0	1.9	144.53	-18.8	-39.2	65.2	61.3	3.86	16.902	
1,200.0	1,198.3	1,196.4	1,195.6	2.2	2.1	144.28	-25.6	-42.5	77.9	73.6	4.24	18.344	
1,300.0	1,297.4	1,295.4	1,294.3	2.5	2.3	144.71	-32.4	-45.8	91.9	87.2	4.64	19.800	
1,400.0	1,396.5	1,394.4	1,392.9	2.8	2.6	145.19	-39.2	-49.1	106.2	101.2	5.04	21.064	
1,500.0	1,495.6	1,493.4	1,491.6	3.0	2.8	145.55	-46.0	-52.4	120.5	115.1	5.45	22.128	
1,600.0	1,594.7	1,592.3	1,590.3	3.3	3.0	145.84	-52.8	-55.7	134.9	129.0	5.85	23.036	
1,700.0	1,693.8	1,691.3	1,689.0	3.6	3.2	146.07	-59.6	-59.0	149.2	142.9	6.26	23.818	
1,800.0	1,793.0	1,790.3	1,787.7	3.9	3.4	146.26	-66.4	-62.3	163.6	156.9	6.68	24.498	
1,900.0	1,892.1	1,889.2	1,886.3	4.1	3.6	146.42	-73.2	-65.6	177.9	170.8	7.09	25.094	
2,000.0	1,991.2	1,988.2	1,985.0	4.4	3.8	146.55	-80.0	-68.9	192.2	184.7	7.50	25.621	
2,100.0	2,090.3	2,087.2	2,083.7	4.7	4.0	146.67	-86.8	-72.2	206.6	198.7	7.92	26.089	
2,200.0	2,189.4	2,186.1	2,182.4	5.0	4.2	146.77	-93.6	-75.4	220.9	212.6	8.33	26.509	
2,300.0	2,288.5	2,285.1	2,281.0	5.3	4.4	146.86	-100.4	-78.7	235.3	226.5	8.75	26.886	
2,400.0	2,387.6	2,384.1	2,379.7	5.5	4.7	146.94	-107.2	-82.0	249.6	240.5	9.17	27.227	
2,500.0	2,486.7	2,483.0	2,478.4	5.8	4.9	147.01	-114.0	-85.3	264.0	254.4	9.59	27.538	
2,600.0	2,585.8	2,582.0	2,577.1	6.1	5.1	147.07	-120.8	-88.6	278.3	268.3	10.00	27.820	
2,700.0	2,684.9	2,681.0	2,675.7	6.4	5.3	147.13	-127.6	-91.9	292.7	282.2	10.42	28.080	
2,800.0	2,784.0	2,779.9	2,774.4	6.7	5.5	147.18	-134.4	-95.2	307.0	296.2	10.84	28.318	
2,900.0	2,883.1	2,878.9	2,873.1	7.0	5.7	147.23	-141.2	-98.5	321.4	310.1	11.26	28.537	
3,000.0	2,982.2	2,977.9	2,971.8	7.3	6.0	147.27	-148.0	-101.8	335.7	324.0	11.68	28.741	
3,100.0	3,081.3	3,076.8	3,070.4	7.6	6.2	147.31	-154.8	-105.1	350.1	338.0	12.10	28.929	
3,200.0	3,180.4	3,175.8	3,169.1	7.8	6.4	147.35	-161.6	-108.4	364.4	351.9	12.52	29.105	
3,300.0	3,279.6	3,274.7	3,267.8	8.1	6.6	147.38	-168.4	-111.7	378.8	365.8	12.94	29.268	
3,400.0	3,378.7	3,373.7	3,366.5	8.4	6.8	147.41	-175.2	-115.0	393.1	379.7	13.36	29.421	
3,500.0	3,477.8	3,472.7	3,465.1	8.7	7.0	147.44	-182.0	-118.3	407.5	393.7	13.78	29.564	
3,600.0	3,576.9	3,571.6	3,563.8	9.0	7.2	147.47	-188.8	-121.6	421.8	407.6	14.20	29.698	
3,700.0	3,676.0	3,670.6	3,662.5	9.3	7.5	147.50	-195.6	-124.9	436.2	421.5	14.62	29.825	
3,800.0	3,775.1	3,769.6	3,761.2	9.6	7.7	147.52	-202.4	-128.2	450.5	435.5	15.05	29.944	
3,900.0	3,874.2	3,868.5	3,859.9	9.9	7.9	147.54	-209.2	-131.5	464.9	449.4	15.47	30.056	
4,000.0	3,973.3	3,967.5	3,958.5	10.2	8.1	147.56	-216.0	-134.8	479.2	463.3	15.89	30.162	
4,100.0	4,072.4	4,066.5	4,057.2	10.5	8.3	147.58	-222.8	-138.1	493.6	477.2	16.31	30.263	
4,200.0	4,171.5	4,165.4	4,155.9	10.7	8.5	147.60	-229.6	-141.4	507.9	491.2	16.73	30.358	
4,300.0	4,270.6	4,264.4	4,254.6	11.0	8.8	147.62	-236.4	-144.7	522.3	505.1	17.15	30.448	
4,400.0	4,369.7	4,363.4	4,353.2	11.3	9.0	147.63	-243.2	-148.0	536.6	519.0	17.57	30.534	
4,500.0	4,468.8	4,462.3	4,451.9	11.6	9.2	147.65	-250.0	-151.3	551.0	533.0	18.00	30.616	
4,600.0	4,567.9	4,561.3	4,550.6	11.9	9.4	147.66	-256.8	-154.6	565.3	546.9	18.42	30.694	
4,700.0	4,667.0	4,660.3	4,649.3	12.2	9.6	147.68	-263.5	-157.9	579.7	560.8	18.84	30.768	
4,800.0	4,766.2	4,759.2	4,747.9	12.5	9.8	147.69	-270.3	-161.2	594.0	574.7	19.26	30.839	
4,900.0	4,865.3	4,858.2	4,846.6	12.8	10.1	147.71	-277.1	-164.5	608.4	588.7	19.68	30.907	
5,000.0	4,964.4	4,957.2	4,945.3	13.1	10.3	147.72	-283.9	-167.8	622.7	602.6	20.11	30.972	
5,100.0	5,063.5	5,056.1	5,044.0	13.4	10.5	147.73	-290.7	-171.1	637.1	616.5	20.53	31.034	

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 Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4E-35H-O367 - 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
5,200.0	5,162.6	5,155.1	5,142.6	13.7	10.7	147.74	-297.5	-174.4	651.4	630.5	20.95	31.093	
5,300.0	5,261.7	5,254.0	5,241.3	13.9	10.9	147.75	-304.3	-177.6	665.8	644.4	21.37	31.151	
5,400.0	5,360.8	5,353.0	5,340.0	14.2	11.1	147.76	-311.1	-180.9	680.1	658.3	21.79	31.206	
5,500.0	5,459.9	5,452.0	5,438.7	14.5	11.4	147.77	-317.9	-184.2	694.5	672.2	22.22	31.258	
5,600.0	5,559.0	5,550.9	5,537.3	14.8	11.6	147.78	-324.7	-187.5	708.8	686.2	22.64	31.309	
5,700.0	5,658.1	5,649.9	5,636.0	15.1	11.8	147.79	-331.5	-190.8	723.2	700.1	23.06	31.358	
5,800.0	5,757.2	5,748.9	5,734.7	15.4	12.0	147.80	-338.3	-194.1	737.5	714.0	23.48	31.405	
5,900.0	5,856.3	5,847.8	5,833.4	15.7	12.2	147.81	-345.1	-197.4	751.9	727.9	23.91	31.450	
6,000.0	5,955.4	5,946.8	5,932.0	16.0	12.4	147.81	-351.9	-200.7	766.2	741.9	24.33	31.494	
6,100.0	6,054.5	6,045.8	6,030.7	16.3	12.7	147.82	-358.7	-204.0	780.6	755.8	24.75	31.536	
6,200.0	6,153.6	6,144.7	6,129.4	16.6	12.9	147.83	-365.5	-207.3	794.9	769.7	25.17	31.577	
6,300.0	6,252.8	6,243.7	6,228.1	16.9	13.1	147.84	-372.3	-210.6	809.3	783.7	25.60	31.616	
6,400.0	6,351.9	6,342.7	6,326.8	17.1	13.3	147.84	-379.1	-213.9	823.6	797.6	26.02	31.654	
6,500.0	6,451.2	6,441.4	6,425.2	17.4	13.5	-154.33	-385.9	-217.2	837.7	811.4	26.33	31.815	
6,600.0	6,549.8	6,538.6	6,522.2	17.5	13.7	-118.11	-392.6	-220.4	851.4	824.8	26.58	32.036	
6,700.0	6,645.9	6,633.2	6,616.5	17.5	13.9	-107.19	-398.4	-223.6	865.1	838.4	26.73	32.367	
6,800.0	6,737.5	6,731.2	6,714.3	17.5	14.0	-103.05	-394.1	-226.9	879.4	852.8	26.69	32.953	
6,900.0	6,823.0	6,834.7	6,815.8	17.4	14.0	-101.32	-375.2	-230.3	894.1	867.6	26.46	33.786	
7,000.0	6,900.5	6,944.4	6,919.4	17.4	13.9	-100.71	-339.3	-233.7	908.6	882.5	26.10	34.805	
7,100.0	6,968.7	7,061.4	7,022.4	17.3	13.7	-100.73	-284.2	-237.2	922.6	896.9	25.70	35.896	
7,200.0	7,026.1	7,186.4	7,120.9	17.4	13.5	-101.09	-207.6	-240.4	935.4	910.0	25.39	36.846	
7,300.0	7,071.7	7,319.8	7,209.7	17.5	13.4	-101.64	-108.4	-243.4	946.4	921.0	25.35	37.337	
7,400.0	7,104.6	7,461.2	7,282.0	17.8	13.6	-102.25	12.8	-245.8	954.9	929.1	25.79	37.026	
7,500.0	7,124.2	7,609.4	7,330.7	18.3	14.1	-102.81	152.5	-247.5	960.2	933.3	26.89	35.711	
7,600.0	7,130.0	7,762.0	7,349.9	18.9	15.2	-103.21	303.7	-248.1	962.0	933.3	28.68	33.540	
7,700.0	7,130.0	7,866.9	7,350.0	19.6	16.1	-103.23	408.6	-248.1	961.1	930.6	30.53	31.481	
7,800.0	7,130.0	7,966.9	7,350.0	20.4	17.1	-103.24	508.6	-248.1	960.3	927.7	32.58	29.471	
7,900.0	7,130.0	8,066.9	7,350.0	21.4	18.3	-103.26	608.5	-248.1	959.4	924.6	34.85	27.529	
8,000.0	7,130.0	8,166.9	7,350.0	22.4	19.5	-103.27	708.5	-248.1	958.6	921.3	37.29	25.703	
8,100.0	7,130.0	8,266.9	7,350.0	23.5	20.8	-103.28	808.5	-248.1	957.7	917.8	39.88	24.016	
8,200.0	7,130.0	8,366.9	7,350.0	24.7	22.2	-103.29	908.5	-248.1	956.9	914.3	42.58	22.471	
8,300.0	7,130.0	8,466.9	7,350.0	26.0	23.6	-103.30	1,008.5	-248.1	956.0	910.6	45.38	21.067	
8,400.0	7,130.0	8,566.9	7,350.0	27.3	25.1	-103.32	1,108.5	-248.1	955.2	906.9	48.26	19.793	
8,500.0	7,130.0	8,666.9	7,350.0	28.7	26.5	-103.33	1,208.5	-248.1	954.3	903.1	51.20	18.639	
8,600.0	7,130.0	8,766.9	7,350.0	30.1	28.1	-103.34	1,308.5	-248.1	953.5	899.3	54.20	17.592	
8,700.0	7,130.0	8,866.9	7,350.0	31.6	29.6	-103.35	1,408.5	-248.1	952.6	895.4	57.24	16.642	
8,800.0	7,130.0	8,966.9	7,350.0	33.0	31.2	-103.37	1,508.5	-248.1	951.8	891.5	60.33	15.777	
8,900.0	7,130.0	9,066.9	7,350.0	34.5	32.8	-103.38	1,608.5	-248.1	950.9	887.5	63.44	14.989	
9,000.0	7,130.0	9,166.9	7,350.0	36.1	34.4	-103.39	1,708.5	-248.1	950.1	883.5	66.59	14.268	
9,100.0	7,130.0	9,266.9	7,350.0	37.6	36.0	-103.40	1,808.5	-248.1	949.2	879.5	69.76	13.608	
9,200.0	7,130.0	9,366.9	7,350.0	39.2	37.6	-103.41	1,908.5	-248.1	948.4	875.4	72.95	13.001	
9,300.0	7,130.0	9,466.9	7,350.0	40.7	39.3	-103.43	2,008.5	-248.1	947.5	871.4	76.16	12.442	
9,400.0	7,130.0	9,566.9	7,350.0	42.3	40.9	-103.44	2,108.5	-248.1	946.7	867.3	79.38	11.925	
9,500.0	7,130.0	9,666.8	7,350.0	43.9	42.6	-103.45	2,208.5	-248.1	945.8	863.2	82.63	11.447	
9,600.0	7,130.0	9,766.8	7,350.0	45.5	44.3	-103.46	2,308.5	-248.1	945.0	859.1	85.88	11.004	
9,700.0	7,130.0	9,866.8	7,350.0	47.2	45.9	-103.48	2,408.5	-248.1	944.1	855.0	89.14	10.591	
9,800.0	7,130.0	9,966.8	7,350.0	48.8	47.6	-103.49	2,508.5	-248.1	943.3	850.9	92.42	10.207	
9,900.0	7,130.0	10,066.8	7,350.0	50.4	49.3	-103.50	2,608.5	-248.1	942.4	846.7	95.70	9.848	
10,000.0	7,130.0	10,166.8	7,350.0	52.1	51.0	-103.51	2,708.5	-248.1	941.6	842.6	98.99	9.512	
10,100.0	7,130.0	10,266.8	7,350.0	53.7	52.7	-103.52	2,808.5	-248.1	940.7	838.5	102.29	9.197	
10,200.0	7,130.0	10,366.8	7,350.0	55.4	54.4	-103.54	2,908.5	-248.1	939.9	834.3	105.60	8.901	
10,300.0	7,130.0	10,466.8	7,350.0	57.1	56.1	-103.55	3,008.5	-248.1	939.0	830.1	108.91	8.622	

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 Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4E-35H-O367 - 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
10,400.0	7,130.0	10,566.8	7,350.0	58.7	57.8	-103.56	3,108.5	-248.1	938.2	826.0	112.23	8.360	
10,500.0	7,130.0	10,666.8	7,350.0	60.4	59.5	-103.57	3,208.4	-248.1	937.4	821.8	115.55	8.112	
10,600.0	7,130.0	10,766.8	7,350.0	62.1	61.2	-103.59	3,308.4	-248.1	936.5	817.6	118.88	7.878	
10,700.0	7,130.0	10,866.8	7,350.0	63.8	62.9	-103.60	3,408.4	-248.1	935.7	813.4	122.21	7.656	
10,800.0	7,130.0	10,966.8	7,350.0	65.5	64.6	-103.61	3,508.4	-248.1	934.8	809.3	125.54	7.446	
10,900.0	7,130.0	11,066.8	7,350.0	67.2	66.4	-103.62	3,608.4	-248.1	934.0	805.1	128.88	7.247	
11,000.0	7,130.0	11,166.8	7,350.0	68.9	68.1	-103.64	3,708.4	-248.1	933.1	800.9	132.22	7.057	
11,100.0	7,130.0	11,266.8	7,350.0	70.6	69.8	-103.65	3,808.4	-248.1	932.3	796.7	135.56	6.877	
11,200.0	7,130.0	11,366.8	7,350.0	72.3	71.5	-103.66	3,908.4	-248.1	931.4	792.5	138.91	6.705	
11,300.0	7,130.0	11,466.8	7,350.0	74.0	73.2	-103.68	4,008.4	-248.1	930.6	788.3	142.25	6.542	
11,400.0	7,130.0	11,566.8	7,350.0	75.7	75.0	-103.69	4,108.4	-248.1	929.7	784.1	145.60	6.385	
11,500.0	7,130.0	11,666.8	7,350.0	77.4	76.7	-103.70	4,208.4	-248.1	928.9	779.9	148.96	6.236	
11,600.0	7,130.0	11,766.8	7,350.0	79.1	78.4	-103.71	4,308.4	-248.1	928.0	775.7	152.31	6.093	
11,695.8	7,130.0	11,862.6	7,350.0	80.7	80.1	-103.73	4,404.2	-248.1	927.2	771.7	155.52	5.962	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4F-35H-O367 - 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	-89.05	0.4	-22.4	22.4				
100.0	100.0	100.0	100.0	0.2	0.2	-89.05	0.4	-22.4	22.4	22.1	0.30	73.621	
200.0	200.0	200.0	200.0	0.3	0.3	-89.05	0.4	-22.4	22.4	21.7	0.65	34.251	
300.0	300.0	300.0	300.0	0.5	0.5	-89.05	0.4	-22.4	22.4	21.4	1.00	22.317	
400.0	400.0	400.0	400.0	0.7	0.7	-89.05	0.4	-22.4	22.4	21.0	1.35	16.550	
500.0	500.0	500.0	500.0	0.8	0.8	-89.05	0.4	-22.4	22.4	20.7	1.70	13.152	CC, ES
600.0	600.0	600.0	600.0	1.0	1.0	147.94	0.4	-22.4	23.1	21.0	2.05	11.270	
700.0	700.0	700.0	700.0	1.2	1.2	151.07	0.4	-22.4	25.3	23.0	2.40	10.570	
800.0	799.9	799.9	799.9	1.4	1.4	155.19	0.4	-22.4	29.2	26.5	2.75	10.644	
900.0	899.7	899.7	899.7	1.6	1.5	159.38	0.4	-22.4	34.9	31.8	3.10	11.267	
1,000.0	999.4	999.4	999.4	1.8	1.7	163.10	0.4	-22.4	42.3	38.9	3.44	12.290	
1,100.0	1,098.9	1,098.9	1,098.9	2.0	1.9	166.18	0.4	-22.4	51.6	47.8	3.79	13.610	
1,200.0	1,198.3	1,198.3	1,198.3	2.2	2.1	168.63	0.4	-22.4	62.6	58.5	4.13	15.153	
1,300.0	1,297.4	1,297.4	1,297.4	2.5	2.2	170.56	0.4	-22.4	75.4	70.9	4.48	16.836	
1,400.0	1,396.5	1,396.5	1,396.5	2.8	2.4	171.97	0.4	-22.4	88.5	83.7	4.82	18.359	
1,500.0	1,495.6	1,495.6	1,495.6	3.0	2.6	173.02	0.4	-22.4	101.8	96.6	5.17	19.685	
1,600.0	1,594.7	1,595.6	1,595.6	3.3	2.8	173.48	-0.4	-22.4	114.7	109.1	5.52	20.773	
1,700.0	1,693.8	1,695.9	1,695.8	3.6	2.9	173.14	-3.0	-22.4	126.7	120.9	5.87	21.583	
1,800.0	1,793.0	1,796.3	1,796.1	3.9	3.1	172.21	-7.3	-22.4	138.0	131.8	6.23	22.158	
1,900.0	1,892.1	1,896.7	1,896.4	4.1	3.3	170.81	-13.4	-22.4	148.6	142.0	6.60	22.533	
2,000.0	1,991.2	1,997.2	1,996.6	4.4	3.5	169.01	-21.2	-22.4	158.6	151.6	6.97	22.740	
2,100.0	2,090.3	2,096.6	2,095.6	4.7	3.7	167.15	-29.8	-22.4	168.4	161.0	7.36	22.874	
2,200.0	2,189.4	2,196.0	2,194.6	5.0	3.9	165.51	-38.5	-22.4	178.3	170.5	7.75	22.992	
2,300.0	2,288.5	2,295.4	2,293.6	5.3	4.1	164.03	-47.1	-22.4	188.4	180.2	8.16	23.095	
2,400.0	2,387.6	2,394.8	2,392.6	5.5	4.3	162.71	-55.7	-22.4	198.5	190.0	8.56	23.185	
2,500.0	2,486.7	2,494.1	2,491.6	5.8	4.5	161.52	-64.4	-22.4	208.8	199.8	8.97	23.264	
2,600.0	2,585.8	2,593.5	2,590.6	6.1	4.7	160.43	-73.0	-22.4	219.1	209.7	9.39	23.333	
2,700.0	2,684.9	2,692.9	2,689.6	6.4	4.9	159.45	-81.6	-22.5	229.6	219.7	9.81	23.393	
2,800.0	2,784.0	2,792.3	2,788.7	6.7	5.1	158.55	-90.3	-22.5	240.0	229.8	10.24	23.447	
2,900.0	2,883.1	2,891.7	2,887.7	7.0	5.3	157.73	-98.9	-22.5	250.6	239.9	10.66	23.494	
3,000.0	2,982.2	2,991.0	2,986.7	7.3	5.6	156.97	-107.5	-22.5	261.1	250.0	11.10	23.536	
3,100.0	3,081.3	3,090.4	3,085.7	7.6	5.8	156.27	-116.2	-22.5	271.8	260.2	11.53	23.573	
3,200.0	3,180.4	3,189.8	3,184.7	7.8	6.0	155.63	-124.8	-22.5	282.4	270.5	11.96	23.607	
3,300.0	3,279.6	3,289.2	3,283.7	8.1	6.2	155.03	-133.4	-22.5	293.1	280.7	12.40	23.637	
3,400.0	3,378.7	3,388.6	3,382.7	8.4	6.4	154.47	-142.1	-22.5	303.8	291.0	12.84	23.664	
3,500.0	3,477.8	3,488.0	3,481.7	8.7	6.6	153.96	-150.7	-22.5	314.6	301.3	13.28	23.688	
3,600.0	3,576.9	3,587.3	3,580.7	9.0	6.9	153.47	-159.3	-22.5	325.3	311.6	13.72	23.710	
3,700.0	3,676.0	3,686.7	3,679.7	9.3	7.1	153.02	-168.0	-22.6	336.1	322.0	14.16	23.731	
3,800.0	3,775.1	3,786.1	3,778.7	9.6	7.3	152.59	-176.6	-22.6	346.9	332.3	14.61	23.749	
3,900.0	3,874.2	3,885.5	3,877.7	9.9	7.5	152.19	-185.2	-22.6	357.8	342.7	15.05	23.766	
4,000.0	3,973.3	3,984.9	3,976.7	10.2	7.8	151.82	-193.9	-22.6	368.6	353.1	15.50	23.782	
4,100.0	4,072.4	4,084.3	4,075.7	10.5	8.0	151.46	-202.5	-22.6	379.5	363.5	15.95	23.796	
4,200.0	4,171.5	4,183.6	4,174.7	10.7	8.2	151.13	-211.2	-22.6	390.3	374.0	16.39	23.809	
4,300.0	4,270.6	4,283.0	4,273.7	11.0	8.4	150.81	-219.8	-22.6	401.2	384.4	16.84	23.822	
4,400.0	4,369.7	4,382.4	4,372.8	11.3	8.6	150.51	-228.4	-22.6	412.1	394.8	17.29	23.833	
4,500.0	4,468.8	4,481.8	4,471.8	11.6	8.9	150.23	-237.1	-22.6	423.0	405.3	17.74	23.844	
4,600.0	4,567.9	4,581.2	4,570.8	11.9	9.1	149.96	-245.7	-22.6	434.0	415.8	18.19	23.854	
4,700.0	4,667.0	4,680.5	4,669.8	12.2	9.3	149.70	-254.3	-22.7	444.9	426.2	18.64	23.863	
4,800.0	4,766.2	4,779.9	4,768.8	12.5	9.5	149.46	-263.0	-22.7	455.8	436.7	19.09	23.872	
4,900.0	4,865.3	4,879.3	4,867.8	12.8	9.8	149.23	-271.6	-22.7	466.8	447.2	19.55	23.880	
5,000.0	4,964.4	4,978.7	4,966.8	13.1	10.0	149.00	-280.2	-22.7	477.7	457.7	20.00	23.888	
5,100.0	5,063.5	5,078.1	5,065.8	13.4	10.2	148.79	-288.9	-22.7	488.7	468.2	20.45	23.895	

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 Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4F-35H-O367 - 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
5,200.0	5,162.6	5,177.5	5,164.8	13.7	10.4	148.59	-297.5	-22.7	499.6	478.7	20.90	23.902	
5,300.0	5,261.7	5,276.8	5,263.8	13.9	10.7	148.39	-306.1	-22.7	510.6	489.2	21.36	23.908	
5,400.0	5,360.8	5,376.2	5,362.8	14.2	10.9	148.21	-314.8	-22.7	521.6	499.8	21.81	23.914	
5,500.0	5,459.9	5,475.6	5,461.8	14.5	11.1	148.03	-323.4	-22.7	532.5	510.3	22.26	23.920	
5,600.0	5,559.0	5,575.0	5,560.8	14.8	11.3	147.86	-332.0	-22.8	543.5	520.8	22.72	23.926	
5,700.0	5,658.1	5,674.4	5,659.8	15.1	11.6	147.69	-340.7	-22.8	554.5	531.3	23.17	23.931	
5,800.0	5,757.2	5,773.7	5,758.8	15.4	11.8	147.54	-349.3	-22.8	565.5	541.9	23.63	23.936	
5,900.0	5,856.3	5,873.1	5,857.8	15.7	12.0	147.38	-357.9	-22.8	576.5	552.4	24.08	23.941	
6,000.0	5,955.4	5,972.5	5,956.9	16.0	12.3	147.24	-366.6	-22.8	587.5	563.0	24.54	23.945	
6,100.0	6,054.5	6,071.9	6,055.9	16.3	12.5	147.10	-375.2	-22.8	598.5	573.5	24.99	23.950	
6,200.0	6,153.6	6,171.3	6,154.9	16.6	12.7	146.96	-383.8	-22.8	609.5	584.1	25.45	23.954	
6,300.0	6,252.8	6,270.7	6,253.9	16.9	12.9	146.83	-392.5	-22.8	620.5	594.6	25.90	23.958	
6,400.0	6,351.9	6,370.0	6,352.9	17.1	13.2	146.70	-401.1	-22.8	631.5	605.2	26.36	23.962	
6,500.0	6,451.2	6,467.7	6,450.4	17.4	13.3	-155.31	-402.8	-22.8	642.6	616.0	26.55	24.204	
6,600.0	6,549.8	6,565.3	6,547.3	17.5	13.3	-118.07	-391.2	-22.9	653.4	626.9	26.50	24.657	
6,700.0	6,645.9	6,663.0	6,641.7	17.5	13.2	-105.46	-366.5	-22.9	663.8	637.5	26.27	25.268	
6,800.0	6,737.5	6,760.8	6,732.0	17.5	13.0	-99.52	-329.1	-22.9	673.6	647.7	25.92	25.986	
6,900.0	6,823.0	6,858.8	6,816.6	17.4	12.8	-96.05	-279.7	-22.9	682.6	657.1	25.53	26.736	
7,000.0	6,900.5	6,957.0	6,893.7	17.4	12.6	-93.78	-219.1	-22.9	690.6	665.4	25.19	27.419	
7,100.0	6,968.7	7,055.4	6,962.1	17.3	12.5	-92.23	-148.3	-22.9	697.5	672.5	24.99	27.911	
7,200.0	7,026.1	7,154.2	7,020.2	17.4	12.5	-91.16	-68.6	-22.9	703.1	678.1	25.03	28.087	
7,300.0	7,071.7	7,253.3	7,067.0	17.5	12.7	-90.45	18.6	-22.9	707.4	682.0	25.40	27.848	
7,400.0	7,104.6	7,352.6	7,101.3	17.8	13.0	-90.04	111.8	-22.9	710.2	684.1	26.14	27.166	
7,500.0	7,124.2	7,452.2	7,122.5	18.3	13.6	-89.90	209.0	-22.9	711.5	684.3	27.27	26.093	
7,600.0	7,130.0	7,552.1	7,130.0	18.9	14.4	-90.00	308.6	-22.9	711.3	682.5	28.75	24.739	
7,700.0	7,130.0	7,652.1	7,130.0	19.6	15.3	-90.00	408.6	-22.9	710.4	679.8	30.63	23.193	
7,800.0	7,130.0	7,752.1	7,130.0	20.4	16.4	-90.00	508.6	-22.9	709.5	676.8	32.76	21.658	
7,900.0	7,130.0	7,852.1	7,130.0	21.4	17.6	-90.00	608.5	-22.9	708.7	673.6	35.11	20.182	
8,000.0	7,130.0	7,952.1	7,130.0	22.4	18.8	-90.00	708.5	-22.9	707.8	670.2	37.65	18.801	
8,100.0	7,130.0	8,052.1	7,130.0	23.5	20.2	-90.00	808.5	-22.9	706.9	666.6	40.33	17.530	
8,200.0	7,130.0	8,152.1	7,130.0	24.7	21.6	-90.00	908.5	-22.9	706.1	662.9	43.13	16.372	
8,300.0	7,130.0	8,252.1	7,130.0	26.0	23.0	-90.00	1,008.5	-22.9	705.2	659.2	46.02	15.323	
8,400.0	7,130.0	8,352.1	7,130.0	27.3	24.5	-90.00	1,108.5	-22.9	704.3	655.3	49.00	14.374	
8,500.0	7,130.0	8,452.1	7,130.0	28.7	26.0	-90.00	1,208.5	-22.9	703.4	651.4	52.04	13.517	
8,600.0	7,130.0	8,552.1	7,130.0	30.1	27.6	-90.00	1,308.5	-22.9	702.6	647.4	55.14	12.742	
8,700.0	7,130.0	8,652.1	7,130.0	31.6	29.2	-90.00	1,408.5	-22.9	701.7	643.4	58.28	12.039	
8,800.0	7,130.0	8,752.1	7,130.0	33.0	30.8	-90.00	1,508.5	-22.9	700.8	639.4	61.47	11.401	
8,900.0	7,130.0	8,852.1	7,130.0	34.5	32.4	-90.00	1,608.5	-22.9	699.9	635.3	64.69	10.821	
9,000.0	7,130.0	8,952.1	7,130.0	36.1	34.0	-90.00	1,708.5	-22.9	699.1	631.1	67.93	10.291	
9,100.0	7,130.0	9,052.1	7,130.0	37.6	35.6	-90.00	1,808.5	-22.9	698.2	627.0	71.20	9.806	
9,200.0	7,130.0	9,152.1	7,130.0	39.2	37.3	-90.00	1,908.5	-22.9	697.3	622.8	74.50	9.361	
9,300.0	7,130.0	9,252.1	7,130.0	40.7	38.9	-90.00	2,008.5	-22.9	696.5	618.7	77.81	8.951	
9,400.0	7,130.0	9,352.1	7,130.0	42.3	40.6	-90.00	2,108.5	-22.9	695.6	614.4	81.14	8.573	
9,500.0	7,130.0	9,452.1	7,130.0	43.9	42.3	-90.00	2,208.5	-22.9	694.7	610.2	84.48	8.224	
9,600.0	7,130.0	9,552.0	7,130.0	45.5	43.9	-90.00	2,308.5	-22.9	693.8	606.0	87.83	7.899	
9,700.0	7,130.0	9,652.0	7,130.0	47.2	45.6	-90.00	2,408.5	-22.9	693.0	601.8	91.20	7.598	
9,800.0	7,130.0	9,752.0	7,130.0	48.8	47.3	-90.00	2,508.5	-22.9	692.1	597.5	94.58	7.318	
9,900.0	7,130.0	9,852.0	7,130.0	50.4	49.0	-90.00	2,608.5	-22.9	691.2	593.3	97.97	7.056	
10,000.0	7,130.0	9,952.0	7,130.0	52.1	50.7	-90.00	2,708.5	-22.9	690.3	589.0	101.36	6.811	
10,100.0	7,130.0	10,052.0	7,130.0	53.7	52.4	-90.00	2,808.5	-22.9	689.5	584.7	104.76	6.581	
10,200.0	7,130.0	10,152.0	7,130.0	55.4	54.1	-90.00	2,908.5	-22.9	688.6	580.4	108.17	6.366	
10,300.0	7,130.0	10,252.0	7,130.0	57.1	55.8	-90.00	3,008.5	-22.9	687.7	576.1	111.59	6.163	

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 Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4F-35H-O367 - 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
10,400.0	7,130.0	10,352.0	7,130.0	58.7	57.5	-90.00	3,108.5	-22.9	686.9	571.9	115.01	5.972	
10,500.0	7,130.0	10,452.0	7,130.0	60.4	59.2	-90.00	3,208.4	-22.9	686.0	567.6	118.43	5.792	
10,600.0	7,130.0	10,552.0	7,130.0	62.1	61.0	-90.00	3,308.4	-22.9	685.1	563.2	121.86	5.622	
10,700.0	7,130.0	10,652.0	7,130.0	63.8	62.7	-90.00	3,408.4	-22.9	684.2	558.9	125.30	5.461	
10,800.0	7,130.0	10,752.0	7,130.0	65.5	64.4	-90.00	3,508.4	-22.9	683.4	554.6	128.74	5.308	
10,900.0	7,130.0	10,852.0	7,130.0	67.2	66.1	-90.00	3,608.4	-22.9	682.5	550.3	132.18	5.163	
11,000.0	7,130.0	10,952.0	7,130.0	68.9	67.8	-90.00	3,708.4	-22.9	681.6	546.0	135.62	5.026	
11,100.0	7,130.0	11,052.0	7,130.0	70.6	69.6	-90.00	3,808.4	-22.9	680.7	541.7	139.07	4.895	
11,200.0	7,130.0	11,152.0	7,130.0	72.3	71.3	-90.00	3,908.4	-22.9	679.9	537.4	142.53	4.770	
11,300.0	7,130.0	11,252.0	7,130.0	74.0	73.0	-90.00	4,008.4	-22.9	679.0	533.0	145.98	4.651	
11,400.0	7,130.0	11,352.0	7,130.0	75.7	74.8	-90.00	4,108.4	-22.9	678.1	528.7	149.44	4.538	
11,500.0	7,130.0	11,452.0	7,130.0	77.4	76.5	-90.00	4,208.4	-22.9	677.3	524.4	152.90	4.430	
11,600.0	7,130.0	11,552.0	7,130.0	79.1	78.2	-90.00	4,308.4	-22.9	676.4	520.0	156.36	4.326	
11,695.8	7,130.0	11,647.8	7,130.0	80.7	79.9	-90.00	4,404.2	-22.9	675.5	515.9	159.68	4.231	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4G-35H-O367 - 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	-88.62	0.4	-15.1	15.1				
100.0	100.0	100.0	100.0	0.2	0.2	-88.62	0.4	-15.1	15.1	14.8	0.30	49.702	
200.0	200.0	200.0	200.0	0.3	0.3	-88.62	0.4	-15.1	15.1	14.4	0.65	23.123	
300.0	300.0	300.0	300.0	0.5	0.5	-88.62	0.4	-15.1	15.1	14.1	1.00	15.066	
400.0	400.0	400.0	400.0	0.7	0.7	-88.62	0.4	-15.1	15.1	13.7	1.35	11.173	
500.0	500.0	500.0	500.0	0.8	0.8	-88.62	0.4	-15.1	15.1	13.4	1.70	8.879	CC, ES
600.0	600.0	600.0	600.0	1.0	1.0	148.89	0.4	-15.1	15.8	13.8	2.05	7.728	
700.0	700.0	700.0	700.0	1.2	1.2	153.16	0.4	-15.1	18.1	15.7	2.40	7.559	
800.0	799.9	800.1	800.1	1.4	1.4	156.43	-0.4	-14.7	21.6	18.8	2.75	7.855	
900.0	899.7	900.2	900.2	1.6	1.6	157.13	-2.8	-13.6	25.6	22.5	3.10	8.275	
1,000.0	999.4	1,000.4	1,000.3	1.8	1.7	156.24	-6.8	-11.7	30.3	26.8	3.46	8.761	
1,100.0	1,098.9	1,100.6	1,100.3	2.0	1.9	154.43	-12.3	-9.1	35.5	31.7	3.82	9.287	
1,200.0	1,198.3	1,200.7	1,200.0	2.2	2.1	152.26	-19.3	-5.8	41.5	37.2	4.21	9.855	
1,300.0	1,297.4	1,300.4	1,299.4	2.5	2.3	151.21	-26.6	-2.4	48.7	44.1	4.60	10.590	
1,400.0	1,396.5	1,400.1	1,398.8	2.8	2.5	150.65	-34.0	1.1	56.3	51.3	5.00	11.261	
1,500.0	1,495.6	1,499.8	1,498.2	3.0	2.7	150.22	-41.3	4.5	63.8	58.4	5.40	11.824	
1,600.0	1,594.7	1,599.5	1,597.6	3.3	2.9	149.88	-48.6	8.0	71.4	65.6	5.81	12.300	
1,700.0	1,693.8	1,699.2	1,697.0	3.6	3.2	149.60	-55.9	11.4	79.0	72.8	6.22	12.707	
1,800.0	1,793.0	1,799.0	1,796.3	3.9	3.4	149.37	-63.3	14.9	86.6	79.9	6.63	13.060	
1,900.0	1,892.1	1,898.7	1,895.7	4.1	3.6	149.18	-70.6	18.3	94.2	87.1	7.04	13.367	
2,000.0	1,991.2	1,998.4	1,995.1	4.4	3.8	149.02	-77.9	21.7	101.7	94.3	7.46	13.637	
2,100.0	2,090.3	2,098.1	2,094.5	4.7	4.0	148.88	-85.2	25.2	109.3	101.5	7.88	13.875	
2,200.0	2,189.4	2,197.8	2,193.9	5.0	4.2	148.76	-92.6	28.6	116.9	108.6	8.30	14.088	
2,300.0	2,288.5	2,297.5	2,293.3	5.3	4.5	148.66	-99.9	32.1	124.5	115.8	8.72	14.278	
2,400.0	2,387.6	2,397.2	2,392.6	5.5	4.7	148.56	-107.2	35.5	132.1	123.0	9.14	14.449	
2,500.0	2,486.7	2,496.9	2,492.0	5.8	4.9	148.48	-114.5	39.0	139.7	130.1	9.56	14.604	
2,600.0	2,585.8	2,596.6	2,591.4	6.1	5.1	148.40	-121.9	42.4	147.3	137.3	9.99	14.745	
2,700.0	2,684.9	2,696.4	2,690.8	6.4	5.3	148.33	-129.2	45.9	154.9	144.4	10.41	14.874	
2,800.0	2,784.0	2,796.1	2,790.2	6.7	5.6	148.27	-136.5	49.3	162.4	151.6	10.84	14.991	
2,900.0	2,883.1	2,895.8	2,889.6	7.0	5.8	148.22	-143.8	52.8	170.0	158.8	11.26	15.100	
3,000.0	2,982.2	2,995.5	2,988.9	7.3	6.0	148.16	-151.2	56.2	177.6	165.9	11.69	15.199	
3,100.0	3,081.3	3,095.2	3,088.3	7.6	6.2	148.12	-158.5	59.7	185.2	173.1	12.11	15.292	
3,200.0	3,180.4	3,194.9	3,187.7	7.8	6.4	148.07	-165.8	63.1	192.8	180.3	12.54	15.377	
3,300.0	3,279.6	3,294.6	3,287.1	8.1	6.7	148.03	-173.1	66.6	200.4	187.4	12.96	15.457	
3,400.0	3,378.7	3,394.3	3,386.5	8.4	6.9	148.00	-180.5	70.0	208.0	194.6	13.39	15.531	
3,500.0	3,477.8	3,494.0	3,485.9	8.7	7.1	147.96	-187.8	73.5	215.6	201.8	13.82	15.600	
3,600.0	3,576.9	3,593.8	3,585.2	9.0	7.3	147.93	-195.1	76.9	223.2	208.9	14.25	15.665	
3,700.0	3,676.0	3,693.5	3,684.6	9.3	7.6	147.90	-202.4	80.3	230.8	216.1	14.67	15.726	
3,800.0	3,775.1	3,793.2	3,784.0	9.6	7.8	147.87	-209.7	83.8	238.3	223.2	15.10	15.783	
3,900.0	3,874.2	3,892.9	3,883.4	9.9	8.0	147.85	-217.1	87.2	245.9	230.4	15.53	15.837	
4,000.0	3,973.3	3,992.6	3,982.8	10.2	8.2	147.82	-224.4	90.7	253.5	237.6	15.96	15.888	
4,100.0	4,072.4	4,092.3	4,082.1	10.5	8.4	147.80	-231.7	94.1	261.1	244.7	16.38	15.936	
4,200.0	4,171.5	4,192.0	4,181.5	10.7	8.7	147.77	-239.0	97.6	268.7	251.9	16.81	15.981	
4,300.0	4,270.6	4,291.7	4,280.9	11.0	8.9	147.75	-246.4	101.0	276.3	259.0	17.24	16.024	
4,400.0	4,369.7	4,391.5	4,380.3	11.3	9.1	147.73	-253.7	104.5	283.9	266.2	17.67	16.065	
4,500.0	4,468.8	4,491.2	4,479.7	11.6	9.3	147.72	-261.0	107.9	291.5	273.4	18.10	16.104	
4,600.0	4,567.9	4,590.9	4,579.1	11.9	9.6	147.70	-268.3	111.4	299.1	280.5	18.53	16.141	
4,700.0	4,667.0	4,690.6	4,678.4	12.2	9.8	147.68	-275.7	114.8	306.6	287.7	18.96	16.176	
4,800.0	4,766.2	4,790.3	4,777.8	12.5	10.0	147.66	-283.0	118.3	314.2	294.9	19.39	16.210	
4,900.0	4,865.3	4,890.0	4,877.2	12.8	10.2	147.65	-290.3	121.7	321.8	302.0	19.81	16.242	
5,000.0	4,964.4	4,989.7	4,976.6	13.1	10.5	147.63	-297.6	125.2	329.4	309.2	20.24	16.273	
5,100.0	5,063.5	5,089.4	5,076.0	13.4	10.7	147.62	-305.0	128.6	337.0	316.3	20.67	16.302	

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 Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4G-35H-O367 - 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
5,200.0	5,162.6	5,189.1	5,175.4	13.7	10.9	147.61	-312.3	132.0	344.6	323.5	21.10	16.330	
5,300.0	5,261.7	5,288.9	5,274.7	13.9	11.1	147.59	-319.6	135.5	352.2	330.7	21.53	16.357	
5,400.0	5,360.8	5,388.6	5,374.1	14.2	11.3	147.58	-326.9	138.9	359.8	337.8	21.96	16.382	
5,500.0	5,459.9	5,488.3	5,473.5	14.5	11.6	147.57	-334.3	142.4	367.4	345.0	22.39	16.407	
5,600.0	5,559.0	5,588.0	5,572.9	14.8	11.8	147.56	-341.6	145.8	375.0	352.1	22.82	16.431	
5,700.0	5,658.1	5,687.7	5,672.3	15.1	12.0	147.55	-348.9	149.3	382.5	359.3	23.25	16.454	
5,800.0	5,757.2	5,787.4	5,771.6	15.4	12.2	147.54	-356.2	152.7	390.1	366.5	23.68	16.476	
5,900.0	5,856.3	5,887.1	5,871.0	15.7	12.5	147.53	-363.6	156.2	397.7	373.6	24.11	16.497	
6,000.0	5,955.4	5,986.8	5,970.4	16.0	12.7	147.52	-370.9	159.6	405.3	380.8	24.54	16.517	
6,100.0	6,054.5	6,086.5	6,069.8	16.3	12.9	147.51	-378.2	163.1	412.9	387.9	24.97	16.537	
6,200.0	6,153.6	6,186.3	6,169.2	16.6	13.1	147.50	-385.5	166.5	420.5	395.1	25.40	16.556	
6,300.0	6,252.8	6,286.0	6,268.6	16.9	13.4	147.49	-392.9	170.0	428.1	402.3	25.83	16.574	
6,400.0	6,351.9	6,385.7	6,367.9	17.1	13.6	147.48	-400.2	173.4	435.7	409.4	26.26	16.592	
6,500.0	6,451.2	6,484.8	6,466.7	17.4	13.8	-155.39	-406.6	176.8	443.1	416.5	26.60	16.657	
6,600.0	6,549.8	6,583.5	6,565.2	17.5	13.9	-119.36	-402.2	180.3	450.4	423.7	26.74	16.842	
6,700.0	6,645.9	6,683.2	6,663.1	17.5	13.8	-107.92	-384.1	183.6	457.5	430.9	26.66	17.161	
6,800.0	6,737.5	6,784.0	6,758.6	17.5	13.7	-103.07	-352.1	187.0	464.3	437.9	26.40	17.590	
6,900.0	6,823.0	6,885.9	6,849.6	17.4	13.5	-100.60	-306.5	190.1	470.6	444.6	26.01	18.089	
7,000.0	6,900.5	6,989.0	6,934.1	17.4	13.4	-99.24	-247.7	193.0	476.3	450.7	25.61	18.598	
7,100.0	6,968.7	7,093.1	7,010.0	17.3	13.2	-98.48	-176.6	195.7	481.2	455.9	25.29	19.026	
7,200.0	7,026.1	7,198.2	7,075.4	17.4	13.2	-98.07	-94.5	197.9	485.3	460.1	25.19	19.262	
7,300.0	7,071.7	7,304.3	7,128.4	17.5	13.3	-97.90	-2.8	199.8	488.4	462.9	25.43	19.201	
7,400.0	7,104.6	7,411.1	7,167.7	17.8	13.6	-97.89	96.5	201.1	490.4	464.3	26.11	18.786	
7,500.0	7,124.2	7,518.5	7,191.8	18.3	14.2	-98.00	201.1	202.0	491.4	464.1	27.24	18.038	
7,600.0	7,130.0	7,626.4	7,200.0	18.9	15.0	-98.19	308.5	202.3	491.1	462.3	28.80	17.051	
7,700.0	7,130.0	7,726.4	7,200.0	19.6	15.9	-98.21	408.6	202.3	490.3	459.6	30.64	15.998	
7,800.0	7,130.0	7,826.4	7,200.0	20.4	16.9	-98.22	508.6	202.3	489.4	456.7	32.74	14.949	
7,900.0	7,130.0	7,926.4	7,200.0	21.4	18.1	-98.24	608.5	202.3	488.5	453.5	35.05	13.937	
8,000.0	7,130.0	8,026.4	7,200.0	22.4	19.3	-98.25	708.5	202.3	487.7	450.1	37.54	12.989	
8,100.0	7,130.0	8,126.4	7,200.0	23.5	20.6	-98.27	808.5	202.3	486.8	446.6	40.18	12.115	
8,200.0	7,130.0	8,226.4	7,200.0	24.7	22.0	-98.28	908.5	202.3	485.9	443.0	42.94	11.317	
8,300.0	7,130.0	8,326.4	7,200.0	26.0	23.4	-98.30	1,008.5	202.3	485.1	439.3	45.79	10.593	
8,400.0	7,130.0	8,426.4	7,200.0	27.3	24.9	-98.31	1,108.5	202.3	484.2	435.5	48.73	9.938	
8,500.0	7,130.0	8,526.4	7,200.0	28.7	26.4	-98.33	1,208.5	202.3	483.4	431.6	51.73	9.345	
8,600.0	7,130.0	8,626.4	7,200.0	30.1	27.9	-98.34	1,308.5	202.3	482.5	427.7	54.78	8.808	
8,700.0	7,130.0	8,726.4	7,200.0	31.6	29.5	-98.36	1,408.5	202.3	481.6	423.7	57.88	8.321	
8,800.0	7,130.0	8,826.4	7,200.0	33.0	31.1	-98.37	1,508.5	202.3	480.8	419.7	61.02	7.878	
8,900.0	7,130.0	8,926.4	7,200.0	34.5	32.7	-98.39	1,608.5	202.3	479.9	415.7	64.20	7.475	
9,000.0	7,130.0	9,026.4	7,200.0	36.1	34.3	-98.40	1,708.5	202.3	479.0	411.6	67.40	7.107	
9,100.0	7,130.0	9,126.4	7,200.0	37.6	35.9	-98.42	1,808.5	202.3	478.2	407.5	70.63	6.770	
9,200.0	7,130.0	9,226.4	7,200.0	39.2	37.5	-98.43	1,908.5	202.3	477.3	403.4	73.88	6.461	
9,300.0	7,130.0	9,326.4	7,200.0	40.7	39.2	-98.45	2,008.5	202.3	476.4	399.3	77.15	6.176	
9,400.0	7,130.0	9,426.4	7,200.0	42.3	40.8	-98.46	2,108.5	202.3	475.6	395.1	80.43	5.913	
9,500.0	7,130.0	9,526.4	7,200.0	43.9	42.5	-98.48	2,208.5	202.3	474.7	391.0	83.73	5.669	
9,600.0	7,130.0	9,626.4	7,200.0	45.5	44.2	-98.50	2,308.5	202.3	473.9	386.8	87.05	5.444	
9,700.0	7,130.0	9,726.4	7,200.0	47.2	45.9	-98.51	2,408.5	202.3	473.0	382.6	90.37	5.234	
9,800.0	7,130.0	9,826.4	7,200.0	48.8	47.5	-98.53	2,508.5	202.3	472.1	378.4	93.70	5.039	
9,900.0	7,130.0	9,926.4	7,200.0	50.4	49.2	-98.54	2,608.5	202.3	471.3	374.2	97.04	4.856	
10,000.0	7,130.0	10,026.4	7,200.0	52.1	50.9	-98.56	2,708.5	202.3	470.4	370.0	100.40	4.685	
10,100.0	7,130.0	10,126.4	7,200.0	53.7	52.6	-98.57	2,808.5	202.3	469.5	365.8	103.75	4.526	
10,200.0	7,130.0	10,226.4	7,200.0	55.4	54.3	-98.59	2,908.5	202.3	468.7	361.6	107.12	4.375	
10,300.0	7,130.0	10,326.3	7,200.0	57.1	56.0	-98.61	3,008.5	202.3	467.8	357.3	110.49	4.234	

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 Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4G-35H-O367 - 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
10,400.0	7,130.0	10,426.3	7,200.0	58.7	57.7	-98.62	3,108.5	202.3	467.0	353.1	113.86	4.101	
10,500.0	7,130.0	10,526.3	7,200.0	60.4	59.4	-98.64	3,208.4	202.3	466.1	348.8	117.25	3.975	
10,600.0	7,130.0	10,626.3	7,200.0	62.1	61.1	-98.65	3,308.4	202.3	465.2	344.6	120.63	3.857	
10,700.0	7,130.0	10,726.3	7,200.0	63.8	62.9	-98.67	3,408.4	202.3	464.4	340.3	124.02	3.744	
10,800.0	7,130.0	10,826.3	7,200.0	65.5	64.6	-98.69	3,508.4	202.3	463.5	336.1	127.41	3.638	
10,900.0	7,130.0	10,926.3	7,200.0	67.2	66.3	-98.70	3,608.4	202.3	462.6	331.8	130.81	3.537	
11,000.0	7,130.0	11,026.3	7,200.0	68.9	68.0	-98.72	3,708.4	202.3	461.8	327.6	134.21	3.441	
11,100.0	7,130.0	11,126.3	7,200.0	70.6	69.7	-98.74	3,808.4	202.3	460.9	323.3	137.61	3.349	
11,200.0	7,130.0	11,226.3	7,200.0	72.3	71.4	-98.75	3,908.4	202.3	460.0	319.0	141.02	3.262	
11,300.0	7,130.0	11,326.3	7,200.0	74.0	73.2	-98.77	4,008.4	202.3	459.2	314.8	144.42	3.179	
11,400.0	7,130.0	11,426.3	7,200.0	75.7	74.9	-98.79	4,108.4	202.3	458.3	310.5	147.83	3.100	
11,500.0	7,130.0	11,526.3	7,200.0	77.4	76.6	-98.80	4,208.4	202.3	457.5	306.2	151.24	3.025	
11,600.0	7,130.0	11,626.3	7,200.0	79.1	78.4	-98.82	4,308.4	202.3	456.6	301.9	154.66	2.952	
11,695.8	7,130.0	11,722.1	7,200.0	80.7	80.0	-98.84	4,404.2	202.3	455.8	297.8	157.93	2.886	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4H-35H-O367 - 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	-89.94	0.0	-7.5	7.5				
100.0	100.0	100.0	100.0	0.2	0.2	-89.94	0.0	-7.5	7.5	7.2	0.30	24.844	
200.0	200.0	200.0	200.0	0.3	0.3	-89.94	0.0	-7.5	7.5	6.9	0.65	11.558	
300.0	300.0	300.0	300.0	0.5	0.5	-89.94	0.0	-7.5	7.5	6.5	1.00	7.531	
400.0	400.0	400.0	400.0	0.7	0.7	-89.94	0.0	-7.5	7.5	6.2	1.35	5.585	
500.0	500.0	500.0	500.0	0.8	0.8	-89.94	0.0	-7.5	7.5	5.8	1.70	4.438	CC, ES
600.0	600.0	600.0	600.0	1.0	1.0	149.25	0.0	-7.5	8.3	6.2	2.05	4.042	
700.0	700.0	700.1	700.1	1.2	1.2	153.51	-0.6	-6.9	9.9	7.5	2.40	4.138	
800.0	799.9	800.2	800.2	1.4	1.4	154.91	-2.5	-5.2	11.8	9.1	2.75	4.293	
900.0	899.7	900.4	900.2	1.6	1.6	154.54	-5.7	-2.2	13.9	10.8	3.10	4.473	
1,000.0	999.4	1,000.6	1,000.2	1.8	1.8	153.09	-10.2	2.0	16.2	12.7	3.47	4.667	
1,100.0	1,098.9	1,100.8	1,100.1	2.0	2.0	151.02	-16.0	7.4	18.7	14.8	3.84	4.867	
1,200.0	1,198.3	1,200.9	1,199.8	2.2	2.2	148.85	-22.9	13.9	21.5	17.3	4.23	5.094	
1,300.0	1,297.4	1,300.8	1,299.2	2.5	2.4	148.66	-30.0	20.6	25.6	21.0	4.62	5.534	
1,400.0	1,396.5	1,400.7	1,398.6	2.8	2.6	148.91	-37.2	27.2	29.9	24.9	5.02	5.966	
1,500.0	1,495.6	1,500.6	1,498.1	3.0	2.8	149.10	-44.3	33.9	34.3	28.9	5.42	6.332	
1,600.0	1,594.7	1,600.5	1,597.5	3.3	3.1	149.25	-51.5	40.6	38.7	32.9	5.82	6.644	
1,700.0	1,693.8	1,700.4	1,696.9	3.6	3.3	149.37	-58.6	47.3	43.1	36.8	6.23	6.913	
1,800.0	1,793.0	1,800.3	1,796.3	3.9	3.5	149.47	-65.8	54.0	47.4	40.8	6.63	7.148	
1,900.0	1,892.1	1,900.2	1,895.8	4.1	3.8	149.55	-72.9	60.7	51.8	44.7	7.04	7.354	
2,000.0	1,991.2	2,000.1	1,995.2	4.4	4.0	149.61	-80.1	67.4	56.2	48.7	7.45	7.536	
2,100.0	2,090.3	2,100.0	2,094.6	4.7	4.2	149.67	-87.2	74.0	60.5	52.7	7.86	7.699	
2,200.0	2,189.4	2,199.9	2,194.0	5.0	4.5	149.72	-94.4	80.7	64.9	56.6	8.27	7.844	
2,300.0	2,288.5	2,299.8	2,293.5	5.3	4.7	149.77	-101.5	87.4	69.3	60.6	8.69	7.975	
2,400.0	2,387.6	2,399.7	2,392.9	5.5	5.0	149.81	-108.7	94.1	73.6	64.5	9.10	8.094	
2,500.0	2,486.7	2,499.6	2,492.3	5.8	5.2	149.84	-115.8	100.8	78.0	68.5	9.51	8.202	
2,600.0	2,585.8	2,599.5	2,591.7	6.1	5.4	149.87	-123.0	107.5	82.4	72.5	9.92	8.301	
2,700.0	2,684.9	2,699.5	2,691.2	6.4	5.7	149.90	-130.1	114.2	86.7	76.4	10.34	8.391	
2,800.0	2,784.0	2,799.4	2,790.6	6.7	5.9	149.92	-137.3	120.8	91.1	80.4	10.75	8.474	
2,900.0	2,883.1	2,899.3	2,890.0	7.0	6.2	149.94	-144.4	127.5	95.5	84.3	11.17	8.551	
3,000.0	2,982.2	2,999.2	2,989.4	7.3	6.4	149.97	-151.6	134.2	99.9	88.3	11.58	8.622	
3,100.0	3,081.3	3,099.1	3,088.8	7.6	6.6	149.98	-158.7	140.9	104.2	92.2	12.00	8.688	
3,200.0	3,180.4	3,199.0	3,188.3	7.8	6.9	150.00	-165.9	147.6	108.6	96.2	12.41	8.749	
3,300.0	3,279.6	3,298.9	3,287.7	8.1	7.1	150.02	-173.0	154.3	113.0	100.1	12.83	8.807	
3,400.0	3,378.7	3,398.8	3,387.1	8.4	7.4	150.03	-180.2	161.0	117.3	104.1	13.24	8.860	
3,500.0	3,477.8	3,498.7	3,486.5	8.7	7.6	150.05	-187.3	167.6	121.7	108.0	13.66	8.910	
3,600.0	3,576.9	3,598.6	3,586.0	9.0	7.9	150.06	-194.5	174.3	126.1	112.0	14.07	8.958	
3,700.0	3,676.0	3,698.5	3,685.4	9.3	8.1	150.07	-201.6	181.0	130.4	116.0	14.49	9.002	
3,800.0	3,775.1	3,798.4	3,784.8	9.6	8.3	150.08	-208.8	187.7	134.8	119.9	14.91	9.044	
3,900.0	3,874.2	3,898.3	3,884.2	9.9	8.6	150.09	-215.9	194.4	139.2	123.9	15.32	9.083	
4,000.0	3,973.3	3,998.2	3,983.7	10.2	8.8	150.10	-223.1	201.1	143.6	127.8	15.74	9.120	
4,100.0	4,072.4	4,098.1	4,083.1	10.5	9.1	150.11	-230.2	207.8	147.9	131.8	16.16	9.156	
4,200.0	4,171.5	4,198.0	4,182.5	10.7	9.3	150.12	-237.4	214.4	152.3	135.7	16.57	9.189	
4,300.0	4,270.6	4,297.9	4,281.9	11.0	9.5	150.13	-244.5	221.1	156.7	139.7	16.99	9.221	
4,400.0	4,369.7	4,397.8	4,381.4	11.3	9.8	150.14	-251.7	227.8	161.0	143.6	17.41	9.251	
4,500.0	4,468.8	4,497.7	4,480.8	11.6	10.0	150.14	-258.8	234.5	165.4	147.6	17.82	9.280	
4,600.0	4,567.9	4,597.6	4,580.2	11.9	10.3	150.15	-266.0	241.2	169.8	151.5	18.24	9.307	
4,700.0	4,667.0	4,697.5	4,679.6	12.2	10.5	150.16	-273.1	247.9	174.1	155.5	18.66	9.333	
4,800.0	4,766.2	4,797.4	4,779.1	12.5	10.8	150.16	-280.3	254.6	178.5	159.4	19.07	9.358	
4,900.0	4,865.3	4,897.3	4,878.5	12.8	11.0	150.17	-287.4	261.3	182.9	163.4	19.49	9.382	
5,000.0	4,964.4	4,997.3	4,977.9	13.1	11.3	150.18	-294.6	267.9	187.2	167.3	19.91	9.405	
5,100.0	5,063.5	5,097.2	5,077.3	13.4	11.5	150.18	-301.7	274.6	191.6	171.3	20.33	9.427	

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 Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4H-35H-O367 - 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
5,200.0	5,162.6	5,197.1	5,176.7	13.7	11.7	150.19	-308.9	281.3	196.0	175.2	20.74	9.448	
5,300.0	5,261.7	5,297.0	5,276.2	13.9	12.0	150.19	-316.0	288.0	200.4	179.2	21.16	9.468	
5,400.0	5,360.8	5,396.9	5,375.6	14.2	12.2	150.20	-323.2	294.7	204.7	183.1	21.58	9.488	
5,500.0	5,459.9	5,496.8	5,475.0	14.5	12.5	150.20	-330.3	301.4	209.1	187.1	22.00	9.506	
5,600.0	5,559.0	5,596.7	5,574.4	14.8	12.7	150.21	-337.5	308.1	213.5	191.1	22.41	9.524	
5,700.0	5,658.1	5,696.6	5,673.9	15.1	13.0	150.21	-344.6	314.7	217.8	195.0	22.83	9.541	
5,800.0	5,757.2	5,796.5	5,773.3	15.4	13.2	150.21	-351.8	321.4	222.2	199.0	23.25	9.558	
5,900.0	5,856.3	5,896.4	5,872.7	15.7	13.4	150.22	-358.9	328.1	226.6	202.9	23.67	9.574	
6,000.0	5,955.4	5,996.3	5,972.1	16.0	13.7	150.22	-366.1	334.8	230.9	206.9	24.08	9.589	
6,100.0	6,054.5	6,096.2	6,071.6	16.3	13.9	150.22	-373.2	341.5	235.3	210.8	24.50	9.604	
6,200.0	6,153.6	6,196.1	6,171.0	16.6	14.2	150.23	-380.4	348.2	239.7	214.8	24.92	9.619	
6,300.0	6,252.8	6,296.0	6,270.4	16.9	14.4	150.23	-387.5	354.9	244.1	218.7	25.34	9.632	
6,400.0	6,351.9	6,395.9	6,369.8	17.1	14.7	150.23	-394.6	361.5	248.4	222.7	25.75	9.646	
6,500.0	6,451.2	6,495.6	6,469.1	17.4	14.9	-153.51	-401.8	368.2	252.4	226.1	26.26	9.611	
6,600.0	6,549.8	6,593.7	6,566.6	17.5	15.1	-120.98	-408.8	374.8	256.2	229.1	27.10	9.454	
6,700.0	6,645.9	6,692.0	6,664.7	17.5	15.3	-114.70	-411.3	381.4	262.2	234.2	27.93	9.388	
6,800.0	6,737.5	6,794.6	6,766.3	17.5	15.4	-114.81	-399.8	388.2	270.7	242.4	28.26	9.576	
6,900.0	6,823.0	6,901.9	6,869.7	17.4	15.4	-116.89	-372.3	395.2	281.2	253.1	28.05	10.026	
7,000.0	6,900.5	7,014.4	6,972.4	17.4	15.2	-119.58	-327.3	402.1	293.0	265.7	27.31	10.729	
7,100.0	6,968.7	7,132.2	7,071.0	17.3	15.1	-122.30	-263.4	408.7	305.3	279.1	26.20	11.649	
7,200.0	7,026.1	7,255.6	7,161.7	17.4	14.9	-124.79	-180.2	414.8	317.0	292.0	24.98	12.690	
7,300.0	7,071.7	7,384.4	7,239.7	17.5	14.9	-126.89	-78.1	420.0	327.2	303.3	23.96	13.655	
7,400.0	7,104.6	7,517.8	7,299.9	17.8	15.2	-128.52	40.7	424.1	335.1	311.6	23.55	14.231	
7,500.0	7,124.2	7,654.7	7,337.7	18.3	15.7	-129.62	172.1	426.6	340.0	315.9	24.03	14.147	
7,600.0	7,130.0	7,792.0	7,350.0	18.9	16.6	-130.14	308.6	427.5	341.3	315.8	25.50	13.383	
7,700.0	7,130.0	7,892.0	7,350.0	19.6	17.4	-130.23	408.6	427.5	340.6	313.8	26.88	12.674	
7,800.0	7,130.0	7,992.0	7,350.0	20.4	18.4	-130.33	508.6	427.5	340.0	311.5	28.43	11.958	
7,900.0	7,130.0	8,092.0	7,350.0	21.4	19.5	-130.42	608.5	427.5	339.3	309.2	30.13	11.259	
8,000.0	7,130.0	8,192.0	7,350.0	22.4	20.6	-130.52	708.5	427.5	338.6	306.7	31.97	10.593	
8,100.0	7,130.0	8,292.0	7,350.0	23.5	21.9	-130.61	808.5	427.5	338.0	304.1	33.90	9.969	
8,200.0	7,130.0	8,392.0	7,350.0	24.7	23.2	-130.71	908.5	427.5	337.3	301.4	35.92	9.389	
8,300.0	7,130.0	8,492.0	7,350.0	26.0	24.5	-130.81	1,008.5	427.5	336.6	298.6	38.02	8.855	
8,400.0	7,130.0	8,591.9	7,350.0	27.3	25.9	-130.90	1,108.5	427.5	336.0	295.8	40.17	8.365	
8,500.0	7,130.0	8,691.9	7,350.0	28.7	27.4	-131.00	1,208.5	427.5	335.3	293.0	42.36	7.915	
8,600.0	7,130.0	8,791.9	7,350.0	30.1	28.9	-131.10	1,308.5	427.5	334.7	290.1	44.60	7.504	
8,700.0	7,130.0	8,891.9	7,350.0	31.6	30.4	-131.20	1,408.5	427.5	334.0	287.1	46.87	7.127	
8,800.0	7,130.0	8,991.9	7,350.0	33.0	31.9	-131.30	1,508.5	427.5	333.4	284.2	49.16	6.781	
8,900.0	7,130.0	9,091.9	7,350.0	34.5	33.5	-131.40	1,608.5	427.5	332.7	281.2	51.48	6.463	
9,000.0	7,130.0	9,191.9	7,350.0	36.1	35.0	-131.50	1,708.5	427.5	332.0	278.2	53.81	6.171	
9,100.0	7,130.0	9,291.9	7,350.0	37.6	36.6	-131.60	1,808.5	427.5	331.4	275.2	56.16	5.901	
9,200.0	7,130.0	9,391.9	7,350.0	39.2	38.2	-131.70	1,908.5	427.5	330.7	272.2	58.52	5.652	
9,300.0	7,130.0	9,491.9	7,350.0	40.7	39.9	-131.80	2,008.5	427.5	330.1	269.2	60.88	5.422	
9,400.0	7,130.0	9,591.9	7,350.0	42.3	41.5	-131.90	2,108.5	427.5	329.4	266.2	63.26	5.208	
9,500.0	7,130.0	9,691.9	7,350.0	43.9	43.1	-132.00	2,208.5	427.5	328.8	263.2	65.64	5.009	
9,600.0	7,130.0	9,791.9	7,350.0	45.5	44.8	-132.10	2,308.5	427.5	328.1	260.1	68.02	4.824	
9,700.0	7,130.0	9,891.9	7,350.0	47.2	46.4	-132.20	2,408.5	427.5	327.5	257.1	70.40	4.652	
9,800.0	7,130.0	9,991.9	7,350.0	48.8	48.1	-132.31	2,508.5	427.5	326.9	254.1	72.79	4.491	
9,900.0	7,130.0	10,091.9	7,350.0	50.4	49.8	-132.41	2,608.5	427.5	326.2	251.0	75.17	4.340	
10,000.0	7,130.0	10,191.9	7,350.0	52.1	51.4	-132.51	2,708.5	427.5	325.6	248.0	77.55	4.198	
10,100.0	7,130.0	10,291.9	7,350.0	53.7	53.1	-132.62	2,808.5	427.5	324.9	245.0	79.93	4.065	
10,200.0	7,130.0	10,391.9	7,350.0	55.4	54.8	-132.72	2,908.5	427.5	324.3	242.0	82.31	3.940	
10,300.0	7,130.0	10,491.9	7,350.0	57.1	56.5	-132.83	3,008.5	427.5	323.6	238.9	84.69	3.822	

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 Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4H-35H-O367 - 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
10,400.0	7,130.0	10,591.9	7,350.0	58.7	58.2	-132.93	3,108.5	427.5	323.0	235.9	87.06	3.710	
10,500.0	7,130.0	10,691.9	7,350.0	60.4	59.9	-133.04	3,208.4	427.5	322.4	232.9	89.43	3.605	
10,600.0	7,130.0	10,791.9	7,350.0	62.1	61.6	-133.14	3,308.4	427.5	321.7	229.9	91.79	3.505	
10,700.0	7,130.0	10,891.9	7,350.0	63.8	63.3	-133.25	3,408.4	427.5	321.1	226.9	94.15	3.411	
10,800.0	7,130.0	10,991.9	7,350.0	65.5	65.0	-133.36	3,508.4	427.5	320.5	224.0	96.50	3.321	
10,900.0	7,130.0	11,091.9	7,350.0	67.2	66.7	-133.46	3,608.4	427.5	319.8	221.0	98.84	3.236	
11,000.0	7,130.0	11,191.8	7,350.0	68.9	68.4	-133.57	3,708.4	427.5	319.2	218.0	101.18	3.155	
11,100.0	7,130.0	11,291.8	7,350.0	70.6	70.1	-133.68	3,808.4	427.5	318.6	215.0	103.51	3.077	
11,200.0	7,130.0	11,391.8	7,350.0	72.3	71.8	-133.79	3,908.4	427.5	317.9	212.1	105.83	3.004	
11,300.0	7,130.0	11,491.8	7,350.0	74.0	73.6	-133.90	4,008.4	427.5	317.3	209.1	108.15	2.934	
11,400.0	7,130.0	11,591.8	7,350.0	75.7	75.3	-134.01	4,108.4	427.5	316.7	206.2	110.46	2.867	
11,500.0	7,130.0	11,691.8	7,350.0	77.4	77.0	-134.12	4,208.4	427.5	316.0	203.3	112.76	2.803	
11,600.0	7,130.0	11,791.8	7,350.0	79.1	78.7	-134.23	4,308.4	427.5	315.4	200.4	115.05	2.741	
11,695.8	7,130.0	11,887.6	7,350.0	80.7	80.4	-134.33	4,404.2	427.5	314.8	197.6	117.24	2.685	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4J-35H-O367 - 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	90.06	0.0	7.5	7.5				
100.0	100.0	100.0	100.0	0.2	0.2	90.06	0.0	7.5	7.5	7.2	0.30	24.844	
200.0	200.0	200.0	200.0	0.3	0.3	90.06	0.0	7.5	7.5	6.9	0.65	11.558	
300.0	300.0	300.0	300.0	0.5	0.5	90.06	0.0	7.5	7.5	6.5	1.00	7.531	
400.0	400.0	400.0	400.0	0.7	0.7	90.06	0.0	7.5	7.5	6.2	1.35	5.585	CC, ES
500.0	500.0	499.9	499.9	0.8	0.9	93.02	-0.4	8.3	8.3	6.6	1.70	4.891	
600.0	600.0	599.7	599.7	1.0	1.0	-27.05	-1.7	10.6	9.9	7.9	2.05	4.847	
700.0	700.0	699.5	699.4	1.2	1.2	-24.73	-3.9	14.4	11.6	9.2	2.40	4.852	
800.0	799.9	799.3	799.0	1.4	1.4	-23.58	-6.9	19.6	13.4	10.7	2.75	4.875	
900.0	899.7	899.1	898.4	1.6	1.6	-23.20	-10.7	26.4	15.2	12.1	3.10	4.905	
1,000.0	999.4	998.8	997.7	1.8	1.8	-23.35	-15.4	34.7	17.1	13.6	3.46	4.937	
1,100.0	1,098.9	1,098.5	1,096.7	2.0	2.1	-23.87	-21.0	44.5	19.0	15.2	3.82	4.967	
1,200.0	1,198.3	1,198.1	1,195.5	2.2	2.3	-24.65	-27.4	55.8	21.0	16.8	4.20	4.993	
1,300.0	1,297.4	1,297.9	1,294.3	2.5	2.6	-25.69	-34.5	68.5	22.9	18.3	4.58	4.994	
1,400.0	1,396.5	1,397.9	1,393.1	2.8	2.9	-26.76	-41.8	81.4	24.7	19.7	4.98	4.962	
1,500.0	1,495.6	1,497.9	1,492.0	3.0	3.2	-27.68	-49.1	94.2	26.5	21.2	5.38	4.930	
1,600.0	1,594.7	1,597.8	1,590.9	3.3	3.5	-28.48	-56.4	107.1	28.4	22.6	5.79	4.898	
1,700.0	1,693.8	1,697.8	1,689.8	3.6	3.8	-29.18	-63.7	120.0	30.2	24.0	6.21	4.867	
1,800.0	1,793.0	1,797.8	1,788.7	3.9	4.1	-29.80	-71.0	132.9	32.1	25.4	6.63	4.837	
1,900.0	1,892.1	1,897.8	1,887.5	4.1	4.4	-30.36	-78.3	145.8	33.9	26.9	7.05	4.809	
2,000.0	1,991.2	1,997.8	1,986.4	4.4	4.7	-30.85	-85.6	158.6	35.8	28.3	7.48	4.782	
2,100.0	2,090.3	2,097.8	2,085.3	4.7	5.0	-31.30	-92.9	171.5	37.6	29.7	7.91	4.756	
2,200.0	2,189.4	2,197.7	2,184.2	5.0	5.3	-31.71	-100.2	184.4	39.5	31.1	8.34	4.732	
2,300.0	2,288.5	2,297.7	2,283.1	5.3	5.6	-32.08	-107.5	197.3	41.3	32.5	8.78	4.709	
2,400.0	2,387.6	2,397.7	2,381.9	5.5	5.9	-32.41	-114.8	210.2	43.2	34.0	9.21	4.687	
2,500.0	2,486.7	2,497.7	2,480.8	5.8	6.2	-32.72	-122.1	223.0	45.0	35.4	9.65	4.667	
2,600.0	2,585.8	2,597.7	2,579.7	6.1	6.5	-33.01	-129.4	235.9	46.9	36.8	10.09	4.647	
2,700.0	2,684.9	2,697.7	2,678.6	6.4	6.9	-33.27	-136.7	248.8	48.8	38.2	10.53	4.629	
2,800.0	2,784.0	2,797.6	2,777.5	6.7	7.2	-33.52	-144.0	261.7	50.6	39.6	10.98	4.612	
2,900.0	2,883.1	2,897.6	2,876.3	7.0	7.5	-33.74	-151.3	274.6	52.5	41.1	11.42	4.595	
3,000.0	2,982.2	2,997.6	2,975.2	7.3	7.8	-33.95	-158.6	287.5	54.4	42.5	11.87	4.580	
3,100.0	3,081.3	3,097.6	3,074.1	7.6	8.1	-34.15	-165.9	300.3	56.2	43.9	12.32	4.565	
3,200.0	3,180.4	3,197.6	3,173.0	7.8	8.4	-34.34	-173.2	313.2	58.1	45.3	12.76	4.551	
3,300.0	3,279.6	3,297.5	3,271.9	8.1	8.7	-34.51	-180.5	326.1	60.0	46.7	13.21	4.538	
3,400.0	3,378.7	3,397.5	3,370.7	8.4	9.0	-34.67	-187.8	339.0	61.8	48.2	13.66	4.525	
3,500.0	3,477.8	3,497.5	3,469.6	8.7	9.3	-34.82	-195.1	351.9	63.7	49.6	14.11	4.513	
3,600.0	3,576.9	3,597.5	3,568.5	9.0	9.6	-34.97	-202.4	364.7	65.6	51.0	14.56	4.502	
3,700.0	3,676.0	3,697.5	3,667.4	9.3	10.0	-35.10	-209.7	377.6	67.4	52.4	15.01	4.491	
3,800.0	3,775.1	3,797.5	3,766.3	9.6	10.3	-35.23	-217.0	390.5	69.3	53.8	15.46	4.481	
3,900.0	3,874.2	3,897.4	3,865.1	9.9	10.6	-35.36	-224.3	403.4	71.2	55.2	15.92	4.471	
4,000.0	3,973.3	3,997.4	3,964.0	10.2	10.9	-35.47	-231.6	416.3	73.0	56.7	16.37	4.462	
4,100.0	4,072.4	4,097.4	4,062.9	10.5	11.2	-35.58	-238.9	429.2	74.9	58.1	16.82	4.453	
4,200.0	4,171.5	4,197.4	4,161.8	10.7	11.5	-35.69	-246.2	442.0	76.8	59.5	17.28	4.444	
4,300.0	4,270.6	4,297.4	4,260.7	11.0	11.8	-35.79	-253.5	454.9	78.6	60.9	17.73	4.436	
4,400.0	4,369.7	4,397.4	4,359.5	11.3	12.1	-35.88	-260.8	467.8	80.5	62.3	18.18	4.428	
4,500.0	4,468.8	4,497.3	4,458.4	11.6	12.5	-35.97	-268.1	480.7	82.4	63.7	18.64	4.420	
4,600.0	4,567.9	4,597.3	4,557.3	11.9	12.8	-36.06	-275.4	493.6	84.3	65.2	19.09	4.413	
4,700.0	4,667.0	4,697.3	4,656.2	12.2	13.1	-36.14	-282.7	506.4	86.1	66.6	19.55	4.406	
4,800.0	4,766.2	4,797.3	4,755.1	12.5	13.4	-36.22	-290.0	519.3	88.0	68.0	20.00	4.399	
4,900.0	4,865.3	4,897.3	4,853.9	12.8	13.7	-36.30	-297.3	532.2	89.9	69.4	20.46	4.393	
5,000.0	4,964.4	4,997.2	4,952.8	13.1	14.0	-36.37	-304.6	545.1	91.7	70.8	20.91	4.387	
5,100.0	5,063.5	5,097.2	5,051.7	13.4	14.3	-36.44	-311.9	558.0	93.6	72.2	21.37	4.381	

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 Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4J-35H-O367 - 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
5,200.0	5,162.6	5,197.2	5,150.6	13.7	14.6	-36.51	-319.2	570.9	95.5	73.7	21.83	4.375	
5,300.0	5,261.7	5,297.2	5,249.5	13.9	15.0	-36.57	-326.5	583.7	97.4	75.1	22.28	4.369	
5,400.0	5,360.8	5,397.2	5,348.3	14.2	15.3	-36.64	-333.8	596.6	99.2	76.5	22.74	4.364	
5,500.0	5,459.9	5,497.2	5,447.2	14.5	15.6	-36.70	-341.1	609.5	101.1	77.9	23.20	4.359	
5,600.0	5,559.0	5,597.1	5,546.1	14.8	15.9	-36.75	-348.4	622.4	103.0	79.3	23.65	4.354	
5,700.0	5,658.1	5,697.1	5,645.0	15.1	16.2	-36.81	-355.7	635.3	104.8	80.7	24.11	4.349	
5,800.0	5,757.2	5,797.1	5,743.9	15.4	16.5	-36.86	-363.0	648.1	106.7	82.2	24.57	4.344	
5,900.0	5,856.3	5,897.1	5,842.7	15.7	16.8	-36.92	-370.3	661.0	108.6	83.6	25.02	4.340	
6,000.0	5,955.4	5,997.1	5,941.6	16.0	17.1	-36.97	-377.6	673.9	110.5	85.0	25.48	4.335	
6,100.0	6,054.5	6,097.1	6,040.5	16.3	17.5	-37.01	-385.0	686.8	112.3	86.4	25.94	4.331	
6,200.0	6,153.6	6,197.0	6,139.4	16.6	17.8	-37.06	-392.3	699.7	114.2	87.8	26.40	4.327	
6,300.0	6,252.8	6,297.0	6,238.3	16.9	18.1	-37.11	-399.6	712.6	116.1	89.2	26.85	4.323	
6,400.0	6,351.9	6,397.0	6,337.1	17.1	18.4	-37.15	-406.9	725.4	118.0	90.6	27.31	4.319	
6,500.0	6,451.2	6,496.8	6,435.8	17.4	18.7	22.43	-414.1	738.3	119.7	92.6	27.13	4.412	
6,600.0	6,549.8	6,596.6	6,534.8	17.5	19.0	64.41	-414.8	751.2	122.2	96.1	26.07	4.687	
6,700.0	6,645.9	6,698.3	6,634.5	17.5	19.1	81.50	-401.2	764.2	125.9	100.8	25.11	5.015	
6,800.0	6,737.5	6,801.7	6,733.1	17.5	19.2	91.50	-372.9	777.0	130.7	106.3	24.40	5.354	
6,900.0	6,823.0	6,907.0	6,828.3	17.4	19.2	98.52	-329.7	789.4	136.1	112.1	24.00	5.671	
7,000.0	6,900.5	7,014.2	6,917.5	17.4	19.2	103.78	-271.8	801.0	141.9	118.0	23.86	5.946	
7,100.0	6,968.7	7,123.1	6,998.5	17.3	19.2	107.79	-199.8	811.6	147.6	123.7	23.92	6.171	
7,200.0	7,026.1	7,233.5	7,068.6	17.4	19.2	110.79	-115.1	820.7	152.9	128.8	24.12	6.338	
7,300.0	7,071.7	7,345.4	7,125.5	17.5	19.3	112.94	-19.3	828.1	157.5	133.1	24.46	6.439	
7,400.0	7,104.6	7,458.3	7,167.4	17.8	19.6	114.34	85.3	833.6	161.2	136.3	24.94	6.464	
7,500.0	7,124.2	7,572.0	7,192.5	18.3	20.1	115.04	196.1	836.9	163.7	138.2	25.59	6.399	
7,600.0	7,130.0	7,684.9	7,200.0	18.9	20.7	115.10	308.6	837.8	165.0	138.6	26.48	6.232	
7,700.0	7,130.0	7,784.9	7,200.0	19.6	21.3	114.97	408.6	837.8	165.8	137.6	28.22	5.876	
7,800.0	7,130.0	7,884.9	7,200.0	20.4	22.1	114.84	508.6	837.8	166.6	136.4	30.20	5.518	
7,900.0	7,130.0	7,984.9	7,200.0	21.4	23.0	114.72	608.5	837.8	167.4	135.0	32.37	5.172	
8,000.0	7,130.0	8,084.8	7,200.0	22.4	24.0	114.59	708.5	837.8	168.2	133.5	34.71	4.847	
8,100.0	7,130.0	8,184.8	7,200.0	23.5	25.0	114.47	808.5	837.8	169.0	131.8	37.18	4.546	
8,200.0	7,130.0	8,284.8	7,200.0	24.7	26.2	114.35	908.5	837.8	169.8	130.0	39.76	4.270	
8,300.0	7,130.0	8,384.8	7,200.0	26.0	27.4	114.23	1,008.5	837.8	170.6	128.2	42.44	4.020	
8,400.0	7,130.0	8,484.8	7,200.0	27.3	28.7	114.11	1,108.5	837.8	171.4	126.2	45.20	3.792	
8,500.0	7,130.0	8,584.8	7,200.0	28.7	30.0	113.99	1,208.5	837.8	172.2	124.2	48.01	3.586	
8,600.0	7,130.0	8,684.8	7,200.0	30.1	31.3	113.87	1,308.5	837.8	173.0	122.1	50.89	3.399	
8,700.0	7,130.0	8,784.8	7,200.0	31.6	32.7	113.75	1,408.5	837.8	173.8	120.0	53.81	3.230	
8,800.0	7,130.0	8,884.8	7,200.0	33.0	34.2	113.64	1,508.5	837.8	174.6	117.8	56.77	3.075	
8,900.0	7,130.0	8,984.8	7,200.0	34.5	35.6	113.52	1,608.5	837.8	175.4	115.6	59.76	2.935	
9,000.0	7,130.0	9,084.8	7,200.0	36.1	37.1	113.41	1,708.5	837.8	176.2	113.4	62.79	2.806	
9,100.0	7,130.0	9,184.8	7,200.0	37.6	38.6	113.30	1,808.5	837.8	177.0	111.1	65.84	2.688	
9,200.0	7,130.0	9,284.8	7,200.0	39.2	40.1	113.19	1,908.5	837.8	177.8	108.9	68.92	2.580	
9,300.0	7,130.0	9,384.8	7,200.0	40.7	41.7	113.08	2,008.5	837.8	178.6	106.6	72.02	2.480	
9,400.0	7,130.0	9,484.8	7,200.0	42.3	43.2	112.97	2,108.5	837.8	179.4	104.3	75.14	2.387	
9,500.0	7,130.0	9,584.8	7,200.0	43.9	44.8	112.86	2,208.5	837.8	180.2	101.9	78.28	2.302	
9,600.0	7,130.0	9,684.8	7,200.0	45.5	46.4	112.75	2,308.5	837.8	181.0	99.6	81.43	2.223	
9,700.0	7,130.0	9,784.8	7,200.0	47.2	48.0	112.65	2,408.5	837.8	181.8	97.2	84.60	2.149	
9,800.0	7,130.0	9,884.8	7,200.0	48.8	49.6	112.54	2,508.5	837.8	182.6	94.8	87.78	2.080	
9,900.0	7,130.0	9,984.3	7,200.0	50.4	51.2	112.44	2,608.0	837.9	183.4	92.5	90.96	2.016	
10,000.0	7,130.0	10,081.7	7,200.0	52.1	52.8	112.17	2,705.4	839.3	185.6	91.3	94.23	1.969	
10,100.0	7,130.0	10,181.7	7,200.0	53.7	54.5	111.87	2,805.4	841.0	188.0	90.4	97.57	1.927	
10,200.0	7,130.0	10,281.7	7,200.0	55.4	56.1	111.57	2,905.3	842.8	190.5	89.5	100.93	1.887	
10,300.0	7,130.0	10,381.6	7,200.0	57.1	57.8	111.28	3,005.3	844.6	192.9	88.6	104.30	1.850	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4J-35H-O367 - 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
10,400.0	7,130.0	10,481.6	7,200.0	58.7	59.4	111.00	3,105.2	846.4	195.4	87.7	107.68	1.815	
10,500.0	7,130.0	10,581.6	7,200.0	60.4	61.1	110.72	3,205.2	848.1	197.9	86.8	111.07	1.782	
10,600.0	7,130.0	10,681.5	7,200.0	62.1	62.8	110.46	3,305.1	849.9	200.4	85.9	114.46	1.750	
10,700.0	7,130.0	10,781.5	7,200.0	63.8	64.4	110.19	3,405.1	851.7	202.8	85.0	117.87	1.721	
10,800.0	7,130.0	10,881.5	7,200.0	65.5	66.1	109.94	3,505.0	853.4	205.3	84.0	121.28	1.693	
10,900.0	7,130.0	10,981.4	7,200.0	67.2	67.8	109.69	3,605.0	855.2	207.8	83.1	124.70	1.666	
11,000.0	7,130.0	11,081.4	7,200.0	68.9	69.5	109.45	3,704.9	857.0	210.3	82.2	128.13	1.641	
11,100.0	7,130.0	11,181.3	7,200.0	70.6	71.2	109.21	3,804.9	858.8	212.8	81.2	131.57	1.617	
11,200.0	7,130.0	11,281.3	7,200.0	72.3	72.9	108.98	3,904.8	860.5	215.3	80.3	135.00	1.595	
11,300.0	7,130.0	11,381.3	7,200.0	74.0	74.6	108.75	4,004.8	862.3	217.8	79.4	138.45	1.573	
11,400.0	7,130.0	11,481.2	7,200.0	75.7	76.3	108.53	4,104.7	864.1	220.3	78.4	141.90	1.553	
11,500.0	7,130.0	11,581.2	7,200.0	77.4	78.0	108.32	4,204.7	865.9	222.8	77.5	145.35	1.533	
11,600.0	7,130.0	11,681.2	7,200.0	79.1	79.7	108.10	4,304.6	867.6	225.3	76.5	148.81	1.514	SF
11,695.8	7,130.0	11,695.7	7,200.0	80.7	79.9	108.07	4,319.1	867.9	241.8	91.2	150.65	1.605	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4K-35H-O367 - 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	90.06	0.0	15.1	15.1				
100.0	100.0	100.0	100.0	0.2	0.2	90.06	0.0	15.1	15.1	14.8	0.30	49.687	
200.0	200.0	200.0	200.0	0.3	0.3	90.06	0.0	15.1	15.1	14.4	0.65	23.117	
300.0	300.0	300.0	300.0	0.5	0.5	90.06	0.0	15.1	15.1	14.1	1.00	15.062	CC, ES
400.0	400.0	399.7	399.7	0.7	0.7	91.32	-0.4	15.9	15.9	14.5	1.35	11.765	
500.0	500.0	499.4	499.4	0.8	0.9	94.44	-1.4	18.3	18.3	16.6	1.70	10.778	
600.0	600.0	599.0	598.9	1.0	1.0	-27.09	-3.2	22.2	21.7	19.7	2.05	10.591	
700.0	700.0	698.6	698.3	1.2	1.2	-25.81	-5.6	27.8	25.2	22.8	2.40	10.508	
800.0	799.9	798.1	797.4	1.4	1.4	-25.44	-8.7	34.9	28.8	26.1	2.75	10.479	
900.0	899.7	897.5	896.4	1.6	1.7	-25.67	-12.6	43.6	32.5	29.4	3.11	10.478	
1,000.0	999.4	996.8	995.1	1.8	1.9	-26.31	-17.1	53.8	36.4	32.9	3.47	10.492	
1,100.0	1,098.9	1,096.1	1,093.6	2.0	2.2	-27.25	-22.3	65.6	40.3	36.4	3.83	10.509	
1,200.0	1,198.3	1,195.3	1,191.7	2.2	2.5	-28.39	-28.2	79.0	44.3	40.1	4.21	10.523	
1,300.0	1,297.4	1,294.5	1,289.5	2.5	2.8	-29.63	-34.8	93.9	48.6	44.0	4.61	10.545	
1,400.0	1,396.5	1,394.0	1,387.5	2.8	3.1	-30.38	-41.9	110.1	53.8	48.8	5.01	10.744	
1,500.0	1,495.6	1,493.9	1,485.7	3.0	3.5	-30.95	-49.1	126.4	59.2	53.8	5.42	10.923	
1,600.0	1,594.7	1,593.7	1,583.9	3.3	3.8	-31.43	-56.3	142.8	64.6	58.8	5.84	11.069	
1,700.0	1,693.8	1,693.6	1,682.2	3.6	4.1	-31.84	-63.6	159.1	70.0	63.7	6.26	11.189	
1,800.0	1,793.0	1,793.5	1,780.4	3.9	4.5	-32.18	-70.8	175.5	75.4	68.7	6.68	11.288	
1,900.0	1,892.1	1,893.3	1,878.7	4.1	4.8	-32.49	-78.0	191.9	80.8	73.7	7.10	11.371	
2,000.0	1,991.2	1,993.2	1,976.9	4.4	5.2	-32.75	-85.2	208.2	86.2	78.6	7.53	11.442	
2,100.0	2,090.3	2,093.0	2,075.1	4.7	5.5	-32.98	-92.4	224.6	91.6	83.6	7.96	11.502	
2,200.0	2,189.4	2,192.9	2,173.4	5.0	5.9	-33.19	-99.7	240.9	97.0	88.6	8.39	11.553	
2,300.0	2,288.5	2,292.7	2,271.6	5.3	6.3	-33.37	-106.9	257.3	102.4	93.5	8.83	11.598	
2,400.0	2,387.6	2,392.6	2,369.9	5.5	6.6	-33.54	-114.1	273.7	107.8	98.5	9.26	11.637	
2,500.0	2,486.7	2,492.4	2,468.1	5.8	7.0	-33.69	-121.3	290.0	113.2	103.5	9.70	11.671	
2,600.0	2,585.8	2,592.3	2,566.3	6.1	7.3	-33.83	-128.5	306.4	118.6	108.4	10.13	11.701	
2,700.0	2,684.9	2,692.1	2,664.6	6.4	7.7	-33.95	-135.7	322.7	124.0	113.4	10.57	11.728	
2,800.0	2,784.0	2,792.0	2,762.8	6.7	8.0	-34.07	-143.0	339.1	129.4	118.3	11.01	11.751	
2,900.0	2,883.1	2,891.8	2,861.1	7.0	8.4	-34.17	-150.2	355.5	134.8	123.3	11.45	11.773	
3,000.0	2,982.2	2,991.7	2,959.3	7.3	8.7	-34.27	-157.4	371.8	140.2	128.3	11.89	11.792	
3,100.0	3,081.3	3,091.6	3,057.5	7.6	9.1	-34.36	-164.6	388.2	145.6	133.2	12.33	11.809	
3,200.0	3,180.4	3,191.4	3,155.8	7.8	9.5	-34.44	-171.8	404.5	151.0	138.2	12.77	11.824	
3,300.0	3,279.6	3,291.3	3,254.0	8.1	9.8	-34.52	-179.0	420.9	156.4	143.2	13.21	11.838	
3,400.0	3,378.7	3,391.1	3,352.3	8.4	10.2	-34.59	-186.3	437.3	161.8	148.1	13.65	11.851	
3,500.0	3,477.8	3,491.0	3,450.5	8.7	10.5	-34.66	-193.5	453.6	167.2	153.1	14.09	11.863	
3,600.0	3,576.9	3,590.8	3,548.7	9.0	10.9	-34.72	-200.7	470.0	172.6	158.0	14.53	11.873	
3,700.0	3,676.0	3,690.7	3,647.0	9.3	11.3	-34.78	-207.9	486.3	178.0	163.0	14.98	11.883	
3,800.0	3,775.1	3,790.5	3,745.2	9.6	11.6	-34.84	-215.1	502.7	183.4	168.0	15.42	11.892	
3,900.0	3,874.2	3,890.4	3,843.5	9.9	12.0	-34.89	-222.3	519.1	188.8	172.9	15.86	11.901	
4,000.0	3,973.3	3,990.2	3,941.7	10.2	12.3	-34.94	-229.6	535.4	194.2	177.9	16.31	11.908	
4,100.0	4,072.4	4,090.1	4,039.9	10.5	12.7	-34.99	-236.8	551.8	199.6	182.8	16.75	11.915	
4,200.0	4,171.5	4,189.9	4,138.2	10.7	13.1	-35.03	-244.0	568.1	205.0	187.8	17.19	11.922	
4,300.0	4,270.6	4,289.8	4,236.4	11.0	13.4	-35.08	-251.2	584.5	210.4	192.8	17.64	11.928	
4,400.0	4,369.7	4,389.7	4,334.7	11.3	13.8	-35.12	-258.4	600.9	215.8	197.7	18.08	11.934	
4,500.0	4,468.8	4,489.5	4,432.9	11.6	14.1	-35.16	-265.7	617.2	221.2	202.7	18.53	11.939	
4,600.0	4,567.9	4,589.4	4,531.1	11.9	14.5	-35.19	-272.9	633.6	226.6	207.6	18.97	11.944	
4,700.0	4,667.0	4,689.2	4,629.4	12.2	14.9	-35.23	-280.1	649.9	232.0	212.6	19.42	11.949	
4,800.0	4,766.2	4,789.1	4,727.6	12.5	15.2	-35.26	-287.3	666.3	237.4	217.6	19.86	11.954	
4,900.0	4,865.3	4,888.9	4,825.9	12.8	15.6	-35.29	-294.5	682.7	242.8	222.5	20.31	11.958	
5,000.0	4,964.4	4,988.8	4,924.1	13.1	15.9	-35.32	-301.7	699.0	248.2	227.5	20.75	11.962	
5,100.0	5,063.5	5,088.6	5,022.3	13.4	16.3	-35.35	-309.0	715.4	253.6	232.4	21.20	11.965	

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 Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4K-35H-O367 - 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
5,200.0	5,162.6	5,188.5	5,120.6	13.7	16.7	-35.38	-316.2	731.7	259.0	237.4	21.64	11.969	
5,300.0	5,261.7	5,288.3	5,218.8	13.9	17.0	-35.41	-323.4	748.1	264.5	242.4	22.09	11.972	
5,400.0	5,360.8	5,388.2	5,317.1	14.2	17.4	-35.43	-330.6	764.5	269.9	247.3	22.54	11.975	
5,500.0	5,459.9	5,488.0	5,415.3	14.5	17.7	-35.46	-337.8	780.8	275.3	252.3	22.98	11.978	
5,600.0	5,559.0	5,587.9	5,513.5	14.8	18.1	-35.48	-345.0	797.2	280.7	257.2	23.43	11.981	
5,700.0	5,658.1	5,687.8	5,611.8	15.1	18.5	-35.50	-352.3	813.5	286.1	262.2	23.87	11.983	
5,800.0	5,757.2	5,787.6	5,710.0	15.4	18.8	-35.52	-359.5	829.9	291.5	267.2	24.32	11.986	
5,900.0	5,856.3	5,887.5	5,808.3	15.7	19.2	-35.55	-366.7	846.3	296.9	272.1	24.76	11.988	
6,000.0	5,955.4	5,987.3	5,906.5	16.0	19.5	-35.57	-373.9	862.6	302.3	277.1	25.21	11.991	
6,100.0	6,054.5	6,087.2	6,004.7	16.3	19.9	-35.59	-381.1	879.0	307.7	282.0	25.66	11.993	
6,200.0	6,153.6	6,187.0	6,103.0	16.6	20.3	-35.61	-388.3	895.3	313.1	287.0	26.10	11.995	
6,300.0	6,252.8	6,286.9	6,201.2	16.9	20.6	-35.62	-395.6	911.7	318.5	292.0	26.55	11.997	
6,400.0	6,351.9	6,386.7	6,299.5	17.1	21.0	-35.64	-402.8	928.1	323.9	296.9	27.00	11.999	
6,500.0	6,451.2	6,486.4	6,397.5	17.4	21.3	22.09	-410.0	944.4	329.2	302.0	27.22	12.098	
6,600.0	6,549.8	6,584.4	6,493.9	17.5	21.7	61.18	-417.1	960.4	335.0	308.2	26.75	12.524	
6,700.0	6,645.9	6,678.8	6,586.8	17.5	22.0	77.42	-423.9	975.9	343.3	317.4	25.87	13.266	
6,800.0	6,737.5	6,779.2	6,685.8	17.5	22.3	87.98	-424.9	992.4	355.9	331.0	24.95	14.266	
6,900.0	6,823.0	6,886.8	6,790.9	17.4	22.6	95.82	-410.4	1,009.9	372.1	347.8	24.31	15.306	
7,000.0	6,900.5	7,002.5	6,900.0	17.4	22.7	102.09	-377.3	1,028.1	390.7	366.7	23.96	16.306	
7,100.0	6,968.7	7,127.4	7,010.4	17.3	22.8	107.21	-322.1	1,046.4	410.3	386.5	23.84	17.211	
7,200.0	7,026.1	7,262.5	7,117.1	17.4	22.9	111.35	-241.5	1,064.2	429.4	405.5	23.89	17.971	
7,300.0	7,071.7	7,408.2	7,213.3	17.5	23.0	114.53	-133.5	1,080.2	446.3	422.2	24.11	18.512	
7,400.0	7,104.6	7,563.6	7,289.8	17.8	23.2	116.72	0.8	1,093.0	459.3	434.8	24.50	18.746	
7,500.0	7,124.2	7,726.3	7,337.5	18.3	23.7	117.85	155.7	1,100.9	467.3	442.1	25.19	18.547	
7,600.0	7,130.0	7,879.9	7,350.0	18.9	24.4	117.95	308.6	1,103.0	469.4	443.2	26.17	17.939	
7,700.0	7,130.0	7,979.9	7,350.0	19.6	24.9	117.90	408.6	1,103.0	470.1	442.3	27.85	16.884	
7,800.0	7,130.0	8,079.9	7,350.0	20.4	25.6	117.85	508.6	1,103.0	470.9	441.2	29.75	15.829	
7,900.0	7,130.0	8,179.9	7,350.0	21.4	26.3	117.80	608.5	1,103.0	471.7	439.8	31.85	14.811	
8,000.0	7,130.0	8,279.9	7,350.0	22.4	27.2	117.75	708.5	1,103.0	472.5	438.4	34.10	13.854	
8,100.0	7,130.0	8,379.9	7,350.0	23.5	28.1	117.70	808.5	1,103.0	473.2	436.7	36.49	12.970	
8,200.0	7,130.0	8,479.9	7,350.0	24.7	29.2	117.65	908.5	1,103.0	474.0	435.0	38.98	12.161	
8,300.0	7,130.0	8,579.9	7,350.0	26.0	30.3	117.61	1,008.5	1,103.0	474.8	433.2	41.56	11.425	
8,400.0	7,130.0	8,679.9	7,350.0	27.3	31.4	117.56	1,108.5	1,103.0	475.6	431.3	44.21	10.757	
8,500.0	7,130.0	8,779.9	7,350.0	28.7	32.6	117.51	1,208.5	1,103.0	476.3	429.4	46.92	10.152	
8,600.0	7,130.0	8,879.9	7,350.0	30.1	33.9	117.46	1,308.5	1,103.0	477.1	427.4	49.68	9.603	
8,700.0	7,130.0	8,979.9	7,350.0	31.6	35.1	117.41	1,408.5	1,103.0	477.9	425.4	52.49	9.104	
8,800.0	7,130.0	9,079.9	7,350.0	33.0	36.5	117.36	1,508.5	1,103.0	478.7	423.3	55.34	8.650	
8,900.0	7,130.0	9,179.9	7,350.0	34.5	37.8	117.32	1,608.5	1,103.0	479.4	421.2	58.22	8.235	
9,000.0	7,130.0	9,279.9	7,350.0	36.1	39.2	117.27	1,708.5	1,103.0	480.2	419.1	61.12	7.856	
9,100.0	7,130.0	9,379.9	7,350.0	37.6	40.7	117.22	1,808.5	1,103.0	481.0	416.9	64.05	7.509	
9,200.0	7,130.0	9,479.9	7,350.0	39.2	42.1	117.17	1,908.5	1,103.0	481.8	414.7	67.01	7.190	
9,300.0	7,130.0	9,579.9	7,350.0	40.7	43.6	117.13	2,008.5	1,103.0	482.5	412.6	69.98	6.895	
9,400.0	7,130.0	9,679.9	7,350.0	42.3	45.1	117.08	2,108.5	1,103.0	483.3	410.3	72.97	6.624	
9,500.0	7,130.0	9,779.9	7,350.0	43.9	46.6	117.03	2,208.5	1,103.0	484.1	408.1	75.97	6.372	
9,600.0	7,130.0	9,879.9	7,350.0	45.5	48.1	116.98	2,308.5	1,103.0	484.9	405.9	78.99	6.138	
9,700.0	7,130.0	9,979.9	7,350.0	47.2	49.7	116.94	2,408.5	1,103.0	485.6	403.6	82.02	5.921	
9,800.0	7,130.0	10,079.9	7,350.0	48.8	51.2	116.89	2,508.5	1,103.0	486.4	401.3	85.07	5.718	
9,900.0	7,130.0	10,179.8	7,350.0	50.4	52.8	116.84	2,608.5	1,103.0	487.2	399.1	88.12	5.529	
10,000.0	7,130.0	10,279.8	7,350.0	52.1	54.4	116.80	2,708.5	1,103.0	488.0	396.8	91.19	5.351	
10,100.0	7,130.0	10,379.8	7,350.0	53.7	56.0	116.75	2,808.5	1,103.0	488.8	394.5	94.26	5.185	
10,200.0	7,130.0	10,479.8	7,350.0	55.4	57.6	116.71	2,908.5	1,103.0	489.5	392.2	97.34	5.029	
10,300.0	7,130.0	10,579.8	7,350.0	57.1	59.2	116.66	3,008.5	1,103.0	490.3	389.9	100.43	4.882	

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 Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4K-35H-O367 - 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
10,400.0	7,130.0	10,679.8	7,350.0	58.7	60.8	116.62	3,108.5	1,103.0	491.1	387.6	103.53	4.743	
10,500.0	7,130.0	10,779.8	7,350.0	60.4	62.4	116.57	3,208.4	1,103.0	491.9	385.2	106.64	4.613	
10,600.0	7,130.0	10,879.8	7,350.0	62.1	64.1	116.52	3,308.4	1,103.0	492.7	382.9	109.75	4.489	
10,700.0	7,130.0	10,979.8	7,350.0	63.8	65.7	116.48	3,408.4	1,103.0	493.4	380.6	112.86	4.372	
10,800.0	7,130.0	11,079.8	7,350.0	65.5	67.3	116.43	3,508.4	1,103.0	494.2	378.2	115.99	4.261	
10,900.0	7,130.0	11,179.8	7,350.0	67.2	69.0	116.39	3,608.4	1,103.0	495.0	375.9	119.11	4.156	
11,000.0	7,130.0	11,279.8	7,350.0	68.9	70.7	116.34	3,708.4	1,103.0	495.8	373.5	122.25	4.056	
11,100.0	7,130.0	11,379.8	7,350.0	70.6	72.3	116.30	3,808.4	1,103.0	496.6	371.2	125.39	3.960	
11,200.0	7,130.0	11,479.8	7,350.0	72.3	74.0	116.25	3,908.4	1,103.0	497.3	368.8	128.53	3.869	
11,300.0	7,130.0	11,579.8	7,350.0	74.0	75.6	116.21	4,008.4	1,103.0	498.1	366.4	131.68	3.783	
11,400.0	7,130.0	11,679.8	7,350.0	75.7	77.3	116.17	4,108.4	1,103.0	498.9	364.1	134.83	3.700	
11,500.0	7,130.0	11,779.8	7,350.0	77.4	79.0	116.12	4,208.4	1,103.0	499.7	361.7	137.99	3.621	
11,600.0	7,130.0	11,879.8	7,350.0	79.1	80.7	116.08	4,308.4	1,103.0	500.5	359.3	141.15	3.546	
11,695.8	7,130.0	11,965.4	7,350.0	80.7	82.1	116.04	4,394.0	1,103.0	501.3	357.3	144.02	3.481	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4L-35H-O367 - 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	90.06	0.0	22.6	22.6				
100.0	100.0	100.0	100.0	0.2	0.2	90.06	0.0	22.6	22.6	22.3	0.30	74.531	
200.0	200.0	200.0	200.0	0.3	0.3	90.06	0.0	22.6	22.6	22.0	0.65	34.675	CC, ES
300.0	300.0	299.6	299.6	0.5	0.5	90.80	-0.3	23.4	23.5	22.4	1.00	23.416	
400.0	400.0	399.2	399.1	0.7	0.7	92.73	-1.2	25.9	25.9	24.6	1.35	19.176	
500.0	500.0	498.6	498.5	0.8	0.9	95.23	-2.7	29.9	30.1	28.4	1.71	17.639	
600.0	600.0	597.9	597.6	1.0	1.1	-27.05	-4.8	35.6	35.2	33.2	2.05	17.192	
700.0	700.0	697.2	696.5	1.2	1.3	-26.17	-7.5	42.8	40.5	38.1	2.40	16.883	
800.0	799.9	796.3	795.2	1.4	1.5	-25.99	-10.8	51.7	45.9	43.1	2.75	16.689	
900.0	899.7	895.3	893.6	1.6	1.8	-26.29	-14.7	62.1	51.4	48.3	3.10	16.561	
1,000.0	999.4	994.2	991.7	1.8	2.0	-26.91	-19.2	74.1	57.1	53.6	3.46	16.470	
1,100.0	1,098.9	1,093.1	1,089.4	2.0	2.3	-27.78	-24.3	87.7	62.8	59.0	3.83	16.398	
1,200.0	1,198.3	1,191.8	1,186.8	2.2	2.6	-28.81	-29.9	102.9	68.8	64.6	4.21	16.328	
1,300.0	1,297.4	1,290.4	1,283.8	2.5	3.0	-29.94	-36.1	119.6	74.9	70.3	4.61	16.271	
1,400.0	1,396.5	1,388.8	1,380.3	2.8	3.4	-30.70	-42.9	137.8	82.4	77.4	5.01	16.459	
1,500.0	1,495.6	1,487.6	1,476.8	3.0	3.7	-31.04	-50.3	157.5	91.5	86.0	5.42	16.888	
1,600.0	1,594.7	1,587.1	1,574.0	3.3	4.1	-31.27	-57.8	177.6	100.7	94.9	5.83	17.292	
1,700.0	1,693.8	1,686.7	1,671.2	3.6	4.6	-31.46	-65.3	197.8	110.0	103.8	6.24	17.634	
1,800.0	1,793.0	1,786.3	1,768.5	3.9	5.0	-31.62	-72.8	217.9	119.3	112.7	6.66	17.927	
1,900.0	1,892.1	1,885.8	1,865.7	4.1	5.4	-31.76	-80.3	238.1	128.6	121.6	7.08	18.181	
2,000.0	1,991.2	1,985.4	1,962.9	4.4	5.8	-31.88	-87.8	258.2	137.9	130.4	7.50	18.401	
2,100.0	2,090.3	2,085.0	2,060.1	4.7	6.2	-31.98	-95.3	278.3	147.2	139.3	7.92	18.595	
2,200.0	2,189.4	2,184.5	2,157.3	5.0	6.6	-32.07	-102.8	298.5	156.5	148.2	8.34	18.766	
2,300.0	2,288.5	2,284.1	2,254.6	5.3	7.0	-32.16	-110.3	318.6	165.8	157.1	8.76	18.919	
2,400.0	2,387.6	2,383.7	2,351.8	5.5	7.4	-32.23	-117.8	338.7	175.1	165.9	9.19	19.055	
2,500.0	2,486.7	2,483.2	2,449.0	5.8	7.8	-32.29	-125.3	358.9	184.4	174.8	9.62	19.178	
2,600.0	2,585.8	2,582.8	2,546.2	6.1	8.3	-32.35	-132.8	379.0	193.7	183.7	10.04	19.289	
2,700.0	2,684.9	2,682.4	2,643.4	6.4	8.7	-32.41	-140.3	399.2	203.0	192.5	10.47	19.389	
2,800.0	2,784.0	2,781.9	2,740.7	6.7	9.1	-32.46	-147.8	419.3	212.3	201.4	10.90	19.481	
2,900.0	2,883.1	2,881.5	2,837.9	7.0	9.5	-32.50	-155.3	439.4	221.6	210.3	11.33	19.565	
3,000.0	2,982.2	2,981.1	2,935.1	7.3	9.9	-32.54	-162.8	459.6	230.9	219.2	11.76	19.642	
3,100.0	3,081.3	3,080.6	3,032.3	7.6	10.3	-32.58	-170.3	479.7	240.2	228.0	12.19	19.713	
3,200.0	3,180.4	3,180.2	3,129.5	7.8	10.8	-32.61	-177.8	499.8	249.5	236.9	12.61	19.779	
3,300.0	3,279.6	3,279.8	3,226.8	8.1	11.2	-32.65	-185.3	520.0	258.8	245.8	13.05	19.839	
3,400.0	3,378.7	3,379.3	3,324.0	8.4	11.6	-32.68	-192.8	540.1	268.1	254.6	13.48	19.896	
3,500.0	3,477.8	3,478.9	3,421.2	8.7	12.0	-32.71	-200.3	560.3	277.4	263.5	13.91	19.949	
3,600.0	3,576.9	3,578.5	3,518.4	9.0	12.4	-32.73	-207.8	580.4	286.7	272.4	14.34	19.998	
3,700.0	3,676.0	3,678.0	3,615.6	9.3	12.8	-32.76	-215.3	600.5	296.0	281.2	14.77	20.044	
3,800.0	3,775.1	3,777.6	3,712.9	9.6	13.3	-32.78	-222.8	620.7	305.3	290.1	15.20	20.087	
3,900.0	3,874.2	3,877.2	3,810.1	9.9	13.7	-32.80	-230.3	640.8	314.6	299.0	15.63	20.127	
4,000.0	3,973.3	3,976.7	3,907.3	10.2	14.1	-32.82	-237.8	660.9	323.9	307.8	16.06	20.165	
4,100.0	4,072.4	4,076.3	4,004.5	10.5	14.5	-32.84	-245.3	681.1	333.2	316.7	16.49	20.201	
4,200.0	4,171.5	4,175.9	4,101.7	10.7	14.9	-32.86	-252.8	701.2	342.5	325.6	16.93	20.235	
4,300.0	4,270.6	4,275.4	4,199.0	11.0	15.4	-32.88	-260.3	721.4	351.8	334.4	17.36	20.267	
4,400.0	4,369.7	4,375.0	4,296.2	11.3	15.8	-32.90	-267.8	741.5	361.1	343.3	17.79	20.297	
4,500.0	4,468.8	4,474.6	4,393.4	11.6	16.2	-32.91	-275.3	761.6	370.4	352.2	18.22	20.326	
4,600.0	4,567.9	4,574.1	4,490.6	11.9	16.6	-32.93	-282.8	781.8	379.7	361.0	18.66	20.353	
4,700.0	4,667.0	4,673.7	4,587.8	12.2	17.0	-32.94	-290.3	801.9	389.0	369.9	19.09	20.379	
4,800.0	4,766.2	4,773.3	4,685.1	12.5	17.5	-32.95	-297.8	822.0	398.3	378.8	19.52	20.404	
4,900.0	4,865.3	4,872.8	4,782.3	12.8	17.9	-32.97	-305.3	842.2	407.6	387.6	19.95	20.427	
5,000.0	4,964.4	4,972.4	4,879.5	13.1	18.3	-32.98	-312.8	862.3	416.9	396.5	20.39	20.450	
5,100.0	5,063.5	5,072.0	4,976.7	13.4	18.7	-32.99	-320.3	882.5	426.2	405.4	20.82	20.471	

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 Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4L-35H-O367 - 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
5,200.0	5,162.6	5,171.5	5,073.9	13.7	19.1	-33.00	-327.8	902.6	435.5	414.3	21.25	20.492	
5,300.0	5,261.7	5,271.1	5,171.2	13.9	19.5	-33.01	-335.3	922.7	444.8	423.1	21.69	20.511	
5,400.0	5,360.8	5,370.7	5,268.4	14.2	20.0	-33.02	-342.8	942.9	454.1	432.0	22.12	20.530	
5,500.0	5,459.9	5,470.2	5,365.6	14.5	20.4	-33.03	-350.3	963.0	463.4	440.9	22.55	20.548	
5,600.0	5,559.0	5,569.8	5,462.8	14.8	20.8	-33.04	-357.8	983.1	472.7	449.7	22.99	20.565	
5,700.0	5,658.1	5,669.4	5,560.0	15.1	21.2	-33.05	-365.3	1,003.3	482.0	458.6	23.42	20.582	
5,800.0	5,757.2	5,768.9	5,657.3	15.4	21.6	-33.06	-372.8	1,023.4	491.3	467.5	23.85	20.598	
5,900.0	5,856.3	5,868.5	5,754.5	15.7	22.1	-33.07	-380.3	1,043.6	500.6	476.3	24.29	20.613	
6,000.0	5,955.4	5,968.1	5,851.7	16.0	22.5	-33.08	-387.8	1,063.7	509.9	485.2	24.72	20.628	
6,100.0	6,054.5	6,067.6	5,948.9	16.3	22.9	-33.09	-395.3	1,083.8	519.2	494.1	25.15	20.642	
6,200.0	6,153.6	6,167.2	6,046.1	16.6	23.3	-33.10	-402.8	1,104.0	528.5	502.9	25.59	20.656	
6,300.0	6,252.8	6,266.8	6,143.4	16.9	23.7	-33.10	-410.3	1,124.1	537.8	511.8	26.02	20.669	
6,400.0	6,351.9	6,366.3	6,240.6	17.1	24.2	-33.11	-417.8	1,144.2	547.1	520.7	26.45	20.682	
6,500.0	6,451.2	6,465.7	6,337.6	17.4	24.6	23.96	-425.3	1,164.3	556.5	529.7	26.85	20.731	
6,600.0	6,549.8	6,565.6	6,435.3	17.5	25.0	61.22	-430.2	1,184.6	566.5	539.7	26.78	21.155	
6,700.0	6,645.9	6,668.7	6,535.8	17.5	25.3	73.97	-421.9	1,205.4	576.8	550.3	26.50	21.768	
6,800.0	6,737.5	6,774.5	6,636.7	17.5	25.6	80.05	-398.1	1,226.3	587.3	561.2	26.11	22.495	
6,900.0	6,823.0	6,883.3	6,735.6	17.4	25.8	83.65	-358.0	1,246.8	597.6	571.9	25.68	23.270	
7,000.0	6,900.5	6,995.1	6,829.9	17.4	25.9	86.04	-301.5	1,266.3	607.4	582.1	25.31	23.999	
7,100.0	6,968.7	7,109.7	6,916.4	17.3	26.0	87.70	-228.7	1,284.2	616.5	591.4	25.09	24.567	
7,200.0	7,026.1	7,226.9	6,992.0	17.4	26.2	88.85	-140.7	1,299.9	624.4	599.2	25.13	24.849	
7,300.0	7,071.7	7,346.3	7,053.5	17.5	26.4	89.61	-39.3	1,312.6	630.9	605.4	25.48	24.757	
7,400.0	7,104.6	7,467.3	7,098.2	17.8	26.6	90.02	72.6	1,321.9	635.8	609.5	26.23	24.237	
7,500.0	7,124.2	7,589.3	7,123.9	18.3	27.0	90.13	191.6	1,327.2	638.8	611.5	27.37	23.340	
7,600.0	7,130.0	7,706.5	7,130.0	18.9	27.5	90.00	308.6	1,328.5	640.1	611.2	28.86	22.183	
7,700.0	7,130.0	7,806.5	7,130.0	19.6	28.0	90.00	408.6	1,328.5	641.0	610.3	30.69	20.883	
7,800.0	7,130.0	7,906.5	7,130.0	20.4	28.6	90.00	508.6	1,328.5	641.8	609.0	32.81	19.565	
7,900.0	7,130.0	8,006.5	7,130.0	21.4	29.2	90.00	608.5	1,328.5	642.7	607.6	35.14	18.290	
8,000.0	7,130.0	8,106.5	7,130.0	22.4	30.0	90.00	708.5	1,328.5	643.6	605.9	37.66	17.090	
8,100.0	7,130.0	8,206.5	7,130.0	23.5	30.8	90.00	808.5	1,328.5	644.5	604.1	40.32	15.982	
8,200.0	7,130.0	8,306.5	7,130.0	24.7	31.8	90.00	908.5	1,328.5	645.3	602.2	43.11	14.969	
8,300.0	7,130.0	8,406.5	7,130.0	26.0	32.8	90.00	1,008.5	1,328.5	646.2	600.2	46.00	14.048	
8,400.0	7,130.0	8,506.5	7,130.0	27.3	33.8	90.00	1,108.5	1,328.5	647.1	598.1	48.96	13.215	
8,500.0	7,130.0	8,606.5	7,130.0	28.7	34.9	90.00	1,208.5	1,328.5	647.9	595.9	52.00	12.461	
8,600.0	7,130.0	8,706.5	7,130.0	30.1	36.1	90.00	1,308.5	1,328.5	648.8	593.7	55.09	11.777	
8,700.0	7,130.0	8,806.5	7,130.0	31.6	37.3	90.00	1,408.5	1,328.5	649.7	591.5	58.23	11.158	
8,800.0	7,130.0	8,906.5	7,130.0	33.0	38.6	90.00	1,508.5	1,328.5	650.6	589.2	61.41	10.594	
8,900.0	7,130.0	9,006.5	7,130.0	34.5	39.8	90.00	1,608.5	1,328.5	651.4	586.8	64.62	10.081	
9,000.0	7,130.0	9,106.5	7,130.0	36.1	41.2	90.00	1,708.5	1,328.5	652.3	584.4	67.86	9.612	
9,100.0	7,130.0	9,206.5	7,130.0	37.6	42.5	90.00	1,808.5	1,328.5	653.2	582.1	71.13	9.183	
9,200.0	7,130.0	9,306.5	7,130.0	39.2	43.9	90.00	1,908.5	1,328.5	654.1	579.6	74.42	8.789	
9,300.0	7,130.0	9,406.5	7,130.0	40.7	45.3	90.00	2,008.5	1,328.5	654.9	577.2	77.72	8.426	
9,400.0	7,130.0	9,506.5	7,130.0	42.3	46.8	90.00	2,108.5	1,328.5	655.8	574.7	81.05	8.091	
9,500.0	7,130.0	9,606.5	7,130.0	43.9	48.2	90.00	2,208.5	1,328.5	656.7	572.3	84.39	7.781	
9,600.0	7,130.0	9,706.5	7,130.0	45.5	49.7	90.00	2,308.5	1,328.5	657.5	569.8	87.74	7.494	
9,700.0	7,130.0	9,806.5	7,130.0	47.2	51.2	90.00	2,408.5	1,328.5	658.4	567.3	91.11	7.227	
9,800.0	7,130.0	9,906.5	7,130.0	48.8	52.7	90.00	2,508.5	1,328.5	659.3	564.8	94.48	6.978	
9,900.0	7,130.0	10,006.5	7,130.0	50.4	54.2	90.00	2,608.5	1,328.5	660.2	562.3	97.87	6.746	
10,000.0	7,130.0	10,106.4	7,130.0	52.1	55.8	90.00	2,708.5	1,328.5	661.0	559.8	101.26	6.528	
10,100.0	7,130.0	10,206.4	7,130.0	53.7	57.3	90.00	2,808.5	1,328.5	661.9	557.2	104.66	6.324	
10,200.0	7,130.0	10,306.4	7,130.0	55.4	58.9	90.00	2,908.5	1,328.5	662.8	554.7	108.07	6.133	
10,300.0	7,130.0	10,406.4	7,130.0	57.1	60.5	90.00	3,008.5	1,328.5	663.6	552.2	111.48	5.953	

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 Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4L-35H-O367 - 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
10,400.0	7,130.0	10,506.4	7,130.0	58.7	62.0	90.00	3,108.5	1,328.5	664.5	549.6	114.90	5.784	
10,500.0	7,130.0	10,606.4	7,130.0	60.4	63.6	90.00	3,208.4	1,328.5	665.4	547.1	118.32	5.624	
10,600.0	7,130.0	10,706.4	7,130.0	62.1	65.2	90.00	3,308.4	1,328.5	666.3	544.5	121.75	5.472	
10,700.0	7,130.0	10,806.4	7,130.0	63.8	66.8	90.00	3,408.4	1,328.5	667.1	542.0	125.19	5.329	
10,800.0	7,130.0	10,906.4	7,130.0	65.5	68.5	90.00	3,508.4	1,328.5	668.0	539.4	128.62	5.194	
10,900.0	7,130.0	11,006.4	7,130.0	67.2	70.1	90.00	3,608.4	1,328.5	668.9	536.8	132.06	5.065	
11,000.0	7,130.0	11,106.4	7,130.0	68.9	71.7	90.00	3,708.4	1,328.5	669.8	534.2	135.51	4.943	
11,100.0	7,130.0	11,206.4	7,130.0	70.6	73.3	90.00	3,808.4	1,328.5	670.6	531.7	138.96	4.826	
11,200.0	7,130.0	11,306.4	7,130.0	72.3	75.0	90.00	3,908.4	1,328.5	671.5	529.1	142.41	4.715	
11,300.0	7,130.0	11,406.4	7,130.0	74.0	76.6	90.00	4,008.4	1,328.5	672.4	526.5	145.86	4.610	
11,400.0	7,130.0	11,506.4	7,130.0	75.7	78.3	90.00	4,108.4	1,328.5	673.2	523.9	149.32	4.509	
11,500.0	7,130.0	11,606.4	7,130.0	77.4	79.9	90.00	4,208.4	1,328.5	674.1	521.3	152.78	4.413	
11,600.0	7,130.0	11,706.4	7,130.0	79.1	81.6	90.00	4,308.4	1,328.5	675.0	518.8	156.24	4.320	
11,695.8	7,130.0	11,786.9	7,130.0	80.7	82.9	90.00	4,388.9	1,328.5	676.0	516.7	159.29	4.244	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KIYOTA 6-8-35 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 843-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	1.1	1.1	0.0	0.0	-69.72	192.4	-520.6	555.0				
100.0	100.0	101.3	101.3	0.2	0.2	-69.71	192.4	-520.5	555.0	554.6	0.33	1,694.935	
200.0	200.0	201.6	201.6	0.3	0.4	-69.69	192.6	-520.4	554.9	554.2	0.68	821.290	
300.0	300.0	301.8	301.8	0.5	0.5	-69.66	192.9	-520.2	554.8	553.8	1.02	541.865	
400.0	400.0	402.0	402.0	0.7	0.7	-69.61	193.3	-519.9	554.6	553.3	1.37	404.239	
500.0	500.0	502.3	502.3	0.8	0.9	-69.54	193.8	-519.5	554.4	552.7	1.72	322.305	
512.8	512.8	515.0	515.0	0.9	0.9	166.27	193.9	-519.4	554.4	552.7	1.77	313.824	
600.0	600.0	602.5	602.5	1.0	1.0	166.36	194.4	-519.0	555.1	553.0	2.07	268.062	
700.0	700.0	702.7	702.7	1.2	1.2	166.51	195.2	-518.4	557.3	554.9	2.42	230.429	
800.0	799.9	802.8	802.8	1.4	1.4	166.71	196.1	-517.7	561.3	558.5	2.77	202.892	
900.0	899.7	914.2	914.2	1.6	1.6	167.00	196.9	-516.2	566.3	563.1	3.13	180.631	
1,000.0	999.4	1,026.0	1,025.9	1.8	1.8	167.15	195.2	-512.8	570.5	567.0	3.50	162.971	
1,100.0	1,098.9	1,143.3	1,143.0	2.0	2.0	167.19	190.6	-506.6	573.4	569.5	3.88	147.967	
1,200.0	1,198.3	1,258.3	1,257.4	2.2	2.2	167.10	183.5	-498.6	575.8	571.6	4.25	135.546	
1,300.0	1,297.4	1,369.9	1,368.1	2.5	2.5	166.83	173.4	-489.1	577.2	572.6	4.62	124.923	
1,400.0	1,396.5	1,477.9	1,475.1	2.8	2.7	166.58	163.1	-478.6	577.7	572.7	5.00	115.644	
1,500.0	1,495.6	1,584.6	1,580.6	3.0	3.0	166.42	153.2	-466.3	576.5	571.2	5.37	107.353	
1,600.0	1,594.7	1,705.1	1,699.4	3.3	3.4	166.14	140.2	-450.4	573.3	567.6	5.78	99.226	
1,700.0	1,693.8	1,809.8	1,802.0	3.6	3.7	165.79	127.1	-434.4	567.5	561.4	6.16	92.077	
1,800.0	1,793.0	1,923.4	1,913.0	3.9	4.1	165.32	111.5	-415.8	560.2	553.7	6.58	85.185	
1,900.0	1,892.1	2,020.1	2,007.2	4.1	4.5	164.88	97.7	-399.1	552.0	545.1	6.96	79.301	
2,000.0	1,991.2	2,130.2	2,114.4	4.4	5.0	164.37	81.7	-379.4	543.1	535.7	7.38	73.547	
2,100.0	2,090.3	2,231.4	2,212.6	4.7	5.4	163.84	66.3	-360.3	533.0	525.2	7.80	68.363	
2,200.0	2,189.4	2,325.8	2,304.3	5.0	5.8	163.38	52.6	-342.7	523.5	515.3	8.19	63.881	
2,300.0	2,288.5	2,423.8	2,399.7	5.3	6.2	162.94	39.0	-324.8	514.5	505.9	8.60	59.805	
2,400.0	2,387.6	2,524.0	2,497.3	5.5	6.6	162.50	25.3	-306.7	505.9	496.8	9.02	56.054	
2,500.0	2,486.7	2,629.9	2,600.1	5.8	7.1	161.88	9.4	-287.0	496.3	486.8	9.48	52.332	
2,600.0	2,585.8	2,726.1	2,693.3	6.1	7.5	161.22	-5.8	-268.7	486.1	476.2	9.93	48.951	
2,700.0	2,684.9	2,821.3	2,785.8	6.4	7.9	160.56	-20.3	-251.8	477.4	467.0	10.38	45.975	
2,800.0	2,784.0	2,924.5	2,886.2	6.7	8.4	159.87	-35.7	-233.3	468.8	457.9	10.86	43.152	
2,900.0	2,883.1	3,022.1	2,981.1	7.0	8.8	159.26	-49.8	-215.2	459.6	448.3	11.33	40.563	
3,000.0	2,982.2	3,121.8	3,078.1	7.3	9.2	158.58	-64.4	-197.2	451.0	439.2	11.82	38.155	
3,100.0	3,081.3	3,220.0	3,173.6	7.6	9.6	157.92	-78.5	-179.4	442.4	430.1	12.31	35.939	
3,200.0	3,180.4	3,316.1	3,267.2	7.8	10.0	157.29	-91.9	-162.4	434.4	421.6	12.80	33.946	
3,300.0	3,279.6	3,418.2	3,366.7	8.1	10.5	156.59	-106.1	-144.5	426.7	413.4	13.32	32.036	
3,400.0	3,378.7	3,516.9	3,462.9	8.4	10.9	155.84	-120.2	-127.0	418.8	404.9	13.85	30.237	
3,500.0	3,477.8	3,616.7	3,560.1	8.7	11.3	155.12	-134.1	-109.4	411.0	396.6	14.38	28.574	
3,600.0	3,576.9	3,719.1	3,659.8	9.0	11.8	154.32	-148.6	-91.0	402.9	388.0	14.95	26.945	
3,700.0	3,676.0	3,822.2	3,760.0	9.3	12.2	153.47	-163.3	-71.6	394.2	378.6	15.54	25.365	
3,800.0	3,775.1	3,923.8	3,858.4	9.6	12.7	152.59	-177.9	-51.4	384.3	368.2	16.14	23.808	
3,900.0	3,874.2	4,022.5	3,954.2	9.9	13.2	151.62	-192.6	-32.5	375.2	358.5	16.77	22.371	
4,000.0	3,973.3	4,121.4	4,049.9	10.2	13.6	150.53	-207.8	-12.7	365.4	348.0	17.44	20.953	
4,100.0	4,072.4	4,217.2	4,143.0	10.5	14.1	149.56	-221.5	5.1	357.2	339.1	18.08	19.756	
4,200.0	4,171.5	4,316.7	4,239.8	10.7	14.5	148.61	-235.2	23.6	349.1	330.4	18.73	18.637	
4,300.0	4,270.6	4,409.0	4,329.8	11.0	14.9	147.80	-247.2	40.4	341.6	322.3	19.34	17.659	
4,400.0	4,369.7	4,505.4	4,424.2	11.3	15.3	147.05	-259.0	56.0	336.3	316.3	19.96	16.847	
4,500.0	4,468.8	4,605.2	4,521.9	11.6	15.7	146.24	-271.1	71.7	331.4	310.8	20.61	16.083	
4,600.0	4,567.9	4,700.0	4,615.0	11.9	16.0	145.49	-282.6	86.0	327.3	306.1	21.23	15.417	
4,700.0	4,667.0	4,800.1	4,713.5	12.2	16.4	144.74	-294.2	99.8	324.6	302.7	21.88	14.838	
4,800.0	4,766.2	4,896.8	4,808.6	12.5	16.7	144.04	-305.3	113.2	321.8	299.3	22.50	14.300	
4,900.0	4,865.3	4,992.8	4,903.3	12.8	17.0	143.46	-315.7	125.3	320.3	297.2	23.10	13.864	
5,000.0	4,964.4	5,092.6	5,001.9	13.1	17.4	142.99	-325.8	137.0	319.7	296.0	23.67	13.505	

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 Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KIYOTA 6-8-35 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 843-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
5,072.0	5,035.7	5,162.1	5,070.7	13.3	17.6	142.88	-331.6	145.1	319.3	295.3	24.01	13.298	CC
5,100.0	5,063.5	5,189.4	5,097.7	13.4	17.6	142.87	-333.7	148.0	319.4	295.3	24.14	13.232	ES
5,200.0	5,162.6	5,287.0	5,194.6	13.7	17.9	142.97	-340.5	158.2	320.0	295.4	24.55	13.032	
5,300.0	5,261.7	5,383.7	5,290.5	13.9	18.2	142.96	-347.9	167.4	321.5	296.5	24.99	12.863	
5,400.0	5,360.8	5,484.2	5,390.3	14.2	18.4	143.08	-354.8	176.4	323.5	298.1	25.40	12.737	
5,500.0	5,459.9	5,579.4	5,485.1	14.5	18.7	143.31	-360.8	184.2	326.3	300.6	25.76	12.669	
5,600.0	5,559.0	5,680.0	5,585.2	14.8	18.9	143.60	-366.8	192.1	329.4	303.3	26.11	12.617	
5,700.0	5,658.1	5,778.2	5,683.0	15.1	19.1	144.04	-371.8	199.5	332.9	306.5	26.41	12.603	SF
5,800.0	5,757.2	5,874.9	5,779.3	15.4	19.3	144.50	-376.4	206.2	337.0	310.3	26.69	12.626	
5,900.0	5,856.3	5,970.3	5,874.5	15.7	19.5	145.22	-379.4	211.6	342.3	315.4	26.87	12.737	
6,000.0	5,955.4	6,065.1	5,969.2	16.0	19.6	146.09	-381.3	215.7	349.0	322.0	27.02	12.916	
6,100.0	6,054.5	6,162.5	6,066.5	16.3	19.8	146.86	-383.8	218.9	356.9	329.7	27.20	13.123	
6,200.0	6,153.6	6,254.0	6,158.0	16.6	19.9	147.59	-385.9	220.6	366.2	338.8	27.37	13.381	
6,300.0	6,252.8	6,349.5	6,253.4	16.9	20.0	148.49	-386.9	220.9	377.2	349.7	27.48	13.726	
6,400.0	6,351.9	6,449.5	6,353.4	17.1	20.1	149.52	-386.9	220.9	388.6	361.0	27.56	14.099	
6,500.0	6,451.2	6,547.9	6,451.8	17.4	20.2	-152.29	-386.7	220.9	399.7	372.1	27.59	14.488	
6,600.0	6,549.8	6,647.2	6,551.2	17.5	20.3	-116.82	-386.6	221.0	409.8	381.8	27.99	14.640	
6,700.0	6,645.9	6,741.6	6,645.6	17.5	20.3	-107.49	-386.2	220.8	420.1	391.5	28.63	14.672	
6,800.0	6,737.5	6,833.9	6,737.8	17.5	20.4	-105.99	-385.8	220.6	432.5	403.1	29.35	14.733	
6,900.0	6,823.0	6,917.2	6,821.1	17.4	20.5	-107.16	-385.6	220.2	449.9	420.1	29.84	15.078	
7,000.0	6,900.5	6,995.6	6,899.6	17.4	20.6	-109.34	-385.5	219.7	475.3	445.3	29.97	15.857	
7,100.0	6,968.7	7,064.7	6,968.6	17.3	20.7	-111.10	-385.4	219.5	510.7	481.0	29.71	17.189	
7,200.0	7,026.1	7,122.9	7,026.9	17.4	20.7	-111.62	-385.4	219.3	557.2	527.9	29.25	19.046	
7,300.0	7,071.7	7,169.2	7,073.2	17.5	20.8	-110.22	-385.3	219.2	614.7	585.8	28.95	21.231	
7,400.0	7,104.6	7,202.7	7,106.7	17.8	20.8	-106.33	-385.2	219.2	682.0	652.9	29.12	23.418	
7,500.0	7,124.2	7,222.9	7,126.9	18.3	20.8	-99.42	-385.2	219.2	757.1	727.2	29.81	25.397	
7,600.0	7,130.0	7,229.1	7,133.1	18.9	20.8	-90.24	-385.2	219.2	837.5	806.9	30.61	27.361	
7,700.0	7,130.0	7,229.4	7,133.3	19.6	20.8	-90.27	-385.2	219.2	921.6	890.0	31.53	29.223	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KIYOTA C-35-320-E (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 7915-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
8,700.0	7,130.0	7,098.0	7,098.0	31.6	12.4	-90.00	2,045.5	-47.2	965.8	924.3	41.51	23.268	
8,800.0	7,130.0	7,098.0	7,098.0	33.0	12.4	-90.00	2,045.5	-47.2	902.3	859.2	43.10	20.935	
8,900.0	7,130.0	7,098.0	7,098.0	34.5	12.4	-90.00	2,045.5	-47.2	845.9	801.1	44.71	18.920	
9,000.0	7,130.0	7,098.0	7,098.0	36.1	12.4	-90.00	2,045.5	-47.2	798.0	751.7	46.33	17.225	
9,100.0	7,130.0	7,098.0	7,098.0	37.6	12.4	-90.00	2,045.5	-47.2	760.4	712.4	47.96	15.853	
9,200.0	7,130.0	7,098.0	7,098.0	39.2	12.4	-90.00	2,045.5	-47.2	734.5	684.9	49.61	14.806	
9,300.0	7,130.0	7,098.0	7,098.0	40.7	12.4	-90.00	2,045.5	-47.2	721.7	670.4	51.27	14.078	
9,343.2	7,130.0	7,098.0	7,098.0	41.4	12.4	-90.00	2,045.5	-47.2	720.4	668.4	51.98	13.858	CC, ES
9,400.0	7,130.0	7,098.0	7,098.0	42.3	12.4	-90.00	2,045.5	-47.2	722.6	669.7	52.93	13.653	
9,500.0	7,130.0	7,098.0	7,098.0	43.9	12.4	-90.00	2,045.5	-47.2	737.3	682.7	54.60	13.503	SF
9,600.0	7,130.0	7,098.0	7,098.0	45.5	12.4	-90.00	2,045.5	-47.2	764.8	708.5	56.28	13.590	
9,700.0	7,130.0	7,098.0	7,098.0	47.2	12.4	-90.00	2,045.5	-47.2	803.9	746.0	57.96	13.870	
9,800.0	7,130.0	7,098.0	7,098.0	48.8	12.4	-90.00	2,045.5	-47.2	853.0	793.4	59.65	14.301	
9,900.0	7,130.0	7,098.0	7,098.0	50.4	12.4	-90.00	2,045.5	-47.2	910.5	849.1	61.34	14.843	
10,000.0	7,130.0	7,098.0	7,098.0	52.1	12.4	-90.00	2,045.5	-47.2	974.8	911.8	63.04	15.464	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4I-35H-O367
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	**MD Reference:**	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Kiyota 4I-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to 13' KB @ 4848.0ft (Original Well Elev
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Kiyota 4I-35H-O367
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.42°