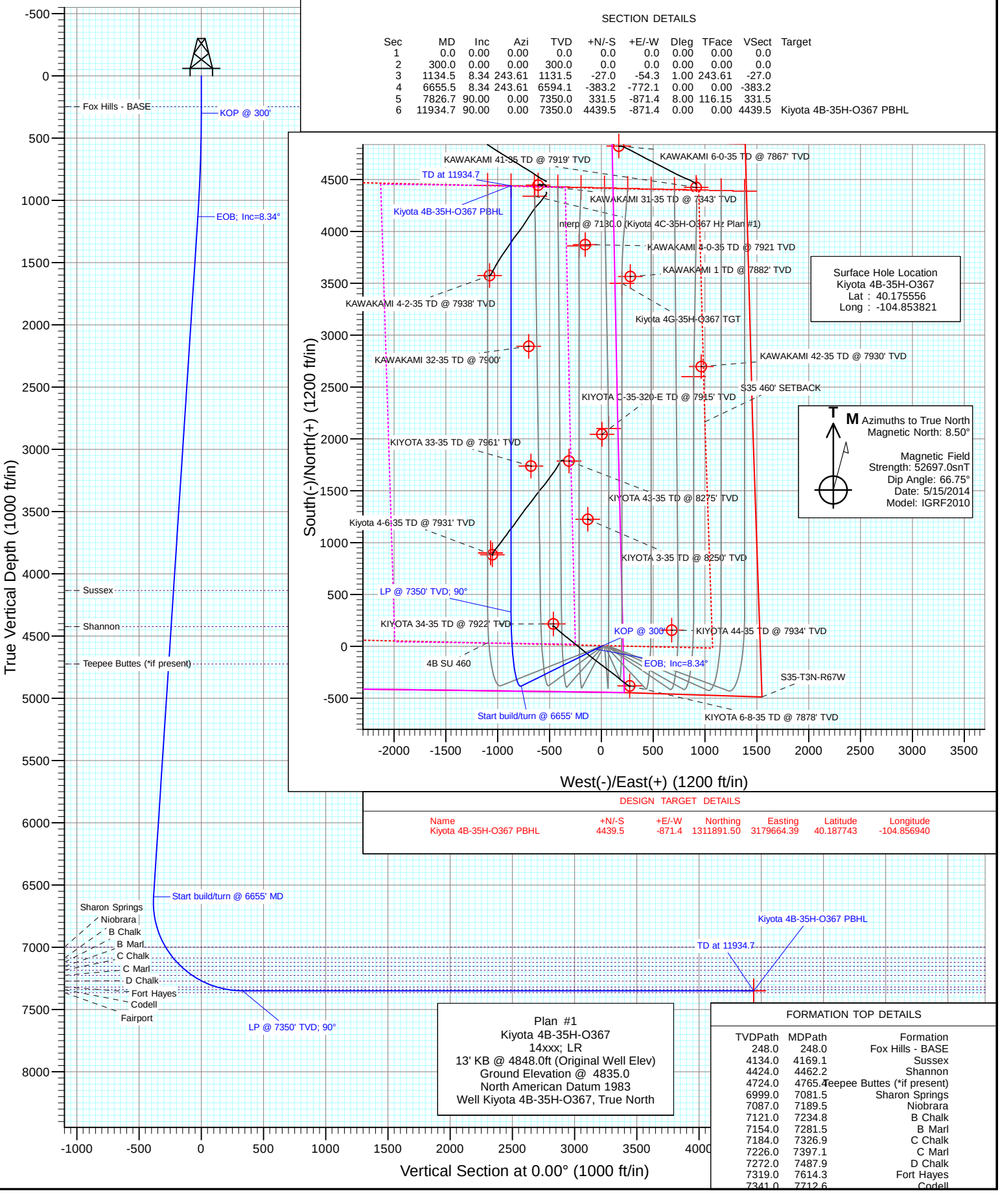
encana natural gas

Project: DJ Wattenberg
Site: S35-T3N-R67W (Kiyota)
Well: Kiyota 4B-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	300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.0	
3	1134.5	8.34	243.61	1131.5	-27.0	-54.3	1.00	243.61	-27.0	
4	6655.5	8.34	243.61	6594.1	-383.2	-772.1	0.00	0.00	-383.2	
5	7826.7	90.00	0.00	7350.0	331.5	-871.4	8.00	116.15	331.5	
6	11934.7	90.00	0.00	7350.0	4439.5	-871.4	0.00	0.00	4439.5	Kiyota 4B-35H-O367 PBHL



DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Kiyota 4B-35H-O367 PBHL	4439.5	-871.4	1311891.50	3179664.39	40.187743	-104.856940

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

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
248.0	248.0	Fox Hills - BASE
4134.0	4169.1	Sussex
4424.0	4462.2	Shannon
4724.0	4765.4	Teepee Buttes (*if present)
6999.0	7081.5	Sharon Springs
7087.0	7189.5	Niobrara
7121.0	7234.8	B Chalk
7154.0	7281.5	B Marl
7184.0	7326.9	C Chalk
7226.0	7397.1	C Marl
7272.0	7487.9	D Chalk
7319.0	7614.3	Fort Hayes
7341.0	7712.6	Codell

Planning Report

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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 4B-35H-O367

Well Position	**+N/-S**	0.0 ft	**Northing:**	1,307,458.42 ft	**Latitude:**	40.175556
	+E/-W	0.0 ft	**Easting:**	3,180,568.12 ft	**Longitude:**	-104.853821
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	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,134.5	8.34	243.61	1,131.5	-27.0	-54.3	1.00	1.00	0.00	243.61	
6,655.5	8.34	243.61	6,594.1	-383.2	-772.1	0.00	0.00	0.00	0.00	
7,826.7	90.00	0.00	7,350.0	331.5	-871.4	8.00	6.97	9.94	116.15	
11,934.7	90.00	0.00	7,350.0	4,439.5	-871.4	0.00	0.00	0.00	0.00	Kiyota 4B-35H-O367

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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	KOP @ 300'
400.0	1.00	243.61	400.0	-0.4	-0.8	-0.4	1.00	1.00	
500.0	2.00	243.61	500.0	-1.6	-3.1	-1.6	1.00	1.00	
600.0	3.00	243.61	599.9	-3.5	-7.0	-3.5	1.00	1.00	
700.0	4.00	243.61	699.7	-6.2	-12.5	-6.2	1.00	1.00	
800.0	5.00	243.61	799.4	-9.7	-19.5	-9.7	1.00	1.00	
900.0	6.00	243.61	898.9	-14.0	-28.1	-14.0	1.00	1.00	
1,000.0	7.00	243.61	998.3	-19.0	-38.3	-19.0	1.00	1.00	
1,100.0	8.00	243.61	1,097.4	-24.8	-49.9	-24.8	1.00	1.00	
1,134.5	8.34	243.61	1,131.5	-27.0	-54.3	-27.0	1.00	1.00	EOB; Inc=8.34°
1,200.0	8.34	243.61	1,196.4	-31.2	-62.9	-31.2	0.00	0.00	
1,300.0	8.34	243.61	1,295.3	-37.6	-75.9	-37.6	0.00	0.00	
1,400.0	8.34	243.61	1,394.2	-44.1	-88.9	-44.1	0.00	0.00	
1,500.0	8.34	243.61	1,493.2	-50.5	-101.9	-50.5	0.00	0.00	
1,600.0	8.34	243.61	1,592.1	-57.0	-114.9	-57.0	0.00	0.00	
1,700.0	8.34	243.61	1,691.1	-63.5	-127.9	-63.5	0.00	0.00	
1,800.0	8.34	243.61	1,790.0	-69.9	-140.9	-69.9	0.00	0.00	
1,900.0	8.34	243.61	1,889.0	-76.4	-153.9	-76.4	0.00	0.00	
2,000.0	8.34	243.61	1,987.9	-82.8	-166.9	-82.8	0.00	0.00	
2,100.0	8.34	243.61	2,086.8	-89.3	-179.9	-89.3	0.00	0.00	
2,200.0	8.34	243.61	2,185.8	-95.7	-192.9	-95.7	0.00	0.00	
2,300.0	8.34	243.61	2,284.7	-102.2	-205.9	-102.2	0.00	0.00	
2,400.0	8.34	243.61	2,383.7	-108.6	-218.9	-108.6	0.00	0.00	
2,500.0	8.34	243.61	2,482.6	-115.1	-231.9	-115.1	0.00	0.00	
2,600.0	8.34	243.61	2,581.5	-121.5	-244.9	-121.5	0.00	0.00	
2,700.0	8.34	243.61	2,680.5	-128.0	-257.9	-128.0	0.00	0.00	
2,800.0	8.34	243.61	2,779.4	-134.4	-270.9	-134.4	0.00	0.00	
2,900.0	8.34	243.61	2,878.4	-140.9	-283.9	-140.9	0.00	0.00	
3,000.0	8.34	243.61	2,977.3	-147.3	-296.9	-147.3	0.00	0.00	
3,100.0	8.34	243.61	3,076.2	-153.8	-309.9	-153.8	0.00	0.00	
3,200.0	8.34	243.61	3,175.2	-160.2	-322.9	-160.2	0.00	0.00	
3,300.0	8.34	243.61	3,274.1	-166.7	-335.9	-166.7	0.00	0.00	
3,400.0	8.34	243.61	3,373.1	-173.1	-348.9	-173.1	0.00	0.00	
3,500.0	8.34	243.61	3,472.0	-179.6	-361.9	-179.6	0.00	0.00	
3,600.0	8.34	243.61	3,571.0	-186.0	-374.9	-186.0	0.00	0.00	
3,700.0	8.34	243.61	3,669.9	-192.5	-387.9	-192.5	0.00	0.00	
3,800.0	8.34	243.61	3,768.8	-198.9	-400.9	-198.9	0.00	0.00	
3,900.0	8.34	243.61	3,867.8	-205.4	-413.9	-205.4	0.00	0.00	
4,000.0	8.34	243.61	3,966.7	-211.8	-426.9	-211.8	0.00	0.00	
4,100.0	8.34	243.61	4,065.7	-218.3	-439.9	-218.3	0.00	0.00	
4,169.1	8.34	243.61	4,134.0	-222.7	-448.8	-222.7	0.00	0.00	Sussex
4,200.0	8.34	243.61	4,164.6	-224.7	-452.9	-224.7	0.00	0.00	
4,300.0	8.34	243.61	4,263.5	-231.2	-465.9	-231.2	0.00	0.00	
4,400.0	8.34	243.61	4,362.5	-237.6	-478.9	-237.6	0.00	0.00	
4,462.2	8.34	243.61	4,424.0	-241.7	-486.9	-241.7	0.00	0.00	Shannon
4,500.0	8.34	243.61	4,461.4	-244.1	-491.9	-244.1	0.00	0.00	
4,600.0	8.34	243.61	4,560.4	-250.5	-504.9	-250.5	0.00	0.00	
4,700.0	8.34	243.61	4,659.3	-257.0	-517.9	-257.0	0.00	0.00	

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Site:	S35-T3N-R67W (Kiyota)	**North Reference:**	True
Well:	Kiyota 4B-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
4,765.4	8.34	243.61	4,724.0	-261.2	-526.4	-261.2	0.00	0.00	Teepee Buttes (*if present)
4,800.0	8.34	243.61	4,758.3	-263.5	-530.9	-263.5	0.00	0.00	
4,900.0	8.34	243.61	4,857.2	-269.9	-543.9	-269.9	0.00	0.00	
5,000.0	8.34	243.61	4,956.1	-276.4	-556.9	-276.4	0.00	0.00	
5,100.0	8.34	243.61	5,055.1	-282.8	-569.9	-282.8	0.00	0.00	
5,200.0	8.34	243.61	5,154.0	-289.3	-582.9	-289.3	0.00	0.00	
5,300.0	8.34	243.61	5,253.0	-295.7	-595.9	-295.7	0.00	0.00	
5,400.0	8.34	243.61	5,351.9	-302.2	-608.9	-302.2	0.00	0.00	
5,500.0	8.34	243.61	5,450.8	-308.6	-621.9	-308.6	0.00	0.00	
5,600.0	8.34	243.61	5,549.8	-315.1	-634.9	-315.1	0.00	0.00	
5,700.0	8.34	243.61	5,648.7	-321.5	-647.9	-321.5	0.00	0.00	
5,800.0	8.34	243.61	5,747.7	-328.0	-660.9	-328.0	0.00	0.00	
5,900.0	8.34	243.61	5,846.6	-334.4	-673.9	-334.4	0.00	0.00	
6,000.0	8.34	243.61	5,945.6	-340.9	-686.9	-340.9	0.00	0.00	
6,100.0	8.34	243.61	6,044.5	-347.3	-699.9	-347.3	0.00	0.00	
6,200.0	8.34	243.61	6,143.4	-353.8	-712.9	-353.8	0.00	0.00	
6,300.0	8.34	243.61	6,242.4	-360.2	-725.9	-360.2	0.00	0.00	
6,400.0	8.34	243.61	6,341.3	-366.7	-738.9	-366.7	0.00	0.00	
6,500.0	8.34	243.61	6,440.3	-373.1	-751.9	-373.1	0.00	0.00	
6,600.0	8.34	243.61	6,539.2	-379.6	-764.9	-379.6	0.00	0.00	
6,655.5	8.34	243.61	6,594.1	-383.2	-772.1	-383.2	0.00	0.00	Start build/turn @ 6655' MD
6,700.0	7.49	268.94	6,638.2	-384.6	-777.9	-384.6	8.00	-1.93	
6,800.0	10.84	316.67	6,737.0	-377.9	-790.9	-377.9	8.00	3.35	
6,900.0	17.50	335.37	6,834.0	-357.4	-803.6	-357.4	8.00	6.66	
7,000.0	24.94	343.59	6,927.2	-323.4	-815.8	-323.4	8.00	7.44	
7,081.5	31.20	347.47	6,999.0	-286.3	-825.3	-286.3	8.00	7.68	Sharon Springs
7,100.0	32.64	348.16	7,014.8	-276.7	-827.3	-276.7	7.99	7.75	
7,189.5	39.62	350.87	7,087.0	-224.9	-836.8	-224.9	8.00	7.80	Niobrara
7,200.0	40.44	351.13	7,095.0	-218.2	-837.9	-218.2	7.99	7.82	
7,234.8	43.18	351.95	7,121.0	-195.2	-841.3	-195.2	8.00	7.85	B Chalk
7,281.5	46.85	352.92	7,154.0	-162.5	-845.6	-162.5	8.00	7.86	B Marl
7,300.0	48.30	353.28	7,166.5	-149.0	-847.3	-149.0	7.99	7.87	
7,326.9	50.42	353.77	7,184.0	-128.7	-849.6	-128.7	8.00	7.89	C Chalk
7,397.1	55.96	354.91	7,226.0	-72.8	-855.1	-72.8	8.00	7.89	C Marl
7,400.0	56.19	354.95	7,227.6	-70.4	-855.3	-70.4	7.96	7.86	
7,487.9	63.14	356.18	7,272.0	5.2	-861.1	5.2	8.00	7.91	D Chalk
7,500.0	64.10	356.34	7,277.4	16.0	-861.9	16.0	7.99	7.91	
7,600.0	72.02	357.56	7,314.7	108.6	-866.8	108.6	8.00	7.92	
7,614.3	73.16	357.72	7,319.0	122.2	-867.3	122.2	8.01	7.93	Fort Hayes
7,700.0	79.95	358.67	7,338.9	205.5	-869.9	205.5	8.00	7.93	
7,712.6	80.95	358.80	7,341.0	217.9	-870.2	217.9	8.01	7.94	Codell
7,800.0	87.88	359.72	7,349.5	304.8	-871.3	304.8	8.00	7.93	
7,826.7	90.00	0.00	7,350.0	331.5	-871.4	331.5	8.00	7.94	LP @ 7350' TVD; 90°
7,900.0	90.00	0.00	7,350.0	404.8	-871.4	404.8	0.00	0.00	
8,000.0	90.00	0.00	7,350.0	504.8	-871.4	504.8	0.00	0.00	
8,100.0	90.00	0.00	7,350.0	604.8	-871.4	604.8	0.00	0.00	
8,200.0	90.00	0.00	7,350.0	704.8	-871.4	704.8	0.00	0.00	
8,300.0	90.00	0.00	7,350.0	804.8	-871.4	804.8	0.00	0.00	
8,400.0	90.00	0.00	7,350.0	904.8	-871.4	904.8	0.00	0.00	
8,500.0	90.00	0.00	7,350.0	1,004.8	-871.4	1,004.8	0.00	0.00	
8,600.0	90.00	0.00	7,350.0	1,104.8	-871.4	1,104.8	0.00	0.00	
8,700.0	90.00	0.00	7,350.0	1,204.8	-871.4	1,204.8	0.00	0.00	

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Site:	S35-T3N-R67W (Kiyota)	**North Reference:**	True
Well:	Kiyota 4B-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
8,800.0	90.00	0.00	7,350.0	1,304.8	-871.4	1,304.8	0.00	0.00	
8,900.0	90.00	0.00	7,350.0	1,404.8	-871.4	1,404.8	0.00	0.00	
9,000.0	90.00	0.00	7,350.0	1,504.8	-871.4	1,504.8	0.00	0.00	
9,100.0	90.00	0.00	7,350.0	1,604.8	-871.4	1,604.8	0.00	0.00	
9,200.0	90.00	0.00	7,350.0	1,704.8	-871.4	1,704.8	0.00	0.00	
9,300.0	90.00	0.00	7,350.0	1,804.8	-871.4	1,804.8	0.00	0.00	
9,400.0	90.00	0.00	7,350.0	1,904.8	-871.4	1,904.8	0.00	0.00	
9,500.0	90.00	0.00	7,350.0	2,004.8	-871.4	2,004.8	0.00	0.00	
9,600.0	90.00	0.00	7,350.0	2,104.8	-871.4	2,104.8	0.00	0.00	
9,700.0	90.00	0.00	7,350.0	2,204.8	-871.4	2,204.8	0.00	0.00	
9,800.0	90.00	0.00	7,350.0	2,304.8	-871.4	2,304.8	0.00	0.00	
9,900.0	90.00	0.00	7,350.0	2,404.8	-871.4	2,404.8	0.00	0.00	
10,000.0	90.00	0.00	7,350.0	2,504.8	-871.4	2,504.8	0.00	0.00	
10,100.0	90.00	0.00	7,350.0	2,604.8	-871.4	2,604.8	0.00	0.00	
10,200.0	90.00	0.00	7,350.0	2,704.8	-871.4	2,704.8	0.00	0.00	
10,300.0	90.00	0.00	7,350.0	2,804.8	-871.4	2,804.8	0.00	0.00	
10,400.0	90.00	0.00	7,350.0	2,904.8	-871.4	2,904.8	0.00	0.00	
10,500.0	90.00	0.00	7,350.0	3,004.8	-871.4	3,004.8	0.00	0.00	
10,600.0	90.00	0.00	7,350.0	3,104.8	-871.4	3,104.8	0.00	0.00	
10,700.0	90.00	0.00	7,350.0	3,204.8	-871.4	3,204.8	0.00	0.00	
10,800.0	90.00	0.00	7,350.0	3,304.8	-871.4	3,304.8	0.00	0.00	
10,900.0	90.00	0.00	7,350.0	3,404.8	-871.4	3,404.8	0.00	0.00	
11,000.0	90.00	0.00	7,350.0	3,504.8	-871.4	3,504.8	0.00	0.00	
11,100.0	90.00	0.00	7,350.0	3,604.8	-871.4	3,604.8	0.00	0.00	
11,200.0	90.00	0.00	7,350.0	3,704.8	-871.4	3,704.8	0.00	0.00	
11,300.0	90.00	0.00	7,350.0	3,804.8	-871.4	3,804.8	0.00	0.00	
11,400.0	90.00	0.00	7,350.0	3,904.8	-871.4	3,904.8	0.00	0.00	
11,500.0	90.00	0.00	7,350.0	4,004.8	-871.4	4,004.8	0.00	0.00	
11,600.0	90.00	0.00	7,350.0	4,104.8	-871.4	4,104.8	0.00	0.00	
11,700.0	90.00	0.00	7,350.0	4,204.8	-871.4	4,204.8	0.00	0.00	
11,800.0	90.00	0.00	7,350.0	4,304.8	-871.4	4,304.8	0.00	0.00	
11,900.0	90.00	0.00	7,350.0	4,404.8	-871.4	4,404.8	0.00	0.00	
11,934.7	90.00	0.00	7,350.0	4,439.5	-871.4	4,439.5	0.00	0.00	TD at 11934.7 - Kiyota 4B-35H-O367 PBHL

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 4B-35H-O367 PB - plan hits target center - Point	0.00	0.00	7,350.0	4,439.5	-871.4	1,311,891.50	3,179,664.39	40.187743	-104.856940

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-35H-O367	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
248.0	248.0	Fox Hills - BASE			
4,169.1	4,134.0	Sussex			
4,462.2	4,424.0	Shannon			
4,765.4	4,724.0	Teepee Buttes (*if present)			
7,081.5	6,999.0	Sharon Springs			
7,189.5	7,087.0	Niobrara			
7,234.8	7,121.0	B Chalk			
7,281.5	7,154.0	B Marl			
7,326.9	7,184.0	C Chalk			
7,397.1	7,226.0	C Marl			
7,487.9	7,272.0	D Chalk			
7,614.3	7,319.0	Fort Hayes			
7,712.6	7,341.0	Codell			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
300.0	300.0	0.0	0.0	KOP @ 300'
1,134.5	1,131.5	-27.0	-54.3	EOB; Inc=8.34°
6,655.5	6,594.1	-383.2	-772.1	Start build/turn @ 6655' MD
7,826.7	7,350.0	331.5	-871.4	LP @ 7350' TVD; 90°
11,934.7	7,350.0	4,439.5	-871.4	TD at 11934.7

EnCana Oil & Gas (USA) Inc

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

Anticollision Report

19 May, 2014

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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** 5/19/2014

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	11,934.7	Plan #1 (Hz)	Geolink MWD	Geolink MWD

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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						Out of range
KAWAKAMI 31-35 (EXISTING) - ENCANA WELL - SURV	11,934.7	7,318.5	261.2	167.8	2.797	CC, ES, SF
KAWAKAMI 32-35 (EXISTING) - ENCANA WELL - NO S	10,386.9	7,314.0	170.9	104.2	2.561	CC, ES
KAWAKAMI 32-35 (EXISTING) - ENCANA WELL - NO S	10,400.0	7,314.0	171.4	104.5	2.560	SF
KAWAKAMI 4-0-35 (EXISTING) - ENCANA WELL - SUR	11,934.7	7,398.3	498.5	403.4	5.242	CC, ES, SF
KAWAKAMI 41-35 (EXISTING) - ENCANA WELL - NO S						Out of range
KAWAKAMI 42-35 (EXISTING) - ENCANA WELL - NO S						Out of range
KAWAKAMI 4-2-35 (EXISTING) - ENCANA WELL - SUR	11,071.1	7,414.2	203.1	118.3	2.395	CC, ES, SF
KAWAKAMI 6-0-35 (EXISTING) - ENCANA WELL - SUR						Out of range
KIYOTA 33-35 (EXISTING) - ENCANA WELL - NO SURV	9,233.5	7,337.0	192.1	144.6	4.046	CC, ES, SF
KIYOTA 3-35 (EXISTING) - ENCANA WELL - NO SURVE	8,719.9	7,326.0	740.9	701.6	18.841	CC, ES
KIYOTA 3-35 (EXISTING) - ENCANA WELL - NO SURVE	8,900.0	7,326.0	762.5	720.4	18.102	SF
KIYOTA 34-35 (EXISTING) - ENCANA WELL - NO SURV	2,914.9	2,879.1	399.9	387.2	31.549	CC
KIYOTA 34-35 (EXISTING) - ENCANA WELL - NO SURV	7,701.6	7,325.2	406.5	379.6	15.134	ES, SF
KIYOTA 43-35 (EXISTING) - ENCANA WELL - NO SURV	9,281.6	7,329.0	558.7	510.5	11.577	CC, ES
KIYOTA 43-35 (EXISTING) - ENCANA WELL - NO SURV	9,400.0	7,329.0	571.1	520.9	11.377	SF
KIYOTA 44-35 (EXISTING) - ENCANA WELL - NO SURV	300.0	275.0	695.9	694.9	709.290	CC, ES
KIYOTA 44-35 (EXISTING) - ENCANA WELL - NO SURV	2,800.0	2,754.4	992.5	982.7	102.049	SF
KIYOTA 4-6-35 (EXISTING) - ENCANA WELL - Plan #2	8,396.4	7,464.4	198.5	156.5	4.722	CC
KIYOTA 4-6-35 (EXISTING) - ENCANA WELL - Plan #2	8,400.0	7,464.4	198.5	156.4	4.718	ES, SF
KIYOTA 4-6-35 (EXISTING) - ENCANA WELL - SURVEY	8,374.6	7,473.8	177.8	135.8	4.240	CC, ES, SF
Kiyota 4A-35H-O367 - Hz - Plan #1	166.7	166.7	7.5	7.0	14.065	CC
Kiyota 4A-35H-O367 - Hz - Plan #1	200.0	200.0	7.5	6.9	11.558	ES
Kiyota 4A-35H-O367 - Hz - Plan #1	11,934.7	11,813.1	270.6	134.7	1.991	SF
Kiyota 4C-35H-O367 - Hz - Plan #1	300.0	300.0	7.5	6.5	7.531	CC, ES
Kiyota 4C-35H-O367 - Hz - Plan #1	11,824.5	11,575.3	318.0	201.9	2.739	SF
Kiyota 4D-35H-O367 - Hz - Plan #1	300.0	300.0	15.1	14.1	15.061	CC, ES
Kiyota 4D-35H-O367 - Hz - Plan #1	11,934.7	11,741.0	475.1	322.0	3.103	SF
Kiyota 4E-35H-O367 - Hz - Plan #1	300.0	300.0	22.6	21.6	22.592	CC, ES
Kiyota 4E-35H-O367 - Hz - Plan #1	11,934.7	11,875.1	675.9	515.2	4.205	SF
Kiyota 4F-35H-O367 - Hz - Plan #1	300.0	300.0	30.2	29.2	30.123	CC, ES
Kiyota 4F-35H-O367 - Hz - Plan #1	11,934.7	11,664.3	927.7	771.3	5.933	SF
Kiyota 4G-35H-O367 - Hz - Plan #1	300.0	300.0	37.4	36.4	37.375	CC, ES
Kiyota 4G-35H-O367 - Hz - Plan #1	700.0	699.7	50.3	47.9	20.978	SF
Kiyota 4H-35H-O367 - Hz - Plan #1	300.0	300.0	45.0	44.0	44.907	CC, ES
Kiyota 4H-35H-O367 - Hz - Plan #1	700.0	699.1	58.3	55.9	24.305	SF
Kiyota 4I-35H-O367 - Hz - Plan #1	300.0	300.0	52.5	51.5	52.437	CC, ES
Kiyota 4I-35H-O367 - Hz - Plan #1	700.0	697.9	68.0	65.6	28.345	SF
Kiyota 4J-35H-O367 - Hz - Plan #1	300.0	300.0	60.1	59.1	59.968	CC, ES
Kiyota 4J-35H-O367 - Hz - Plan #1	700.0	696.3	79.3	76.9	33.072	SF
Kiyota 4K-35H-O367 - Hz - Plan #1	266.7	266.7	67.6	66.7	76.369	CC
Kiyota 4K-35H-O367 - Hz - Plan #1	300.0	300.0	67.6	66.6	67.500	ES
Kiyota 4K-35H-O367 - Hz - Plan #1	700.0	694.2	92.7	90.3	38.654	SF
Kiyota 4L-35H-O367 - Hz - Plan #1	166.7	166.7	75.2	74.6	140.130	CC
Kiyota 4L-35H-O367 - Hz - Plan #1	200.0	200.0	75.2	74.5	115.153	ES
Kiyota 4L-35H-O367 - Hz - Plan #1	800.0	788.5	123.6	120.8	44.903	SF
KIYOTA 6-8-35 (EXISTING) - ENCANA WELL - SURVEY	2,683.8	2,710.7	129.1	116.0	9.860	CC, ES
KIYOTA 6-8-35 (EXISTING) - ENCANA WELL - SURVEY	2,700.0	2,725.9	129.3	116.1	9.817	SF
KIYOTA C-35-320-E (EXISTING) - ENCANA WELL - NO	9,540.3	7,318.0	876.7	824.2	16.699	CC, ES
KIYOTA C-35-320-E (EXISTING) - ENCANA WELL - NO	9,800.0	7,318.0	914.4	857.5	16.088	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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 31-35 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 100-Geolink MWD

Offset Well Error: 0.0 ft

Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
11,000.0	7,350.0	7,321.1	7,319.8	66.3	12.9	90.84	4,445.8	-610.3	976.6	899.3	77.26	12.641	
11,100.0	7,350.0	7,320.8	7,319.6	67.9	12.9	90.78	4,445.8	-610.3	880.6	801.7	78.98	11.150	
11,200.0	7,350.0	7,320.5	7,319.3	69.6	12.9	90.73	4,445.8	-610.3	785.7	705.0	80.70	9.736	
11,300.0	7,350.0	7,320.3	7,319.0	71.3	12.9	90.67	4,445.8	-610.3	692.2	609.8	82.42	8.398	
11,400.0	7,350.0	7,320.0	7,318.8	73.0	12.9	90.61	4,445.9	-610.3	600.8	516.6	84.15	7.139	
11,500.0	7,350.0	7,319.7	7,318.5	74.7	12.9	90.55	4,445.9	-610.3	512.5	426.7	85.87	5.969	
11,600.0	7,350.0	7,319.4	7,318.2	76.4	12.9	90.48	4,445.9	-610.3	429.5	341.9	87.60	4.903	
11,700.0	7,350.0	7,319.2	7,317.9	78.1	12.9	90.42	4,445.9	-610.3	355.4	266.0	89.33	3.978	
11,800.0	7,350.0	7,318.9	7,317.6	79.8	12.9	90.36	4,445.9	-610.3	296.8	205.7	91.06	3.259	
11,900.0	7,350.0	7,318.6	7,317.3	81.5	12.9	90.29	4,445.9	-610.3	264.3	171.5	92.79	2.849	
11,934.7	7,350.0	7,318.5	7,317.2	82.1	12.9	90.27	4,445.9	-610.3	261.2	167.8	93.39	2.797	CC, ES, SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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 32-35 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 7900-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,500.0	7,350.0	7,314.0	7,314.0	42.0	12.8	90.00	2,891.7	-700.5	903.2	851.4	51.83	17.427	
9,600.0	7,350.0	7,314.0	7,314.0	43.5	12.8	90.00	2,891.7	-700.5	805.2	751.7	53.49	15.055	
9,700.0	7,350.0	7,314.0	7,314.0	45.1	12.8	90.00	2,891.7	-700.5	707.8	652.7	55.15	12.834	
9,800.0	7,350.0	7,314.0	7,314.0	46.7	12.8	90.00	2,891.7	-700.5	611.3	554.4	56.83	10.757	
9,900.0	7,350.0	7,314.0	7,314.0	48.2	12.8	90.00	2,891.7	-700.5	516.0	457.5	58.51	8.820	
10,000.0	7,350.0	7,314.0	7,314.0	49.8	12.8	90.00	2,891.7	-700.5	423.0	362.8	60.19	7.027	
10,100.0	7,350.0	7,314.0	7,314.0	51.5	12.8	90.00	2,891.7	-700.5	333.9	272.1	61.88	5.396	
10,200.0	7,350.0	7,314.0	7,314.0	53.1	12.8	90.00	2,891.7	-700.5	253.3	189.7	63.58	3.984	
10,300.0	7,350.0	7,314.0	7,314.0	54.7	12.8	90.00	2,891.7	-700.5	191.7	126.5	65.27	2.938	
10,386.9	7,350.0	7,314.0	7,314.0	56.1	12.8	90.00	2,891.7	-700.5	170.9	104.2	66.75	2.561	CC, ES
10,400.0	7,350.0	7,314.0	7,314.0	56.3	12.8	90.00	2,891.7	-700.5	171.4	104.5	66.98	2.560	SF
10,500.0	7,350.0	7,314.0	7,314.0	58.0	12.8	90.00	2,891.7	-700.5	205.0	136.3	68.68	2.984	
10,600.0	7,350.0	7,314.0	7,314.0	59.6	12.8	90.00	2,891.7	-700.5	273.2	202.8	70.39	3.881	
10,700.0	7,350.0	7,314.0	7,314.0	61.3	12.8	90.00	2,891.7	-700.5	356.7	284.6	72.10	4.948	
10,800.0	7,350.0	7,314.0	7,314.0	62.9	12.8	90.00	2,891.7	-700.5	447.1	373.3	73.81	6.057	
10,900.0	7,350.0	7,314.0	7,314.0	64.6	12.8	90.00	2,891.7	-700.5	540.8	465.3	75.53	7.161	
11,000.0	7,350.0	7,314.0	7,314.0	66.3	12.8	90.00	2,891.7	-700.5	636.5	559.3	77.25	8.240	
11,100.0	7,350.0	7,314.0	7,314.0	67.9	12.8	90.00	2,891.7	-700.5	733.3	654.4	78.97	9.287	
11,200.0	7,350.0	7,314.0	7,314.0	69.6	12.8	90.00	2,891.7	-700.5	830.9	750.2	80.69	10.298	
11,300.0	7,350.0	7,314.0	7,314.0	71.3	12.8	90.00	2,891.7	-700.5	929.0	846.6	82.41	11.273	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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 4-0-35 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 109-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
11,400.0	7,350.0	7,398.5	7,330.0	73.0	18.1	-89.72	4,857.9	-1,142.5	990.9	905.0	85.85	11.541	
11,500.0	7,350.0	7,398.5	7,329.9	74.7	18.1	-89.70	4,857.9	-1,142.5	895.1	807.5	87.58	10.220	
11,600.0	7,350.0	7,398.4	7,329.8	76.4	18.1	-89.69	4,857.9	-1,142.5	800.4	711.1	89.31	8.962	
11,700.0	7,350.0	7,398.4	7,329.8	78.1	18.1	-89.68	4,857.9	-1,142.5	707.1	616.1	91.04	7.767	
11,800.0	7,350.0	7,398.3	7,329.7	79.8	18.1	-89.67	4,857.9	-1,142.5	615.9	523.2	92.76	6.640	
11,900.0	7,350.0	7,398.3	7,329.7	81.5	18.1	-89.66	4,857.9	-1,142.5	528.0	433.5	94.50	5.587	
11,934.7	7,350.0	7,398.3	7,329.7	82.1	18.1	-89.65	4,857.9	-1,142.5	498.5	403.4	95.10	5.242	CC, ES, SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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 4-2-35 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 868-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
10,100.0	7,350.0	7,416.3	7,332.2	51.5	21.3	-90.21	3,575.9	-1,074.5	992.1	923.9	68.22	14.543	
10,200.0	7,350.0	7,416.1	7,331.9	53.1	21.3	-90.15	3,575.9	-1,074.5	894.5	824.6	69.91	12.794	
10,300.0	7,350.0	7,415.9	7,331.7	54.7	21.3	-90.09	3,575.9	-1,074.5	797.4	725.8	71.61	11.135	
10,400.0	7,350.0	7,415.7	7,331.5	56.3	21.3	-90.03	3,575.9	-1,074.5	701.2	627.9	73.32	9.564	
10,500.0	7,350.0	7,415.5	7,331.3	58.0	21.3	-89.97	3,575.9	-1,074.5	606.2	531.2	75.02	8.080	
10,600.0	7,350.0	7,415.3	7,331.1	59.6	21.3	-89.91	3,575.9	-1,074.5	513.1	436.3	76.73	6.687	
10,700.0	7,350.0	7,415.1	7,330.9	61.3	21.3	-89.85	3,575.9	-1,074.5	423.1	344.6	78.44	5.394	
10,800.0	7,350.0	7,414.8	7,330.7	62.9	21.3	-89.79	3,575.9	-1,074.5	338.8	258.6	80.15	4.227	
10,900.0	7,350.0	7,414.6	7,330.4	64.6	21.3	-89.73	3,575.9	-1,074.5	265.6	183.7	81.87	3.244	
11,000.0	7,350.0	7,414.4	7,330.2	66.3	21.3	-89.67	3,575.9	-1,074.5	215.2	131.6	83.59	2.575	
11,071.1	7,350.0	7,414.2	7,330.1	67.5	21.3	-89.62	3,575.9	-1,074.5	203.1	118.3	84.81	2.395	CC, ES, SF
11,100.0	7,350.0	7,414.2	7,330.0	67.9	21.3	-89.61	3,575.9	-1,074.5	205.2	119.9	85.31	2.405	
11,200.0	7,350.0	7,414.0	7,329.8	69.6	21.3	-89.55	3,575.9	-1,074.5	240.6	153.5	87.03	2.764	
11,300.0	7,350.0	7,413.7	7,329.6	71.3	21.3	-89.48	3,575.9	-1,074.5	306.0	217.3	88.75	3.448	
11,400.0	7,350.0	7,413.5	7,329.3	73.0	21.3	-89.42	3,575.9	-1,074.5	386.5	296.1	90.47	4.272	
11,500.0	7,350.0	7,413.3	7,329.1	74.7	21.3	-89.36	3,575.9	-1,074.5	474.5	382.3	92.20	5.147	
11,600.0	7,350.0	7,413.1	7,328.9	76.4	21.3	-89.29	3,575.9	-1,074.5	566.5	472.6	93.93	6.032	
11,700.0	7,350.0	7,412.9	7,328.7	78.1	21.3	-89.23	3,576.0	-1,074.5	660.9	565.2	95.65	6.909	
11,800.0	7,350.0	7,412.6	7,328.4	79.8	21.3	-89.17	3,576.0	-1,074.5	756.6	659.3	97.38	7.770	
11,900.0	7,350.0	7,412.4	7,328.2	81.5	21.3	-89.10	3,576.0	-1,074.5	853.4	754.3	99.11	8.611	
11,934.7	7,350.0	7,412.3	7,328.1	82.1	21.3	-89.08	3,576.0	-1,074.5	887.2	787.5	99.71	8.897	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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 33-35 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 7961-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
8,300.0	7,350.0	7,337.0	7,337.0	25.6	12.8	90.00	1,738.4	-679.3	953.1	919.9	33.22	28.687	
8,400.0	7,350.0	7,337.0	7,337.0	26.7	12.8	90.00	1,738.4	-679.3	855.4	820.8	34.61	24.715	
8,500.0	7,350.0	7,337.0	7,337.0	27.9	12.8	90.00	1,738.4	-679.3	758.3	722.3	36.05	21.036	
8,600.0	7,350.0	7,337.0	7,337.0	29.1	12.8	90.00	1,738.4	-679.3	662.0	624.5	37.53	17.643	
8,700.0	7,350.0	7,337.0	7,337.0	30.4	12.8	90.00	1,738.4	-679.3	567.1	528.1	39.04	14.527	
8,800.0	7,350.0	7,337.0	7,337.0	31.7	12.8	90.00	1,738.4	-679.3	474.2	433.6	40.58	11.687	
8,900.0	7,350.0	7,337.0	7,337.0	33.1	12.8	90.00	1,738.4	-679.3	384.9	342.8	42.14	9.134	
9,000.0	7,350.0	7,337.0	7,337.0	34.5	12.8	90.00	1,738.4	-679.3	302.4	258.7	43.73	6.917	
9,100.0	7,350.0	7,337.0	7,337.0	36.0	12.8	90.00	1,738.4	-679.3	234.0	188.7	45.33	5.162	
9,200.0	7,350.0	7,337.0	7,337.0	37.4	12.8	90.00	1,738.4	-679.3	195.0	148.1	46.94	4.155	
9,233.5	7,350.0	7,337.0	7,337.0	37.9	12.8	90.00	1,738.4	-679.3	192.1	144.6	47.49	4.046	CC, ES, SF
9,300.0	7,350.0	7,337.0	7,337.0	38.9	12.8	90.00	1,738.4	-679.3	203.3	154.7	48.57	4.185	
9,400.0	7,350.0	7,337.0	7,337.0	40.4	12.8	90.00	1,738.4	-679.3	254.2	204.0	50.22	5.062	
9,500.0	7,350.0	7,337.0	7,337.0	42.0	12.8	90.00	1,738.4	-679.3	328.5	276.6	51.87	6.334	
9,600.0	7,350.0	7,337.0	7,337.0	43.5	12.8	90.00	1,738.4	-679.3	413.8	360.2	53.53	7.730	
9,700.0	7,350.0	7,337.0	7,337.0	45.1	12.8	90.00	1,738.4	-679.3	504.5	449.3	55.19	9.140	
9,800.0	7,350.0	7,337.0	7,337.0	46.7	12.8	90.00	1,738.4	-679.3	598.1	541.3	56.87	10.518	
9,900.0	7,350.0	7,337.0	7,337.0	48.2	12.8	90.00	1,738.4	-679.3	693.6	635.0	58.55	11.847	
10,000.0	7,350.0	7,337.0	7,337.0	49.8	12.8	90.00	1,738.4	-679.3	790.2	729.9	60.23	13.119	
10,100.0	7,350.0	7,337.0	7,337.0	51.5	12.8	90.00	1,738.4	-679.3	887.5	825.6	61.92	14.332	
10,200.0	7,350.0	7,337.0	7,337.0	53.1	12.8	90.00	1,738.4	-679.3	985.4	921.7	63.62	15.489	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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	7,350.0	7,326.0	7,326.0	23.6	12.8	90.00	1,224.7	-130.5	966.0	935.4	30.63	31.542	
8,200.0	7,350.0	7,326.0	7,326.0	24.5	12.8	90.00	1,224.7	-130.5	905.1	873.2	31.88	28.392	
8,300.0	7,350.0	7,326.0	7,326.0	25.6	12.8	90.00	1,224.7	-130.5	851.6	818.4	33.21	25.647	
8,400.0	7,350.0	7,326.0	7,326.0	26.7	12.8	90.00	1,224.7	-130.5	807.0	772.4	34.59	23.329	
8,500.0	7,350.0	7,326.0	7,326.0	27.9	12.8	90.00	1,224.7	-130.5	772.9	736.8	36.03	21.451	
8,600.0	7,350.0	7,326.0	7,326.0	29.1	12.8	90.00	1,224.7	-130.5	750.5	713.0	37.51	20.011	
8,700.0	7,350.0	7,326.0	7,326.0	30.4	12.8	90.00	1,224.7	-130.5	741.2	702.2	39.02	18.996	
8,719.9	7,350.0	7,326.0	7,326.0	30.7	12.8	90.00	1,224.7	-130.5	740.9	701.6	39.32	18.841	CC, ES
8,800.0	7,350.0	7,326.0	7,326.0	31.7	12.8	90.00	1,224.7	-130.5	745.2	704.7	40.56	18.374	
8,900.0	7,350.0	7,326.0	7,326.0	33.1	12.8	90.00	1,224.7	-130.5	762.5	720.4	42.12	18.102	SF
9,000.0	7,350.0	7,326.0	7,326.0	34.5	12.8	90.00	1,224.7	-130.5	792.1	748.4	43.71	18.123	
9,100.0	7,350.0	7,326.0	7,326.0	36.0	12.8	90.00	1,224.7	-130.5	832.7	787.4	45.31	18.379	
9,200.0	7,350.0	7,326.0	7,326.0	37.4	12.8	90.00	1,224.7	-130.5	882.9	835.9	46.93	18.814	
9,300.0	7,350.0	7,326.0	7,326.0	38.9	12.8	90.00	1,224.7	-130.5	941.0	892.4	48.56	19.380	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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	-64.98	216.4	-463.6	511.8				
100.0	100.0	86.0	86.0	0.2	0.2	-64.98	216.4	-463.6	511.6	511.3	0.30	1,693.138	
200.0	200.0	186.0	186.0	0.3	0.3	-64.98	216.4	-463.6	511.6	510.9	0.65	785.592	
300.0	300.0	286.0	286.0	0.5	0.5	-64.98	216.4	-463.6	511.6	510.6	1.00	511.448	
400.0	400.0	386.0	386.0	0.7	0.7	51.50	216.4	-463.6	511.0	509.7	1.35	378.637	
500.0	500.0	486.0	486.0	0.9	0.8	51.74	216.4	-463.6	509.4	507.7	1.70	299.460	
600.0	599.9	585.9	585.9	1.0	1.0	52.15	216.4	-463.6	506.7	504.7	2.06	246.370	
700.0	699.7	685.7	685.7	1.2	1.2	52.73	216.4	-463.6	503.0	500.6	2.42	207.924	
800.0	799.4	785.4	785.4	1.4	1.4	53.48	216.4	-463.6	498.3	495.5	2.79	178.532	
900.0	898.9	884.9	884.9	1.7	1.5	54.42	216.4	-463.6	492.6	489.5	3.18	155.141	
1,000.0	998.3	984.3	984.3	1.9	1.7	55.55	216.4	-463.6	486.1	482.5	3.58	135.956	
1,100.0	1,097.4	1,083.4	1,083.4	2.2	1.9	56.90	216.4	-463.6	478.8	474.8	3.99	119.854	
1,200.0	1,196.4	1,182.4	1,182.4	2.5	2.1	58.38	216.4	-463.6	471.0	466.6	4.43	106.336	
1,300.0	1,295.3	1,281.3	1,281.3	2.8	2.2	59.89	216.4	-463.6	463.5	458.7	4.87	95.094	
1,400.0	1,394.2	1,380.2	1,380.2	3.1	2.4	61.46	216.4	-463.6	456.4	451.0	5.33	85.660	
1,500.0	1,493.2	1,479.2	1,479.2	3.4	2.6	63.07	216.4	-463.6	449.6	443.8	5.79	77.665	
1,600.0	1,592.1	1,578.1	1,578.1	3.6	2.8	64.73	216.4	-463.6	443.1	436.9	6.26	70.831	
1,700.0	1,691.1	1,677.1	1,677.1	3.9	2.9	66.43	216.4	-463.6	437.1	430.3	6.73	64.945	
1,800.0	1,790.0	1,776.0	1,776.0	4.2	3.1	68.18	216.4	-463.6	431.4	424.2	7.21	59.845	
1,900.0	1,888.9	1,874.9	1,874.9	4.6	3.3	69.98	216.4	-463.6	426.2	418.5	7.69	55.401	
2,000.0	1,987.9	1,973.9	1,973.9	4.9	3.4	71.81	216.4	-463.6	421.4	413.2	8.18	51.511	
2,100.0	2,086.8	2,072.8	2,072.8	5.2	3.6	73.69	216.4	-463.6	417.0	408.4	8.67	48.093	
2,200.0	2,185.8	2,171.8	2,171.8	5.5	3.8	75.60	216.4	-463.6	413.2	404.0	9.16	45.081	
2,300.0	2,284.7	2,270.7	2,270.7	5.8	4.0	77.55	216.4	-463.6	409.7	400.1	9.66	42.419	
2,400.0	2,383.7	2,369.7	2,369.7	6.1	4.1	79.52	216.4	-463.6	406.8	396.7	10.15	40.064	
2,500.0	2,482.6	2,468.6	2,468.6	6.4	4.3	81.53	216.4	-463.6	404.4	393.8	10.65	37.975	
2,600.0	2,581.5	2,567.5	2,567.5	6.7	4.5	83.55	216.4	-463.6	402.5	391.4	11.14	36.123	
2,700.0	2,680.5	2,666.5	2,666.5	7.0	4.7	85.59	216.4	-463.6	401.1	389.5	11.63	34.480	
2,800.0	2,779.4	2,765.4	2,765.4	7.3	4.8	87.64	216.4	-463.6	400.3	388.1	12.12	33.022	
2,900.0	2,878.4	2,864.4	2,864.4	7.6	5.0	89.69	216.4	-463.6	399.9	387.3	12.60	31.729	
2,914.9	2,893.1	2,879.1	2,879.1	7.7	5.0	90.00	216.4	-463.6	399.9	387.2	12.68	31.549	CC
3,000.0	2,977.3	2,963.3	2,963.3	7.9	5.2	91.75	216.4	-463.6	400.1	387.0	13.08	30.585	
3,100.0	3,076.2	3,062.2	3,062.2	8.2	5.3	93.80	216.4	-463.6	400.8	387.3	13.55	29.573	
3,200.0	3,175.2	3,161.2	3,161.2	8.5	5.5	95.84	216.4	-463.6	402.0	388.0	14.02	28.681	
3,300.0	3,274.1	3,260.1	3,260.1	8.8	5.7	97.87	216.4	-463.6	403.8	389.3	14.48	27.896	
3,400.0	3,373.1	3,359.1	3,359.1	9.1	5.9	99.88	216.4	-463.6	406.1	391.1	14.92	27.207	
3,500.0	3,472.0	3,458.0	3,458.0	9.4	6.0	101.86	216.4	-463.6	408.8	393.5	15.37	26.607	
3,600.0	3,570.9	3,556.9	3,556.9	9.8	6.2	103.82	216.4	-463.6	412.1	396.3	15.80	26.085	
3,700.0	3,669.9	3,655.9	3,655.9	10.1	6.4	105.74	216.4	-463.6	415.8	399.6	16.22	25.634	
3,800.0	3,768.8	3,754.8	3,754.8	10.4	6.6	107.63	216.4	-463.6	420.0	403.4	16.64	25.248	
3,900.0	3,867.8	3,853.8	3,853.8	10.7	6.7	109.48	216.4	-463.6	424.7	407.7	17.04	24.920	
4,000.0	3,966.7	3,952.7	3,952.7	11.0	6.9	111.29	216.4	-463.6	429.8	412.4	17.44	24.644	
4,100.0	4,065.7	4,051.7	4,051.7	11.3	7.1	113.05	216.4	-463.6	435.3	417.5	17.83	24.416	
4,200.0	4,164.6	4,150.6	4,150.6	11.6	7.2	114.77	216.4	-463.6	441.3	423.1	18.21	24.231	
4,300.0	4,263.5	4,249.5	4,249.5	11.9	7.4	116.44	216.4	-463.6	447.6	429.0	18.58	24.084	
4,400.0	4,362.5	4,348.5	4,348.5	12.2	7.6	118.07	216.4	-463.6	454.3	435.3	18.95	23.972	
4,500.0	4,461.4	4,447.4	4,447.4	12.5	7.8	119.65	216.4	-463.6	461.4	442.0	19.31	23.892	
4,600.0	4,560.4	4,546.4	4,546.4	12.8	7.9	121.18	216.4	-463.6	468.8	449.1	19.66	23.839	
4,700.0	4,659.3	4,645.3	4,645.3	13.1	8.1	122.66	216.4	-463.6	476.5	456.5	20.01	23.811	
4,800.0	4,758.2	4,744.2	4,744.2	13.5	8.3	124.09	216.4	-463.6	484.5	464.2	20.35	23.806	
4,900.0	4,857.2	4,843.2	4,843.2	13.8	8.5	125.48	216.4	-463.6	492.9	472.2	20.69	23.821	
5,000.0	4,956.1	4,942.1	4,942.1	14.1	8.6	126.82	216.4	-463.6	501.5	480.5	21.02	23.854	

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 4B-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 4B-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
5,100.0	5,055.1	5,041.1	5,041.1	14.4	8.8	128.12	216.4	-463.6	510.4	489.0	21.35	23.903	
5,200.0	5,154.0	5,140.0	5,140.0	14.7	9.0	129.37	216.4	-463.6	519.5	497.9	21.68	23.967	
5,300.0	5,253.0	5,239.0	5,239.0	15.0	9.1	130.58	216.4	-463.6	528.9	506.9	22.00	24.042	
5,400.0	5,351.9	5,337.9	5,337.9	15.3	9.3	131.74	216.4	-463.6	538.5	516.2	22.32	24.129	
5,500.0	5,450.8	5,436.8	5,436.8	15.6	9.5	132.87	216.4	-463.6	548.3	525.7	22.64	24.225	
5,600.0	5,549.8	5,535.8	5,535.8	15.9	9.7	133.95	216.4	-463.6	558.4	535.4	22.95	24.330	
5,700.0	5,648.7	5,634.7	5,634.7	16.2	9.8	135.00	216.4	-463.6	568.6	545.3	23.26	24.443	
5,800.0	5,747.7	5,733.7	5,733.7	16.5	10.0	136.01	216.4	-463.6	579.0	555.4	23.57	24.562	
5,900.0	5,846.6	5,832.6	5,832.6	16.9	10.2	136.99	216.4	-463.6	589.6	565.7	23.88	24.686	
6,000.0	5,945.5	5,931.5	5,931.5	17.2	10.4	137.93	216.4	-463.6	600.3	576.1	24.19	24.815	
6,100.0	6,044.5	6,030.5	6,030.5	17.5	10.5	138.83	216.4	-463.6	611.2	586.7	24.50	24.948	
6,200.0	6,143.4	6,129.4	6,129.4	17.8	10.7	139.71	216.4	-463.6	622.3	597.5	24.81	25.085	
6,300.0	6,242.4	6,228.4	6,228.4	18.1	10.9	140.55	216.4	-463.6	633.5	608.4	25.11	25.224	
6,400.0	6,341.3	6,327.3	6,327.3	18.4	11.0	141.37	216.4	-463.6	644.8	619.4	25.42	25.366	
6,500.0	6,440.2	6,426.2	6,426.2	18.7	11.2	142.16	216.4	-463.6	656.2	630.5	25.73	25.509	
6,600.0	6,539.2	6,525.2	6,525.2	19.0	11.4	142.92	216.4	-463.6	667.8	641.8	26.03	25.654	
6,700.0	6,638.2	6,624.2	6,624.2	19.3	11.6	118.46	216.4	-463.6	678.3	651.9	26.38	25.709	
6,800.0	6,737.0	6,723.0	6,723.0	19.5	11.7	72.47	216.4	-463.6	678.5	652.0	26.50	25.606	
6,900.0	6,834.0	6,820.0	6,820.0	19.6	11.9	56.54	216.4	-463.6	667.0	640.7	26.24	25.418	
7,000.0	6,927.2	6,913.2	6,913.2	19.7	12.1	52.28	216.4	-463.6	644.6	618.9	25.71	25.073	
7,100.0	7,014.7	7,000.7	7,000.7	19.7	12.2	53.07	216.4	-463.6	612.8	587.7	25.08	24.433	
7,200.0	7,095.0	7,081.0	7,081.0	19.8	12.4	57.07	216.4	-463.6	573.6	549.0	24.61	23.304	
7,300.0	7,166.5	7,152.5	7,152.5	19.8	12.5	63.48	216.4	-463.6	529.8	505.3	24.56	21.572	
7,400.0	7,227.6	7,213.6	7,213.6	19.9	12.6	71.41	216.4	-463.6	485.5	460.5	24.97	19.439	
7,500.0	7,277.4	7,263.4	7,263.4	20.1	12.7	79.47	216.4	-463.6	445.8	420.2	25.62	17.404	
7,600.0	7,314.7	7,300.7	7,300.7	20.4	12.7	86.08	216.4	-463.6	417.3	391.1	26.24	15.905	
7,700.0	7,338.9	7,324.9	7,324.9	20.8	12.8	89.96	216.4	-463.6	406.5	379.7	26.85	15.140	
7,701.6	7,339.2	7,325.2	7,325.2	20.8	12.8	90.00	216.4	-463.6	406.5	379.6	26.86	15.134	ES, SF
7,800.0	7,349.5	7,335.5	7,335.5	21.3	12.8	90.47	216.4	-463.6	417.2	389.7	27.55	15.145	
7,900.0	7,350.0	7,336.0	7,336.0	21.9	12.8	90.00	216.4	-463.6	449.2	420.8	28.43	15.801	
8,000.0	7,350.0	7,336.0	7,336.0	22.7	12.8	90.00	216.4	-463.6	499.5	470.0	29.48	16.942	
8,100.0	7,350.0	7,336.0	7,336.0	23.6	12.8	90.00	216.4	-463.6	563.2	532.6	30.64	18.378	
8,200.0	7,350.0	7,336.0	7,336.0	24.5	12.8	90.00	216.4	-463.6	636.3	604.4	31.90	19.949	
8,300.0	7,350.0	7,336.0	7,336.0	25.6	12.8	90.00	216.4	-463.6	715.9	682.7	33.22	21.549	
8,400.0	7,350.0	7,336.0	7,336.0	26.7	12.8	90.00	216.4	-463.6	800.2	765.5	34.61	23.119	
8,500.0	7,350.0	7,336.0	7,336.0	27.9	12.8	90.00	216.4	-463.6	887.7	851.6	36.05	24.625	
8,600.0	7,350.0	7,336.0	7,336.0	29.1	12.8	90.00	216.4	-463.6	977.6	940.0	37.52	26.052	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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 43-35 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 8275-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
8,500.0	7,350.0	7,329.0	7,329.0	27.9	12.8	90.00	1,786.4	-312.7	960.8	924.8	36.03	26.664	
8,600.0	7,350.0	7,329.0	7,329.0	29.1	12.8	90.00	1,786.4	-312.7	881.4	843.9	37.51	23.496	
8,700.0	7,350.0	7,329.0	7,329.0	30.4	12.8	90.00	1,786.4	-312.7	806.5	767.5	39.02	20.668	
8,800.0	7,350.0	7,329.0	7,329.0	31.7	12.8	90.00	1,786.4	-312.7	737.7	697.1	40.56	18.186	
8,900.0	7,350.0	7,329.0	7,329.0	33.1	12.8	90.00	1,786.4	-312.7	676.6	634.5	42.13	16.061	
9,000.0	7,350.0	7,329.0	7,329.0	34.5	12.8	90.00	1,786.4	-312.7	625.7	582.0	43.71	14.314	
9,100.0	7,350.0	7,329.0	7,329.0	36.0	12.8	90.00	1,786.4	-312.7	587.5	542.2	45.31	12.965	
9,200.0	7,350.0	7,329.0	7,329.0	37.4	12.8	90.00	1,786.4	-312.7	564.7	517.7	46.93	12.032	
9,281.6	7,350.0	7,329.0	7,329.0	38.6	12.8	90.00	1,786.4	-312.7	558.7	510.5	48.26	11.577	CC, ES
9,300.0	7,350.0	7,329.0	7,329.0	38.9	12.8	90.00	1,786.4	-312.7	559.0	510.5	48.56	11.512	
9,400.0	7,350.0	7,329.0	7,329.0	40.4	12.8	90.00	1,786.4	-312.7	571.1	520.9	50.20	11.377	SF
9,500.0	7,350.0	7,329.0	7,329.0	42.0	12.8	90.00	1,786.4	-312.7	599.9	548.0	51.85	11.569	
9,600.0	7,350.0	7,329.0	7,329.0	43.5	12.8	90.00	1,786.4	-312.7	643.1	589.6	53.51	12.017	
9,700.0	7,350.0	7,329.0	7,329.0	45.1	12.8	90.00	1,786.4	-312.7	698.0	642.8	55.18	12.650	
9,800.0	7,350.0	7,329.0	7,329.0	46.7	12.8	90.00	1,786.4	-312.7	762.2	705.3	56.85	13.406	
9,900.0	7,350.0	7,329.0	7,329.0	48.2	12.8	90.00	1,786.4	-312.7	833.4	774.9	58.53	14.238	
10,000.0	7,350.0	7,329.0	7,329.0	49.8	12.8	90.00	1,786.4	-312.7	910.1	849.9	60.22	15.113	
10,100.0	7,350.0	7,329.0	7,329.0	51.5	12.8	90.00	1,786.4	-312.7	990.9	929.0	61.91	16.006	

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 4B-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 4B-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	77.05	155.9	678.2	696.3				
100.0	100.0	75.0	75.0	0.2	0.1	77.05	155.9	678.2	695.9	695.6	0.28	2,459.279	
200.0	200.0	175.0	175.0	0.3	0.3	77.05	155.9	678.2	695.9	695.2	0.63	1,101.028	
300.0	300.0	275.0	275.0	0.5	0.5	77.05	155.9	678.2	695.9	694.9	0.98	709.290	CC, ES
400.0	400.0	375.0	375.0	0.7	0.7	-166.57	155.9	678.2	696.7	695.4	1.33	523.829	
500.0	500.0	475.0	475.0	0.9	0.8	-166.61	155.9	678.2	699.3	697.6	1.68	416.514	
600.0	599.9	574.9	574.9	1.0	1.0	-166.69	155.9	678.2	703.5	701.5	2.03	346.982	
700.0	699.7	674.7	674.7	1.2	1.2	-166.79	155.9	678.2	709.5	707.1	2.38	298.588	
800.0	799.4	774.4	774.4	1.4	1.4	-166.91	155.9	678.2	717.1	714.4	2.72	263.211	
900.0	898.9	873.9	873.9	1.7	1.5	-167.06	155.9	678.2	726.4	723.4	3.07	236.423	
1,000.0	998.3	973.3	973.3	1.9	1.7	-167.23	155.9	678.2	737.5	734.1	3.42	215.600	
1,100.0	1,097.4	1,072.4	1,072.4	2.2	1.9	-167.43	155.9	678.2	750.2	746.4	3.77	199.092	
1,200.0	1,196.4	1,171.4	1,171.4	2.5	2.0	-167.65	155.9	678.2	764.3	760.2	4.12	185.580	
1,300.0	1,295.3	1,270.3	1,270.3	2.8	2.2	-167.88	155.9	678.2	778.5	774.0	4.47	174.146	
1,400.0	1,394.2	1,369.2	1,369.2	3.1	2.4	-168.10	155.9	678.2	792.7	787.9	4.82	164.388	
1,500.0	1,493.2	1,468.2	1,468.2	3.4	2.6	-168.31	155.9	678.2	806.9	801.7	5.17	155.963	
1,600.0	1,592.1	1,567.1	1,567.1	3.6	2.7	-168.52	155.9	678.2	821.1	815.6	5.53	148.617	
1,700.0	1,691.1	1,666.1	1,666.1	3.9	2.9	-168.72	155.9	678.2	835.4	829.5	5.88	142.157	
1,800.0	1,790.0	1,765.0	1,765.0	4.2	3.1	-168.91	155.9	678.2	849.6	843.4	6.23	136.433	
1,900.0	1,888.9	1,863.9	1,863.9	4.6	3.3	-169.09	155.9	678.2	863.9	857.3	6.58	131.324	
2,000.0	1,987.9	1,962.9	1,962.9	4.9	3.4	-169.27	155.9	678.2	878.1	871.2	6.93	126.739	
2,100.0	2,086.8	2,061.8	2,061.8	5.2	3.6	-169.44	155.9	678.2	892.4	885.1	7.28	122.600	
2,200.0	2,185.8	2,160.8	2,160.8	5.5	3.8	-169.61	155.9	678.2	906.7	899.0	7.63	118.845	
2,300.0	2,284.7	2,259.7	2,259.7	5.8	3.9	-169.77	155.9	678.2	920.9	913.0	7.98	115.424	
2,400.0	2,383.7	2,358.7	2,358.7	6.1	4.1	-169.93	155.9	678.2	935.2	926.9	8.33	112.293	
2,500.0	2,482.6	2,457.6	2,457.6	6.4	4.3	-170.09	155.9	678.2	949.5	940.8	8.68	109.419	
2,600.0	2,581.5	2,556.5	2,556.5	6.7	4.5	-170.23	155.9	678.2	963.8	954.8	9.03	106.769	
2,700.0	2,680.5	2,655.5	2,655.5	7.0	4.6	-170.38	155.9	678.2	978.1	968.8	9.38	104.320	
2,800.0	2,779.4	2,754.4	2,754.4	7.3	4.8	-170.52	155.9	678.2	992.5	982.7	9.73	102.049	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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 4-6-35 (EXISTING) - ENCANA WELL - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-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
7,400.0	7,227.6	7,342.0	7,223.6	19.9	23.7	-13.15	901.3	-1,069.9	995.0	967.8	27.20	36.584	
7,500.0	7,277.4	7,391.7	7,273.4	20.1	23.8	-21.10	901.3	-1,069.9	909.3	883.4	25.92	35.086	
7,600.0	7,314.7	7,429.1	7,310.7	20.4	23.8	-34.39	901.3	-1,069.9	818.3	791.4	26.86	30.462	
7,700.0	7,338.9	7,453.3	7,334.9	20.8	23.8	-56.36	901.3	-1,069.9	723.9	692.7	31.22	23.191	
7,800.0	7,349.5	7,463.9	7,345.5	21.3	23.9	-83.55	901.3	-1,069.9	628.6	593.6	34.98	17.973	
7,900.0	7,350.0	7,464.4	7,346.0	21.9	23.9	-90.00	901.3	-1,069.9	534.7	498.7	35.90	14.892	
8,000.0	7,350.0	7,464.4	7,346.0	22.7	23.9	-90.00	901.3	-1,069.9	443.4	406.4	36.95	11.998	
8,100.0	7,350.0	7,464.4	7,346.0	23.6	23.9	-90.00	901.3	-1,069.9	356.8	318.6	38.11	9.360	
8,200.0	7,350.0	7,464.4	7,346.0	24.5	23.9	-90.00	901.3	-1,069.9	279.3	239.9	39.37	7.094	
8,300.0	7,350.0	7,464.4	7,346.0	25.6	23.9	-90.00	901.3	-1,069.9	220.7	180.0	40.69	5.423	
8,396.4	7,350.0	7,464.4	7,346.0	26.6	23.9	-90.00	901.3	-1,069.9	198.5	156.5	42.03	4.722	CC
8,400.0	7,350.0	7,464.4	7,346.0	26.7	23.9	-90.00	901.3	-1,069.9	198.5	156.4	42.08	4.718	ES, SF
8,500.0	7,350.0	7,464.4	7,346.0	27.9	23.9	-90.00	901.3	-1,069.9	223.9	180.4	43.52	5.145	
8,600.0	7,350.0	7,464.4	7,346.0	29.1	23.9	-90.00	901.3	-1,069.9	284.3	239.3	44.99	6.319	
8,700.0	7,350.0	7,464.4	7,346.0	30.4	23.9	-90.00	901.3	-1,069.9	362.7	316.2	46.51	7.799	
8,800.0	7,350.0	7,464.4	7,346.0	31.7	23.9	-90.00	901.3	-1,069.9	449.7	401.7	48.05	9.360	
8,900.0	7,350.0	7,464.4	7,346.0	33.1	23.9	-90.00	901.3	-1,069.9	541.3	491.7	49.61	10.910	
9,000.0	7,350.0	7,464.4	7,346.0	34.5	23.9	-90.00	901.3	-1,069.9	635.4	584.2	51.19	12.411	
9,100.0	7,350.0	7,464.4	7,346.0	36.0	23.9	-90.00	901.3	-1,069.9	731.0	678.2	52.80	13.846	
9,200.0	7,350.0	7,464.4	7,346.0	37.4	23.9	-90.00	901.3	-1,069.9	827.7	773.3	54.41	15.211	
9,300.0	7,350.0	7,464.4	7,346.0	38.9	23.9	-90.00	901.3	-1,069.9	925.1	869.1	56.04	16.507	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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 4-6-35 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 806-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
7,400.0	7,227.6	7,349.4	7,221.0	19.9	23.8	-11.43	879.0	-1,048.3	968.8	942.0	26.81	36.134	
7,500.0	7,277.4	7,397.7	7,269.4	20.1	23.9	-18.85	879.1	-1,048.8	883.1	857.7	25.41	34.756	
7,600.0	7,314.7	7,434.4	7,306.1	20.4	23.9	-31.40	879.2	-1,049.0	791.9	765.8	26.15	30.285	
7,700.0	7,338.9	7,458.6	7,330.2	20.8	23.9	-53.06	879.4	-1,049.1	697.3	666.7	30.63	22.764	
7,800.0	7,349.5	7,469.7	7,341.3	21.3	23.9	-81.72	879.4	-1,049.1	601.5	566.4	35.09	17.140	
7,900.0	7,350.0	7,470.8	7,342.4	21.9	23.9	-88.86	879.4	-1,049.1	506.8	470.7	36.11	14.035	
8,000.0	7,350.0	7,471.4	7,343.1	22.7	23.9	-89.06	879.4	-1,049.1	414.7	377.5	37.16	11.159	
8,100.0	7,350.0	7,472.1	7,343.7	23.6	23.9	-89.26	879.4	-1,049.1	327.1	288.8	38.32	8.537	
8,200.0	7,350.0	7,472.7	7,344.3	24.5	23.9	-89.46	879.4	-1,049.1	249.2	209.6	39.57	6.298	
8,300.0	7,350.0	7,473.3	7,345.0	25.6	23.9	-89.66	879.4	-1,049.1	192.8	151.9	40.89	4.715	
8,374.6	7,350.0	7,473.8	7,345.4	26.4	23.9	-89.81	879.4	-1,049.1	177.8	135.8	41.92	4.240	CC, ES, SF
8,400.0	7,350.0	7,473.9	7,345.6	26.7	23.9	-89.86	879.4	-1,049.1	179.6	137.3	42.27	4.247	
8,500.0	7,350.0	7,474.6	7,346.2	27.9	23.9	-90.06	879.5	-1,049.2	217.5	173.8	43.71	4.977	
8,600.0	7,350.0	7,475.2	7,346.8	29.1	23.9	-90.26	879.5	-1,049.2	287.0	241.8	45.18	6.353	
8,700.0	7,350.0	7,475.8	7,347.4	30.4	23.9	-90.46	879.5	-1,049.2	370.8	324.1	46.69	7.941	
8,800.0	7,350.0	7,476.4	7,348.0	31.7	23.9	-90.65	879.5	-1,049.2	461.0	412.8	48.23	9.559	
8,900.0	7,350.0	7,477.0	7,348.6	33.1	23.9	-90.85	879.5	-1,049.2	554.6	504.8	49.79	11.140	
9,000.0	7,350.0	7,477.6	7,349.2	34.5	23.9	-91.05	879.5	-1,049.2	650.1	598.8	51.36	12.657	
9,100.0	7,350.0	7,478.2	7,349.8	36.0	23.9	-91.24	879.5	-1,049.2	746.8	693.9	52.96	14.101	
9,200.0	7,350.0	7,478.8	7,350.4	37.4	23.9	-91.43	879.5	-1,049.2	844.3	789.7	54.57	15.471	
9,300.0	7,350.0	7,479.4	7,351.0	38.9	23.9	-91.63	879.5	-1,049.2	942.3	886.1	56.19	16.768	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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	-89.94	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	24.841	
166.7	166.7	166.7	166.7	0.3	0.3	-89.94	0.0	-7.5	7.5	7.0	0.54	14.065	CC
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	ES
300.0	300.0	299.9	299.9	0.5	0.5	-92.13	-0.3	-8.4	8.4	7.4	1.00	8.344	
400.0	400.0	399.7	399.7	0.7	0.7	21.36	-1.3	-10.8	10.0	8.7	1.35	7.436	
500.0	500.0	499.5	499.4	0.9	0.9	20.00	-2.9	-14.8	11.8	10.1	1.70	6.931	
600.0	599.9	599.3	599.0	1.0	1.1	19.59	-5.1	-20.5	13.6	11.5	2.05	6.617	
700.0	699.7	699.0	698.4	1.2	1.3	19.80	-7.9	-27.8	15.4	13.0	2.41	6.404	
800.0	799.4	798.7	797.6	1.4	1.5	20.45	-11.4	-36.6	17.3	14.5	2.76	6.252	
900.0	898.9	898.4	896.7	1.7	1.8	21.39	-15.6	-47.1	19.2	16.1	3.13	6.136	
1,000.0	998.3	998.0	995.5	1.9	2.0	22.54	-20.3	-59.2	21.1	17.6	3.50	6.042	
1,100.0	1,097.4	1,097.7	1,094.0	2.2	2.3	23.84	-25.7	-72.8	23.2	19.3	3.89	5.959	
1,200.0	1,196.4	1,197.2	1,192.2	2.5	2.7	24.89	-31.7	-88.1	25.6	21.3	4.29	5.965	
1,300.0	1,295.3	1,297.1	1,290.5	2.8	3.0	24.97	-38.2	-104.5	29.1	24.4	4.69	6.208	
1,400.0	1,394.2	1,397.0	1,388.8	3.1	3.3	25.00	-44.7	-121.0	32.6	27.6	5.09	6.420	
1,500.0	1,493.2	1,496.9	1,487.2	3.4	3.7	25.02	-51.2	-137.6	36.2	30.7	5.49	6.599	
1,600.0	1,592.1	1,596.9	1,585.5	3.6	4.0	25.04	-57.7	-154.1	39.8	33.9	5.89	6.752	
1,700.0	1,691.1	1,696.8	1,683.9	3.9	4.4	25.06	-64.2	-170.6	43.3	37.0	6.29	6.884	
1,800.0	1,790.0	1,796.7	1,782.2	4.2	4.7	25.07	-70.7	-187.1	46.9	40.2	6.70	6.999	
1,900.0	1,888.9	1,896.7	1,880.6	4.6	5.1	25.08	-77.2	-203.6	50.4	43.3	7.11	7.100	
2,000.0	1,987.9	1,996.6	1,978.9	4.9	5.4	25.09	-83.7	-220.1	54.0	46.5	7.51	7.189	
2,100.0	2,086.8	2,096.6	2,077.3	5.2	5.8	25.10	-90.2	-236.6	57.6	49.6	7.92	7.269	
2,200.0	2,185.8	2,196.5	2,175.6	5.5	6.1	25.11	-96.7	-253.1	61.1	52.8	8.33	7.340	
2,300.0	2,284.7	2,296.4	2,273.9	5.8	6.5	25.12	-103.2	-269.6	64.7	56.0	8.74	7.405	
2,400.0	2,383.7	2,396.4	2,372.3	6.1	6.8	25.12	-109.7	-286.1	68.2	59.1	9.14	7.463	
2,500.0	2,482.6	2,496.3	2,470.6	6.4	7.2	25.13	-116.2	-302.7	71.8	62.3	9.55	7.517	
2,600.0	2,581.5	2,596.2	2,569.0	6.7	7.6	25.14	-122.7	-319.2	75.4	65.4	9.96	7.565	
2,700.0	2,680.5	2,696.2	2,667.3	7.0	7.9	25.14	-129.2	-335.7	78.9	68.6	10.37	7.610	
2,800.0	2,779.4	2,796.1	2,765.7	7.3	8.3	25.14	-135.7	-352.2	82.5	71.7	10.78	7.651	
2,900.0	2,878.4	2,896.1	2,864.0	7.6	8.6	25.15	-142.2	-368.7	86.0	74.9	11.19	7.689	
3,000.0	2,977.3	2,996.0	2,962.4	7.9	9.0	25.15	-148.7	-385.2	89.6	78.0	11.60	7.724	
3,100.0	3,076.2	3,095.9	3,060.7	8.2	9.3	25.16	-155.2	-401.7	93.2	81.2	12.01	7.756	
3,200.0	3,175.2	3,195.9	3,159.1	8.5	9.7	25.16	-161.7	-418.2	96.7	84.3	12.42	7.787	
3,300.0	3,274.1	3,295.8	3,257.4	8.8	10.1	25.16	-168.2	-434.7	100.3	87.5	12.83	7.815	
3,400.0	3,373.1	3,395.7	3,355.8	9.1	10.4	25.16	-174.7	-451.2	103.8	90.6	13.24	7.842	
3,500.0	3,472.0	3,495.7	3,454.1	9.4	10.8	25.17	-181.2	-467.8	107.4	93.8	13.65	7.866	
3,600.0	3,570.9	3,595.6	3,552.5	9.8	11.1	25.17	-187.7	-484.3	111.0	96.9	14.06	7.890	
3,700.0	3,669.9	3,695.5	3,650.8	10.1	11.5	25.17	-194.2	-500.8	114.5	100.1	14.48	7.912	
3,800.0	3,768.8	3,795.5	3,749.2	10.4	11.8	25.17	-200.7	-517.3	118.1	103.2	14.89	7.932	
3,900.0	3,867.8	3,895.4	3,847.5	10.7	12.2	25.17	-207.2	-533.8	121.6	106.3	15.30	7.952	
4,000.0	3,966.7	3,995.4	3,945.9	11.0	12.6	25.18	-213.7	-550.3	125.2	109.5	15.71	7.971	
4,100.0	4,065.7	4,095.3	4,044.2	11.3	12.9	25.18	-220.2	-566.8	128.8	112.6	16.12	7.988	
4,200.0	4,164.6	4,195.2	4,142.6	11.6	13.3	25.18	-226.7	-583.3	132.3	115.8	16.53	8.005	
4,300.0	4,263.5	4,295.2	4,240.9	11.9	13.6	25.18	-233.2	-599.8	135.9	118.9	16.94	8.021	
4,400.0	4,362.5	4,395.1	4,339.3	12.2	14.0	25.18	-239.7	-616.3	139.4	122.1	17.35	8.036	
4,500.0	4,461.4	4,495.0	4,437.6	12.5	14.3	25.18	-246.2	-632.9	143.0	125.2	17.77	8.050	
4,600.0	4,560.4	4,595.0	4,536.0	12.8	14.7	25.19	-252.7	-649.4	146.6	128.4	18.18	8.063	
4,700.0	4,659.3	4,694.9	4,634.3	13.1	15.1	25.19	-259.2	-665.9	150.1	131.5	18.59	8.077	
4,800.0	4,758.2	4,794.8	4,732.7	13.5	15.4	25.19	-265.7	-682.4	153.7	134.7	19.00	8.089	
4,900.0	4,857.2	4,894.8	4,831.0	13.8	15.8	25.19	-272.2	-698.9	157.2	137.8	19.41	8.101	
5,000.0	4,956.1	4,994.7	4,929.4	14.1	16.1	25.19	-278.7	-715.4	160.8	141.0	19.82	8.112	

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 4B-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 4B-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
5,100.0	5,055.1	5,094.7	5,027.7	14.4	16.5	25.19	-285.2	-731.9	164.4	144.1	20.23	8.123	
5,200.0	5,154.0	5,194.6	5,126.1	14.7	16.9	25.19	-291.7	-748.4	167.9	147.3	20.65	8.134	
5,300.0	5,253.0	5,294.5	5,224.4	15.0	17.2	25.19	-298.2	-764.9	171.5	150.4	21.06	8.144	
5,400.0	5,351.9	5,394.5	5,322.8	15.3	17.6	25.19	-304.7	-781.4	175.0	153.6	21.47	8.153	
5,500.0	5,450.8	5,494.4	5,421.1	15.6	17.9	25.20	-311.2	-798.0	178.6	156.7	21.88	8.163	
5,600.0	5,549.8	5,594.3	5,519.5	15.9	18.3	25.20	-317.7	-814.5	182.2	159.9	22.29	8.172	
5,700.0	5,648.7	5,694.3	5,617.8	16.2	18.6	25.20	-324.2	-831.0	185.7	163.0	22.70	8.180	
5,800.0	5,747.7	5,794.2	5,716.2	16.5	19.0	25.20	-330.7	-847.5	189.3	166.2	23.12	8.188	
5,900.0	5,846.6	5,894.1	5,814.5	16.9	19.4	25.20	-337.2	-864.0	192.8	169.3	23.53	8.196	
6,000.0	5,945.5	5,994.1	5,912.9	17.2	19.7	25.20	-343.7	-880.5	196.4	172.5	23.94	8.204	
6,100.0	6,044.5	6,094.0	6,011.2	17.5	20.1	25.20	-350.2	-897.0	200.0	175.6	24.35	8.212	
6,200.0	6,143.4	6,194.0	6,109.6	17.8	20.4	25.20	-356.7	-913.5	203.5	178.8	24.76	8.219	
6,300.0	6,242.4	6,293.9	6,207.9	18.1	20.8	25.20	-363.2	-930.0	207.1	181.9	25.18	8.226	
6,400.0	6,341.3	6,393.8	6,306.3	18.4	21.2	25.20	-369.7	-946.5	210.6	185.1	25.59	8.232	
6,500.0	6,440.2	6,493.8	6,404.6	18.7	21.5	25.20	-376.2	-963.1	214.2	188.2	26.00	8.239	
6,600.0	6,539.2	6,593.8	6,503.2	19.0	21.9	25.78	-380.5	-979.6	217.7	191.2	26.53	8.207	
6,700.0	6,638.2	6,692.2	6,599.7	19.3	22.1	4.21	-372.4	-995.8	221.6	193.9	27.74	7.989	
6,800.0	6,737.0	6,788.3	6,692.2	19.5	22.3	-39.00	-351.7	-1,011.3	226.5	197.7	28.85	7.851	
6,900.0	6,834.0	6,882.7	6,779.6	19.6	22.4	-53.50	-319.3	-1,026.0	232.1	202.6	29.52	7.862	
7,000.0	6,927.2	6,975.4	6,860.6	19.7	22.5	-57.89	-276.3	-1,039.6	238.2	208.5	29.67	8.026	
7,100.0	7,014.7	7,066.8	6,934.4	19.7	22.6	-59.00	-224.0	-1,052.0	244.3	215.0	29.30	8.340	
7,200.0	7,095.0	7,156.9	7,000.2	19.8	22.7	-58.91	-163.5	-1,063.0	250.4	221.9	28.48	8.790	
7,300.0	7,166.5	7,246.0	7,057.4	19.8	22.8	-58.36	-95.9	-1,072.6	255.9	228.6	27.38	9.347	
7,400.0	7,227.6	7,334.3	7,105.4	19.9	23.0	-57.71	-22.3	-1,080.7	260.9	234.6	26.21	9.952	
7,500.0	7,277.4	7,422.0	7,143.9	20.1	23.2	-57.11	56.0	-1,087.2	264.9	239.6	25.35	10.451	
7,600.0	7,314.7	7,509.1	7,172.6	20.4	23.4	-56.65	138.1	-1,092.0	267.9	242.9	25.02	10.708	
7,700.0	7,338.9	7,595.9	7,191.2	20.8	23.8	-56.38	222.8	-1,095.1	269.9	244.3	25.54	10.566	
7,800.0	7,349.5	7,682.5	7,199.5	21.3	24.2	-56.31	309.0	-1,096.5	270.6	243.6	27.00	10.022	
7,900.0	7,350.0	7,778.4	7,200.0	21.9	24.7	-56.33	404.8	-1,096.6	270.6	241.9	28.65	9.443	
8,000.0	7,350.0	7,878.4	7,200.0	22.7	25.4	-56.33	504.8	-1,096.6	270.6	240.2	30.35	8.914	
8,100.0	7,350.0	7,978.4	7,200.0	23.6	26.2	-56.33	604.8	-1,096.6	270.6	238.3	32.23	8.396	
8,200.0	7,350.0	8,078.4	7,200.0	24.5	27.0	-56.33	704.8	-1,096.6	270.6	236.3	34.25	7.900	
8,300.0	7,350.0	8,178.4	7,200.0	25.6	28.0	-56.33	804.8	-1,096.6	270.6	234.2	36.40	7.434	
8,400.0	7,350.0	8,278.4	7,200.0	26.7	29.0	-56.33	904.8	-1,096.6	270.6	231.9	38.65	7.001	
8,500.0	7,350.0	8,378.4	7,200.0	27.9	30.1	-56.33	1,004.8	-1,096.6	270.6	229.6	40.98	6.602	
8,600.0	7,350.0	8,478.4	7,200.0	29.1	31.2	-56.33	1,104.8	-1,096.6	270.6	227.2	43.39	6.236	
8,700.0	7,350.0	8,578.4	7,200.0	30.4	32.4	-56.33	1,204.8	-1,096.6	270.6	224.7	45.86	5.901	
8,800.0	7,350.0	8,678.4	7,200.0	31.7	33.7	-56.33	1,304.8	-1,096.6	270.6	222.2	48.38	5.593	
8,900.0	7,350.0	8,778.4	7,200.0	33.1	35.0	-56.33	1,404.8	-1,096.6	270.6	219.6	50.94	5.312	
9,000.0	7,350.0	8,878.4	7,200.0	34.5	36.3	-56.33	1,504.8	-1,096.6	270.6	217.0	53.54	5.054	
9,100.0	7,350.0	8,978.4	7,200.0	36.0	37.7	-56.33	1,604.8	-1,096.6	270.6	214.4	56.17	4.817	
9,200.0	7,350.0	9,078.4	7,200.0	37.4	39.1	-56.33	1,704.8	-1,096.6	270.6	211.7	58.83	4.599	
9,300.0	7,350.0	9,178.4	7,200.0	38.9	40.5	-56.33	1,804.8	-1,096.6	270.6	209.1	61.52	4.398	
9,400.0	7,350.0	9,278.4	7,200.0	40.4	42.0	-56.33	1,904.8	-1,096.6	270.6	206.4	64.22	4.213	
9,500.0	7,350.0	9,378.4	7,200.0	42.0	43.4	-56.33	2,004.8	-1,096.6	270.6	203.6	66.95	4.042	
9,600.0	7,350.0	9,478.4	7,200.0	43.5	44.9	-56.33	2,104.8	-1,096.6	270.6	200.9	69.69	3.883	
9,700.0	7,350.0	9,578.4	7,200.0	45.1	46.4	-56.33	2,204.8	-1,096.6	270.6	198.1	72.44	3.735	
9,800.0	7,350.0	9,678.4	7,200.0	46.7	48.0	-56.33	2,304.8	-1,096.6	270.6	195.4	75.21	3.598	
9,900.0	7,350.0	9,778.4	7,200.0	48.2	49.5	-56.33	2,404.8	-1,096.6	270.6	192.6	77.99	3.469	
10,000.0	7,350.0	9,878.4	7,200.0	49.8	51.1	-56.33	2,504.8	-1,096.6	270.6	189.8	80.78	3.349	
10,100.0	7,350.0	9,978.4	7,200.0	51.5	52.6	-56.33	2,604.8	-1,096.6	270.6	187.0	83.58	3.237	
10,200.0	7,350.0	10,078.4	7,200.0	53.1	54.2	-56.33	2,704.8	-1,096.6	270.6	184.2	86.39	3.132	

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 4B-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 4B-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
10,300.0	7,350.0	10,178.4	7,200.0	54.7	55.8	-56.33	2,804.8	-1,096.6	270.6	181.4	89.21	3.033	
10,400.0	7,350.0	10,278.4	7,200.0	56.3	57.4	-56.33	2,904.8	-1,096.6	270.6	178.5	92.03	2.940	
10,500.0	7,350.0	10,378.4	7,200.0	58.0	59.0	-56.33	3,004.8	-1,096.6	270.6	175.7	94.86	2.852	
10,600.0	7,350.0	10,478.4	7,200.0	59.6	60.7	-56.33	3,104.8	-1,096.6	270.6	172.9	97.69	2.770	
10,700.0	7,350.0	10,578.4	7,200.0	61.3	62.3	-56.33	3,204.8	-1,096.6	270.6	170.0	100.53	2.691	
10,800.0	7,350.0	10,678.4	7,200.0	62.9	63.9	-56.33	3,304.8	-1,096.6	270.6	167.2	103.38	2.617	
10,900.0	7,350.0	10,778.4	7,200.0	64.6	65.6	-56.33	3,404.8	-1,096.6	270.6	164.3	106.23	2.547	
11,000.0	7,350.0	10,878.4	7,200.0	66.3	67.2	-56.33	3,504.8	-1,096.6	270.6	161.5	109.08	2.480	
11,100.0	7,350.0	10,978.4	7,200.0	67.9	68.8	-56.33	3,604.8	-1,096.6	270.6	158.6	111.94	2.417	
11,200.0	7,350.0	11,078.4	7,200.0	69.6	70.5	-56.33	3,704.8	-1,096.6	270.6	155.8	114.80	2.357	
11,300.0	7,350.0	11,178.4	7,200.0	71.3	72.2	-56.33	3,804.8	-1,096.6	270.6	152.9	117.67	2.299	
11,400.0	7,350.0	11,278.4	7,200.0	73.0	73.8	-56.33	3,904.8	-1,096.6	270.6	150.0	120.54	2.245	
11,500.0	7,350.0	11,378.4	7,200.0	74.7	75.5	-56.33	4,004.8	-1,096.6	270.6	147.2	123.41	2.193	
11,600.0	7,350.0	11,478.4	7,200.0	76.4	77.2	-56.33	4,104.8	-1,096.6	270.6	144.3	126.28	2.143	
11,700.0	7,350.0	11,578.4	7,200.0	78.1	78.8	-56.33	4,204.8	-1,096.6	270.6	141.4	129.15	2.095	
11,800.0	7,350.0	11,678.4	7,200.0	79.8	80.5	-56.33	4,304.8	-1,096.6	270.6	138.5	132.03	2.049	
11,900.0	7,350.0	11,778.4	7,200.0	81.5	82.2	-56.33	4,404.8	-1,096.6	270.6	135.7	134.91	2.006	
11,934.7	7,350.0	11,813.1	7,200.0	82.1	82.8	-56.33	4,439.5	-1,096.6	270.6	134.7	135.91	1.991	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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	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	24.841	
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	CC, ES
400.0	400.0	400.0	400.0	0.7	0.7	-156.21	0.0	7.5	8.3	7.0	1.35	6.170	
500.0	500.0	500.1	500.1	0.9	0.9	-159.47	-0.5	6.8	10.0	8.3	1.70	5.893	
600.0	599.9	600.3	600.2	1.0	1.0	-160.43	-2.1	4.7	11.9	9.8	2.05	5.777	
700.0	699.7	700.4	700.3	1.2	1.2	-159.97	-4.7	1.2	13.8	11.4	2.40	5.741	
800.0	799.4	800.6	800.3	1.4	1.4	-158.62	-8.3	-3.7	15.9	13.1	2.76	5.749	
900.0	898.9	900.9	900.2	1.7	1.6	-156.72	-13.0	-10.1	18.1	15.0	3.13	5.783	
1,000.0	998.3	1,001.1	1,000.0	1.9	1.8	-154.50	-18.7	-17.8	20.5	17.0	3.52	5.830	
1,100.0	1,097.4	1,101.2	1,099.5	2.2	2.1	-152.52	-25.3	-26.7	23.3	19.4	3.92	5.945	
1,200.0	1,196.4	1,201.1	1,198.8	2.5	2.3	-152.15	-31.9	-35.8	27.2	22.9	4.33	6.290	
1,300.0	1,295.3	1,301.1	1,298.1	2.8	2.6	-151.97	-38.6	-44.8	31.2	26.5	4.73	6.590	
1,400.0	1,394.2	1,401.0	1,397.4	3.1	2.8	-151.83	-45.2	-53.8	35.2	30.0	5.15	6.837	
1,500.0	1,493.2	1,500.9	1,496.6	3.4	3.1	-151.72	-51.9	-62.9	39.2	33.6	5.56	7.044	
1,600.0	1,592.1	1,600.8	1,595.9	3.6	3.3	-151.63	-58.6	-71.9	43.2	37.2	5.98	7.221	
1,700.0	1,691.1	1,700.7	1,695.2	3.9	3.6	-151.55	-65.2	-80.9	47.1	40.8	6.40	7.372	
1,800.0	1,790.0	1,800.7	1,794.5	4.2	3.8	-151.49	-71.9	-90.0	51.1	44.3	6.82	7.503	
1,900.0	1,888.9	1,900.6	1,893.8	4.6	4.1	-151.43	-78.5	-99.0	55.1	47.9	7.24	7.618	
2,000.0	1,987.9	2,000.5	1,993.1	4.9	4.3	-151.39	-85.2	-108.0	59.1	51.5	7.66	7.720	
2,100.0	2,086.8	2,100.4	2,092.4	5.2	4.6	-151.34	-91.8	-117.1	63.1	55.0	8.08	7.810	
2,200.0	2,185.8	2,200.3	2,191.7	5.5	4.9	-151.31	-98.5	-126.1	67.1	58.6	8.50	7.890	
2,300.0	2,284.7	2,300.3	2,291.0	5.8	5.1	-151.28	-105.2	-135.1	71.1	62.1	8.93	7.963	
2,400.0	2,383.7	2,400.2	2,390.2	6.1	5.4	-151.25	-111.8	-144.2	75.1	65.7	9.35	8.028	
2,500.0	2,482.6	2,500.1	2,489.5	6.4	5.6	-151.22	-118.5	-153.2	79.1	69.3	9.77	8.087	
2,600.0	2,581.5	2,600.0	2,588.8	6.7	5.9	-151.20	-125.1	-162.2	83.0	72.8	10.20	8.142	
2,700.0	2,680.5	2,699.9	2,688.1	7.0	6.2	-151.18	-131.8	-171.2	87.0	76.4	10.62	8.191	
2,800.0	2,779.4	2,799.9	2,787.4	7.3	6.4	-151.16	-138.4	-180.3	91.0	80.0	11.05	8.237	
2,900.0	2,878.4	2,899.8	2,886.7	7.6	6.7	-151.14	-145.1	-189.3	95.0	83.5	11.48	8.279	
3,000.0	2,977.3	2,999.7	2,986.0	7.9	6.9	-151.12	-151.8	-198.3	99.0	87.1	11.90	8.317	
3,100.0	3,076.2	3,099.6	3,085.3	8.2	7.2	-151.11	-158.4	-207.4	103.0	90.7	12.33	8.353	
3,200.0	3,175.2	3,199.5	3,184.6	8.5	7.5	-151.09	-165.1	-216.4	107.0	94.2	12.75	8.387	
3,300.0	3,274.1	3,299.5	3,283.8	8.8	7.7	-151.08	-171.7	-225.4	111.0	97.8	13.18	8.418	
3,400.0	3,373.1	3,399.4	3,383.1	9.1	8.0	-151.07	-178.4	-234.5	114.9	101.3	13.61	8.447	
3,500.0	3,472.0	3,499.3	3,482.4	9.4	8.2	-151.06	-185.0	-243.5	118.9	104.9	14.03	8.474	
3,600.0	3,570.9	3,599.2	3,581.7	9.8	8.5	-151.05	-191.7	-252.5	122.9	108.5	14.46	8.500	
3,700.0	3,669.9	3,699.1	3,681.0	10.1	8.8	-151.04	-198.4	-261.6	126.9	112.0	14.89	8.524	
3,800.0	3,768.8	3,799.1	3,780.3	10.4	9.0	-151.03	-205.0	-270.6	130.9	115.6	15.32	8.546	
3,900.0	3,867.8	3,899.0	3,879.6	10.7	9.3	-151.02	-211.7	-279.6	134.9	119.1	15.74	8.568	
4,000.0	3,966.7	3,998.9	3,978.9	11.0	9.5	-151.01	-218.3	-288.7	138.9	122.7	16.17	8.588	
4,100.0	4,065.7	4,098.8	4,078.1	11.3	9.8	-151.00	-225.0	-297.7	142.9	126.3	16.60	8.607	
4,200.0	4,164.6	4,198.7	4,177.4	11.6	10.1	-151.00	-231.6	-306.7	146.8	129.8	17.03	8.625	
4,300.0	4,263.5	4,298.7	4,276.7	11.9	10.3	-150.99	-238.3	-315.8	150.8	133.4	17.45	8.642	
4,400.0	4,362.5	4,398.6	4,376.0	12.2	10.6	-150.98	-245.0	-324.8	154.8	136.9	17.88	8.659	
4,500.0	4,461.4	4,498.5	4,475.3	12.5	10.9	-150.98	-251.6	-333.8	158.8	140.5	18.31	8.674	
4,600.0	4,560.4	4,598.4	4,574.6	12.8	11.1	-150.97	-258.3	-342.9	162.8	144.1	18.74	8.689	
4,700.0	4,659.3	4,698.3	4,673.9	13.1	11.4	-150.97	-264.9	-351.9	166.8	147.6	19.16	8.703	
4,800.0	4,758.2	4,798.3	4,773.2	13.5	11.6	-150.96	-271.6	-360.9	170.8	151.2	19.59	8.717	
4,900.0	4,857.2	4,898.2	4,872.5	13.8	11.9	-150.95	-278.2	-370.0	174.8	154.7	20.02	8.730	
5,000.0	4,956.1	4,998.1	4,971.7	14.1	12.2	-150.95	-284.9	-379.0	178.8	158.3	20.45	8.742	
5,100.0	5,055.1	5,098.0	5,071.0	14.4	12.4	-150.95	-291.6	-388.0	182.7	161.9	20.88	8.754	

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 4B-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 4B-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	5,154.0	5,198.0	5,170.3	14.7	12.7	-150.94	-298.2	-397.1	186.7	165.4	21.30	8.765	
5,300.0	5,253.0	5,297.9	5,269.6	15.0	13.0	-150.94	-304.9	-406.1	190.7	169.0	21.73	8.776	
5,400.0	5,351.9	5,397.8	5,368.9	15.3	13.2	-150.93	-311.5	-415.1	194.7	172.5	22.16	8.786	
5,500.0	5,450.8	5,497.7	5,468.2	15.6	13.5	-150.93	-318.2	-424.2	198.7	176.1	22.59	8.796	
5,600.0	5,549.8	5,597.6	5,567.5	15.9	13.7	-150.92	-324.8	-433.2	202.7	179.7	23.02	8.806	
5,700.0	5,648.7	5,697.6	5,666.8	16.2	14.0	-150.92	-331.5	-442.2	206.7	183.2	23.45	8.815	
5,800.0	5,747.7	5,797.5	5,766.1	16.5	14.3	-150.92	-338.2	-451.3	210.7	186.8	23.87	8.824	
5,900.0	5,846.6	5,897.4	5,865.3	16.9	14.5	-150.91	-344.8	-460.3	214.6	190.3	24.30	8.833	
6,000.0	5,945.5	5,997.3	5,964.6	17.2	14.8	-150.91	-351.5	-469.3	218.6	193.9	24.73	8.841	
6,100.0	6,044.5	6,097.2	6,063.9	17.5	15.1	-150.91	-358.1	-478.3	222.6	197.5	25.16	8.849	
6,200.0	6,143.4	6,197.2	6,163.2	17.8	15.3	-150.90	-364.8	-487.4	226.6	201.0	25.59	8.857	
6,300.0	6,242.4	6,297.1	6,262.5	18.1	15.6	-150.90	-371.5	-496.4	230.6	204.6	26.02	8.864	
6,400.0	6,341.3	6,397.0	6,361.8	18.4	15.8	-150.90	-378.1	-505.4	234.6	208.1	26.44	8.871	
6,500.0	6,440.2	6,498.3	6,462.6	18.7	16.0	-152.34	-378.8	-514.7	238.3	211.8	26.50	8.992	
6,600.0	6,539.2	6,596.3	6,559.3	19.0	16.1	-156.88	-366.0	-523.8	242.3	216.5	25.83	9.381	
6,700.0	6,638.2	6,688.1	6,647.4	19.3	16.2	171.21	-342.1	-532.2	249.5	224.7	24.81	10.055	
6,800.0	6,737.0	6,775.9	6,728.2	19.5	16.1	117.17	-308.8	-540.1	260.3	236.1	24.12	10.790	
6,900.0	6,834.0	6,860.9	6,802.0	19.6	16.1	92.99	-267.4	-547.4	273.4	249.4	23.96	11.411	
7,000.0	6,927.2	6,943.5	6,868.5	19.7	16.0	80.16	-218.9	-554.2	287.7	263.6	24.17	11.908	
7,100.0	7,014.7	7,024.1	6,927.6	19.7	16.0	71.82	-164.5	-560.4	302.4	277.8	24.52	12.332	
7,200.0	7,095.0	7,100.0	6,977.4	19.8	16.1	65.95	-107.6	-565.8	316.4	291.6	24.79	12.762	
7,300.0	7,166.5	7,180.9	7,023.5	19.8	16.1	61.43	-41.4	-571.0	329.2	304.2	25.00	13.165	
7,400.0	7,227.6	7,257.5	7,060.1	19.9	16.3	58.11	25.8	-575.3	340.2	315.2	24.98	13.621	
7,500.0	7,277.4	7,333.3	7,089.0	20.1	16.6	55.67	95.7	-578.9	349.1	324.3	24.88	14.035	
7,600.0	7,314.7	7,408.5	7,110.3	20.4	16.9	53.96	167.7	-581.9	355.6	330.9	24.74	14.375	
7,700.0	7,338.9	7,483.3	7,123.9	20.8	17.3	52.89	241.2	-584.1	359.4	334.8	24.65	14.580	
7,800.0	7,349.5	7,557.8	7,129.8	21.3	17.8	52.40	315.5	-585.7	360.5	335.8	24.71	14.590	
7,900.0	7,350.0	7,651.2	7,130.0	21.9	18.5	52.27	408.8	-587.0	359.5	333.7	25.89	13.887	
8,000.0	7,350.0	7,751.2	7,130.0	22.7	19.5	52.14	508.8	-588.4	358.4	330.9	27.58	12.997	
8,100.0	7,350.0	7,851.1	7,130.0	23.6	20.5	52.00	608.7	-589.8	357.3	327.9	29.42	12.145	
8,200.0	7,350.0	7,951.1	7,130.0	24.5	21.6	51.86	708.7	-591.2	356.2	324.8	31.39	11.349	
8,300.0	7,350.0	8,051.1	7,130.0	25.6	22.8	51.72	808.7	-592.6	355.1	321.7	33.46	10.614	
8,400.0	7,350.0	8,151.1	7,130.0	26.7	24.0	51.58	908.7	-594.0	354.0	318.4	35.61	9.942	
8,500.0	7,350.0	8,251.1	7,130.0	27.9	25.4	51.44	1,008.7	-595.4	353.0	315.1	37.83	9.331	
8,600.0	7,350.0	8,351.1	7,130.0	29.1	26.7	51.30	1,108.6	-596.8	351.9	311.8	40.09	8.776	
8,700.0	7,350.0	8,451.1	7,130.0	30.4	28.2	51.16	1,208.6	-598.2	350.8	308.4	42.40	8.273	
8,800.0	7,350.0	8,551.1	7,130.0	31.7	29.6	51.01	1,308.6	-599.6	349.7	304.9	44.74	7.816	
8,900.0	7,350.0	8,651.1	7,130.0	33.1	31.1	50.87	1,408.6	-601.0	348.6	301.5	47.11	7.400	
9,000.0	7,350.0	8,751.1	7,130.0	34.5	32.6	50.72	1,508.6	-602.4	347.5	298.0	49.49	7.022	
9,100.0	7,350.0	8,851.0	7,130.0	36.0	34.1	50.58	1,608.6	-603.8	346.4	294.5	51.89	6.676	
9,200.0	7,350.0	8,951.0	7,130.0	37.4	35.7	50.43	1,708.5	-605.2	345.4	291.1	54.31	6.360	
9,300.0	7,350.0	9,051.0	7,130.0	38.9	37.2	50.28	1,808.5	-606.6	344.3	287.6	56.73	6.069	
9,400.0	7,350.0	9,151.0	7,130.0	40.4	38.8	50.13	1,908.5	-608.0	343.2	284.1	59.15	5.802	
9,500.0	7,350.0	9,251.0	7,130.0	42.0	40.4	49.98	2,008.5	-609.4	342.1	280.6	61.58	5.556	
9,600.0	7,350.0	9,351.0	7,130.0	43.5	42.0	49.83	2,108.5	-610.8	341.1	277.1	64.01	5.329	
9,700.0	7,350.0	9,451.0	7,130.0	45.1	43.7	49.68	2,208.4	-612.2	340.0	273.6	66.44	5.118	
9,800.0	7,350.0	9,551.0	7,130.0	46.7	45.3	49.53	2,308.4	-613.6	338.9	270.1	68.86	4.922	
9,900.0	7,350.0	9,651.0	7,130.0	48.2	46.9	49.37	2,408.4	-615.0	337.9	266.6	71.29	4.740	
10,000.0	7,350.0	9,751.0	7,130.0	49.8	48.6	49.22	2,508.4	-616.4	336.8	263.1	73.70	4.570	
10,100.0	7,350.0	9,850.9	7,130.0	51.5	50.3	49.06	2,608.4	-617.8	335.8	259.7	76.12	4.411	
10,200.0	7,350.0	9,950.9	7,130.0	53.1	51.9	48.91	2,708.3	-619.2	334.7	256.2	78.52	4.263	
10,300.0	7,350.0	10,050.9	7,130.0	54.7	53.6	48.75	2,808.3	-620.5	333.7	252.8	80.92	4.124	

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 4B-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 4B-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
10,400.0	7,350.0	10,150.9	7,130.0	56.3	55.3	48.59	2,908.3	-621.9	332.6	249.3	83.31	3.993	
10,500.0	7,350.0	10,250.9	7,130.0	58.0	56.9	48.43	3,008.3	-623.3	331.6	245.9	85.69	3.870	
10,600.0	7,350.0	10,350.9	7,130.0	59.6	58.6	48.27	3,108.3	-624.7	330.5	242.5	88.06	3.754	
10,700.0	7,350.0	10,450.9	7,130.0	61.3	60.3	48.11	3,208.2	-626.1	329.5	239.1	90.42	3.644	
10,800.0	7,350.0	10,550.9	7,130.0	62.9	62.0	47.95	3,308.2	-627.5	328.5	235.7	92.76	3.541	
10,900.0	7,350.0	10,650.9	7,130.0	64.6	63.7	47.78	3,408.2	-628.9	327.4	232.3	95.10	3.443	
11,000.0	7,350.0	10,750.9	7,130.0	66.3	65.4	47.62	3,508.2	-630.3	326.4	229.0	97.43	3.350	
11,100.0	7,350.0	10,850.9	7,130.0	67.9	67.1	47.45	3,608.2	-631.7	325.4	225.6	99.74	3.262	
11,200.0	7,350.0	10,950.8	7,130.0	69.6	68.8	47.29	3,708.1	-633.1	324.3	222.3	102.04	3.178	
11,300.0	7,350.0	11,050.8	7,130.0	71.3	70.5	47.12	3,808.1	-634.5	323.3	219.0	104.33	3.099	
11,400.0	7,350.0	11,150.8	7,130.0	73.0	72.2	46.95	3,908.1	-635.9	322.3	215.7	106.60	3.023	
11,500.0	7,350.0	11,250.8	7,130.0	74.7	73.9	46.78	4,008.1	-637.3	321.3	212.4	108.86	2.951	
11,600.0	7,350.0	11,350.8	7,130.0	76.4	75.6	46.61	4,108.1	-638.7	320.2	209.1	111.10	2.882	
11,700.0	7,350.0	11,450.8	7,130.0	78.1	77.3	46.44	4,208.0	-640.1	319.2	205.9	113.33	2.817	
11,800.0	7,350.0	11,550.8	7,130.0	79.8	79.1	46.26	4,308.0	-641.5	318.2	202.7	115.55	2.754	
11,824.5	7,350.0	11,575.3	7,130.0	80.2	79.5	46.22	4,332.5	-641.8	318.0	201.9	116.09	2.739	SF
11,900.0	7,350.0	11,582.3	7,130.0	81.5	79.6	46.21	4,339.6	-641.9	324.5	207.4	117.10	2.771	
11,934.7	7,350.0	11,582.3	7,130.0	82.1	79.6	46.21	4,339.6	-641.9	333.2	215.7	117.54	2.835	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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	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	49.682	
200.0	200.0	200.0	200.0	0.3	0.3	90.06	0.0	15.1	15.1	14.4	0.65	23.115	
300.0	300.0	300.0	300.0	0.5	0.5	90.06	0.0	15.1	15.1	14.1	1.00	15.061	CC, ES
400.0	400.0	400.0	400.0	0.7	0.7	-154.94	0.0	15.1	15.9	14.5	1.35	11.751	
500.0	500.0	500.0	500.0	0.9	0.8	-158.41	0.0	15.1	18.3	16.6	1.70	10.753	
600.0	599.9	600.2	600.2	1.0	1.0	-161.05	-0.7	14.5	21.7	19.7	2.05	10.599	
700.0	699.7	700.4	700.4	1.2	1.2	-161.63	-2.6	12.8	25.5	23.1	2.40	10.629	
800.0	799.4	800.7	800.5	1.4	1.4	-160.91	-5.9	9.9	29.7	26.9	2.76	10.753	
900.0	898.9	901.0	900.7	1.7	1.6	-159.39	-10.5	5.8	34.1	31.0	3.12	10.931	
1,000.0	998.3	1,001.3	1,000.7	1.9	1.8	-157.39	-16.4	0.6	39.0	35.5	3.50	11.135	
1,100.0	1,097.4	1,101.3	1,100.2	2.2	2.0	-155.58	-23.3	-5.5	44.6	40.7	3.89	11.456	
1,200.0	1,196.4	1,201.1	1,199.6	2.5	2.2	-154.80	-30.1	-11.6	51.4	47.1	4.29	11.985	
1,300.0	1,295.3	1,300.8	1,298.9	2.8	2.4	-154.25	-37.0	-17.6	58.3	53.7	4.69	12.430	
1,400.0	1,394.2	1,400.6	1,398.3	3.1	2.7	-153.83	-43.8	-23.7	65.3	60.2	5.10	12.795	
1,500.0	1,493.2	1,500.3	1,497.6	3.4	2.9	-153.48	-50.7	-29.8	72.2	66.7	5.51	13.099	
1,600.0	1,592.1	1,600.1	1,596.9	3.6	3.1	-153.19	-57.5	-35.8	79.2	73.2	5.93	13.355	
1,700.0	1,691.1	1,699.8	1,696.3	3.9	3.3	-152.96	-64.4	-41.9	86.1	79.8	6.34	13.573	
1,800.0	1,790.0	1,799.6	1,795.6	4.2	3.6	-152.75	-71.3	-48.0	93.1	86.3	6.76	13.761	
1,900.0	1,888.9	1,899.4	1,894.9	4.6	3.8	-152.58	-78.1	-54.0	100.0	92.8	7.18	13.924	
2,000.0	1,987.9	1,999.1	1,994.3	4.9	4.0	-152.42	-85.0	-60.1	107.0	99.4	7.60	14.068	
2,100.0	2,086.8	2,098.9	2,093.6	5.2	4.3	-152.29	-91.8	-66.2	113.9	105.9	8.02	14.194	
2,200.0	2,185.8	2,198.6	2,192.9	5.5	4.5	-152.17	-98.7	-72.3	120.9	112.4	8.45	14.307	
2,300.0	2,284.7	2,298.4	2,292.3	5.8	4.7	-152.07	-105.5	-78.3	127.8	118.9	8.87	14.408	
2,400.0	2,383.7	2,398.2	2,391.6	6.1	5.0	-151.97	-112.4	-84.4	134.7	125.5	9.29	14.498	
2,500.0	2,482.6	2,497.9	2,491.0	6.4	5.2	-151.89	-119.3	-90.5	141.7	132.0	9.72	14.580	
2,600.0	2,581.5	2,597.7	2,590.3	6.7	5.4	-151.81	-126.1	-96.5	148.7	138.5	10.14	14.655	
2,700.0	2,680.5	2,697.4	2,689.6	7.0	5.7	-151.74	-133.0	-102.6	155.6	145.0	10.57	14.722	
2,800.0	2,779.4	2,797.2	2,789.0	7.3	5.9	-151.67	-139.8	-108.7	162.6	151.6	10.99	14.784	
2,900.0	2,878.4	2,896.9	2,888.3	7.6	6.1	-151.61	-146.7	-114.7	169.5	158.1	11.42	14.841	
3,000.0	2,977.3	2,996.7	2,987.6	7.9	6.4	-151.56	-153.5	-120.8	176.5	164.6	11.85	14.894	
3,100.0	3,076.2	3,096.5	3,087.0	8.2	6.6	-151.51	-160.4	-126.9	183.4	171.1	12.27	14.942	
3,200.0	3,175.2	3,196.2	3,186.3	8.5	6.8	-151.46	-167.3	-133.0	190.4	177.7	12.70	14.987	
3,300.0	3,274.1	3,296.0	3,285.6	8.8	7.1	-151.42	-174.1	-139.0	197.3	184.2	13.13	15.029	
3,400.0	3,373.1	3,395.7	3,385.0	9.1	7.3	-151.38	-181.0	-145.1	204.3	190.7	13.56	15.068	
3,500.0	3,472.0	3,495.5	3,484.3	9.4	7.5	-151.34	-187.8	-151.2	211.2	197.2	13.98	15.105	
3,600.0	3,570.9	3,595.2	3,583.7	9.8	7.8	-151.31	-194.7	-157.2	218.2	203.8	14.41	15.139	
3,700.0	3,669.9	3,695.0	3,683.0	10.1	8.0	-151.27	-201.5	-163.3	225.1	210.3	14.84	15.171	
3,800.0	3,768.8	3,794.8	3,782.3	10.4	8.2	-151.24	-208.4	-169.4	232.1	216.8	15.27	15.201	
3,900.0	3,867.8	3,894.5	3,881.7	10.7	8.5	-151.21	-215.3	-175.4	239.0	223.3	15.70	15.229	
4,000.0	3,966.7	3,994.3	3,981.0	11.0	8.7	-151.18	-222.1	-181.5	246.0	229.8	16.12	15.255	
4,100.0	4,065.7	4,094.0	4,080.3	11.3	9.0	-151.16	-229.0	-187.6	252.9	236.4	16.55	15.281	
4,200.0	4,164.6	4,193.8	4,179.7	11.6	9.2	-151.13	-235.8	-193.7	259.9	242.9	16.98	15.304	
4,300.0	4,263.5	4,293.6	4,279.0	11.9	9.4	-151.11	-242.7	-199.7	266.8	249.4	17.41	15.327	
4,400.0	4,362.5	4,393.3	4,378.4	12.2	9.7	-151.09	-249.5	-205.8	273.8	255.9	17.84	15.348	
4,500.0	4,461.4	4,493.1	4,477.7	12.5	9.9	-151.07	-256.4	-211.9	280.7	262.5	18.27	15.369	
4,600.0	4,560.4	4,592.8	4,577.0	12.8	10.1	-151.05	-263.3	-217.9	287.7	269.0	18.70	15.388	
4,700.0	4,659.3	4,692.6	4,676.4	13.1	10.4	-151.03	-270.1	-224.0	294.6	275.5	19.12	15.407	
4,800.0	4,758.2	4,792.3	4,775.7	13.5	10.6	-151.01	-277.0	-230.1	301.6	282.0	19.55	15.424	
4,900.0	4,857.2	4,892.1	4,875.0	13.8	10.8	-150.99	-283.8	-236.1	308.5	288.6	19.98	15.441	
5,000.0	4,956.1	4,991.9	4,974.4	14.1	11.1	-150.97	-290.7	-242.2	315.5	295.1	20.41	15.457	
5,100.0	5,055.1	5,091.6	5,073.7	14.4	11.3	-150.96	-297.5	-248.3	322.4	301.6	20.84	15.472	

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 4B-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 4B-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	5,154.0	5,191.4	5,173.0	14.7	11.5	-150.94	-304.4	-254.4	329.4	308.1	21.27	15.487	
5,300.0	5,253.0	5,291.1	5,272.4	15.0	11.8	-150.93	-311.3	-260.4	336.4	314.7	21.70	15.501	
5,400.0	5,351.9	5,390.9	5,371.7	15.3	12.0	-150.91	-318.1	-266.5	343.3	321.2	22.13	15.514	
5,500.0	5,450.8	5,490.6	5,471.1	15.6	12.3	-150.90	-325.0	-272.6	350.3	327.7	22.56	15.527	
5,600.0	5,549.8	5,590.4	5,570.4	15.9	12.5	-150.89	-331.8	-278.6	357.2	334.2	22.99	15.540	
5,700.0	5,648.7	5,690.2	5,669.7	16.2	12.7	-150.87	-338.7	-284.7	364.2	340.7	23.42	15.552	
5,800.0	5,747.7	5,789.9	5,769.1	16.5	13.0	-150.86	-345.5	-290.8	371.1	347.3	23.85	15.563	
5,900.0	5,846.6	5,889.7	5,868.4	16.9	13.2	-150.85	-352.4	-296.8	378.1	353.8	24.28	15.574	
6,000.0	5,945.5	5,989.4	5,967.7	17.2	13.4	-150.84	-359.3	-302.9	385.0	360.3	24.70	15.585	
6,100.0	6,044.5	6,089.2	6,067.1	17.5	13.7	-150.83	-366.1	-309.0	392.0	366.8	25.13	15.595	
6,200.0	6,143.4	6,189.0	6,166.4	17.8	13.9	-150.82	-373.0	-315.1	398.9	373.4	25.56	15.605	
6,300.0	6,242.4	6,288.7	6,265.8	18.1	14.1	-150.81	-379.8	-321.1	405.9	379.9	25.99	15.615	
6,400.0	6,341.3	6,388.5	6,365.1	18.4	14.4	-150.80	-386.7	-327.2	412.8	386.4	26.42	15.624	
6,500.0	6,440.2	6,489.2	6,465.4	18.7	14.6	-150.87	-393.0	-333.3	419.8	392.9	26.83	15.648	
6,600.0	6,539.2	6,591.1	6,566.9	19.0	14.7	-152.39	-388.7	-339.6	426.2	399.4	26.85	15.873	
6,700.0	6,638.2	6,688.4	6,662.4	19.3	14.7	179.26	-371.1	-345.7	433.1	406.6	26.44	16.378	
6,800.0	6,737.0	6,782.2	6,751.3	19.5	14.7	128.43	-342.0	-351.4	441.1	415.3	25.86	17.058	
6,900.0	6,834.0	6,873.3	6,833.3	19.6	14.6	106.87	-302.8	-356.8	450.1	424.8	25.34	17.763	
7,000.0	6,927.2	6,962.1	6,907.8	19.7	14.5	96.09	-254.9	-361.8	459.5	434.6	24.97	18.406	
7,100.0	7,014.7	7,050.0	6,975.2	19.7	14.4	89.27	-198.8	-366.5	469.1	444.3	24.79	18.924	
7,200.0	7,095.0	7,134.0	7,032.8	19.8	14.3	84.45	-137.8	-370.6	478.3	453.4	24.82	19.272	
7,300.0	7,166.5	7,217.7	7,082.6	19.8	14.3	80.81	-70.7	-374.2	486.8	461.7	25.03	19.449	
7,400.0	7,227.6	7,300.0	7,123.7	19.9	14.5	78.03	0.5	-377.4	494.2	468.8	25.38	19.474	
7,500.0	7,277.4	7,381.9	7,156.2	20.1	14.7	75.92	75.6	-380.0	500.4	474.5	25.88	19.334	
7,600.0	7,314.7	7,462.8	7,179.7	20.4	15.1	74.40	152.9	-382.2	505.0	478.5	26.50	19.054	
7,700.0	7,338.9	7,543.2	7,194.3	20.8	15.5	73.40	231.9	-383.8	507.9	480.7	27.25	18.640	
7,800.0	7,349.5	7,623.3	7,199.9	21.3	16.1	72.90	311.8	-384.8	509.0	480.9	28.12	18.100	
7,900.0	7,350.0	7,720.6	7,200.0	21.9	17.0	72.84	409.1	-385.7	508.4	478.6	29.75	17.088	
8,000.0	7,350.0	7,820.6	7,200.0	22.7	17.9	72.81	509.0	-386.5	507.5	475.8	31.79	15.966	
8,100.0	7,350.0	7,920.6	7,200.0	23.6	19.0	72.78	609.0	-387.4	506.7	472.7	34.04	14.888	
8,200.0	7,350.0	8,020.6	7,200.0	24.5	20.2	72.75	709.0	-388.3	505.9	469.4	36.45	13.878	
8,300.0	7,350.0	8,120.6	7,200.0	25.6	21.5	72.72	809.0	-389.2	505.0	466.0	39.01	12.948	
8,400.0	7,350.0	8,220.5	7,200.0	26.7	22.8	72.69	909.0	-390.0	504.2	462.5	41.67	12.100	
8,500.0	7,350.0	8,320.5	7,200.0	27.9	24.2	72.66	1,009.0	-390.9	503.4	459.0	44.43	11.330	
8,600.0	7,350.0	8,420.5	7,200.0	29.1	25.6	72.63	1,109.0	-391.8	502.5	455.3	47.26	10.634	
8,700.0	7,350.0	8,520.5	7,200.0	30.4	27.1	72.60	1,209.0	-392.6	501.7	451.6	50.15	10.003	
8,800.0	7,350.0	8,620.5	7,200.0	31.7	28.6	72.57	1,309.0	-393.5	500.9	447.8	53.10	9.433	
8,900.0	7,350.0	8,720.5	7,200.0	33.1	30.1	72.54	1,409.0	-394.4	500.0	444.0	56.09	8.915	
9,000.0	7,350.0	8,820.5	7,200.0	34.5	31.7	72.51	1,509.0	-395.3	499.2	440.1	59.12	8.445	
9,100.0	7,350.0	8,920.5	7,200.0	36.0	33.2	72.48	1,609.0	-396.1	498.4	436.2	62.17	8.016	
9,200.0	7,350.0	9,020.5	7,200.0	37.4	34.8	72.45	1,709.0	-397.0	497.6	432.3	65.26	7.624	
9,300.0	7,350.0	9,120.5	7,200.0	38.9	36.4	72.42	1,808.9	-397.9	496.7	428.4	68.37	7.266	
9,400.0	7,350.0	9,220.5	7,200.0	40.4	38.1	72.39	1,908.9	-398.8	495.9	424.4	71.49	6.936	
9,500.0	7,350.0	9,320.5	7,200.0	42.0	39.7	72.36	2,008.9	-399.6	495.1	420.4	74.64	6.633	
9,600.0	7,350.0	9,420.5	7,200.0	43.5	41.3	72.33	2,108.9	-400.5	494.2	416.4	77.79	6.353	
9,700.0	7,350.0	9,520.5	7,200.0	45.1	43.0	72.30	2,208.9	-401.4	493.4	412.4	80.97	6.094	
9,800.0	7,350.0	9,620.5	7,200.0	46.7	44.6	72.27	2,308.9	-402.2	492.6	408.4	84.15	5.853	
9,900.0	7,350.0	9,720.5	7,200.0	48.2	46.3	72.24	2,408.9	-403.1	491.7	404.4	87.34	5.630	
10,000.0	7,350.0	9,820.5	7,200.0	49.8	48.0	72.21	2,508.9	-404.0	490.9	400.4	90.54	5.422	
10,100.0	7,350.0	9,920.5	7,200.0	51.5	49.6	72.18	2,608.9	-404.9	490.1	396.3	93.75	5.227	
10,200.0	7,350.0	10,020.5	7,200.0	53.1	51.3	72.15	2,708.9	-405.7	489.2	392.3	96.97	5.045	
10,300.0	7,350.0	10,120.5	7,200.0	54.7	53.0	72.11	2,808.9	-406.6	488.4	388.2	100.19	4.875	

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 4B-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 4B-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
10,400.0	7,350.0	10,220.5	7,200.0	56.3	54.7	72.08	2,908.9	-407.5	487.6	384.2	103.42	4.715	
10,500.0	7,350.0	10,320.5	7,200.0	58.0	56.4	72.05	3,008.9	-408.4	486.7	380.1	106.65	4.564	
10,600.0	7,350.0	10,420.5	7,200.0	59.6	58.1	72.02	3,108.8	-409.2	485.9	376.0	109.88	4.422	
10,700.0	7,350.0	10,520.5	7,200.0	61.3	59.8	71.99	3,208.8	-410.1	485.1	372.0	113.12	4.288	
10,800.0	7,350.0	10,620.5	7,200.0	62.9	61.5	71.96	3,308.8	-411.0	484.3	367.9	116.37	4.161	
10,900.0	7,350.0	10,720.5	7,200.0	64.6	63.2	71.92	3,408.8	-411.8	483.4	363.8	119.61	4.042	
11,000.0	7,350.0	10,820.4	7,200.0	66.3	64.9	71.89	3,508.8	-412.7	482.6	359.7	122.86	3.928	
11,100.0	7,350.0	10,920.4	7,200.0	67.9	66.6	71.86	3,608.8	-413.6	481.8	355.7	126.11	3.820	
11,200.0	7,350.0	11,020.4	7,200.0	69.6	68.3	71.83	3,708.8	-414.5	480.9	351.6	129.37	3.718	
11,300.0	7,350.0	11,120.4	7,200.0	71.3	70.0	71.79	3,808.8	-415.3	480.1	347.5	132.62	3.620	
11,400.0	7,350.0	11,220.4	7,200.0	73.0	71.8	71.76	3,908.8	-416.2	479.3	343.4	135.88	3.527	
11,500.0	7,350.0	11,320.4	7,200.0	74.7	73.5	71.73	4,008.8	-417.1	478.5	339.3	139.13	3.439	
11,600.0	7,350.0	11,420.4	7,200.0	76.4	75.2	71.70	4,108.8	-418.0	477.6	335.2	142.39	3.354	
11,700.0	7,350.0	11,520.4	7,200.0	78.1	76.9	71.66	4,208.8	-418.8	476.8	331.1	145.65	3.274	
11,800.0	7,350.0	11,620.4	7,200.0	79.8	78.6	71.63	4,308.8	-419.7	476.0	327.1	148.91	3.196	
11,900.0	7,350.0	11,720.4	7,200.0	81.5	80.4	71.60	4,408.8	-420.6	475.1	323.0	152.17	3.122	
11,924.5	7,350.0	11,741.0	7,200.0	81.9	80.7	71.59	4,429.3	-420.8	475.0	322.0	152.91	3.106	
11,934.7	7,350.0	11,741.0	7,200.0	82.1	80.7	71.59	4,429.3	-420.8	475.1	322.0	153.07	3.103	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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	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	74.523	
200.0	200.0	200.0	200.0	0.3	0.3	90.06	0.0	22.6	22.6	22.0	0.65	34.673	
300.0	300.0	300.0	300.0	0.5	0.5	90.06	0.0	22.6	22.6	21.6	1.00	22.592	CC, ES
400.0	400.0	400.0	400.0	0.7	0.7	-154.49	0.0	22.6	23.4	22.1	1.35	17.335	
500.0	500.0	500.0	500.0	0.9	0.8	-156.99	0.0	22.6	25.8	24.1	1.70	15.178	
600.0	599.9	599.9	599.9	1.0	1.0	-160.24	0.0	22.6	29.9	27.8	2.05	14.575	
700.0	699.7	700.1	700.1	1.2	1.2	-162.43	-0.8	22.2	35.1	32.8	2.40	14.650	
800.0	799.4	800.3	800.2	1.4	1.4	-162.78	-3.1	21.0	41.1	38.3	2.75	14.926	
900.0	898.9	900.5	900.4	1.7	1.6	-161.97	-7.0	19.0	47.6	44.5	3.11	15.310	
1,000.0	998.3	1,000.8	1,000.5	1.9	1.8	-160.45	-12.4	16.1	54.8	51.3	3.48	15.753	
1,100.0	1,097.4	1,100.7	1,100.1	2.2	1.9	-158.69	-19.2	12.6	62.8	59.0	3.86	16.275	
1,200.0	1,196.4	1,200.3	1,199.3	2.5	2.2	-157.63	-26.0	8.9	72.0	67.8	4.25	16.951	
1,300.0	1,295.3	1,299.8	1,298.6	2.8	2.4	-156.85	-32.9	5.3	81.4	76.7	4.65	17.511	
1,400.0	1,394.2	1,399.4	1,397.9	3.1	2.6	-156.23	-39.8	1.7	90.7	85.7	5.05	17.969	
1,500.0	1,493.2	1,498.9	1,497.1	3.4	2.8	-155.72	-46.7	-1.9	100.1	94.6	5.45	18.350	
1,600.0	1,592.1	1,598.5	1,596.4	3.6	3.0	-155.30	-53.6	-5.6	109.4	103.6	5.86	18.669	
1,700.0	1,691.1	1,698.1	1,695.6	3.9	3.2	-154.95	-60.5	-9.2	118.8	112.5	6.27	18.940	
1,800.0	1,790.0	1,797.6	1,794.9	4.2	3.4	-154.65	-67.3	-12.8	128.2	121.5	6.69	19.173	
1,900.0	1,888.9	1,897.2	1,894.1	4.6	3.6	-154.39	-74.2	-16.4	137.5	130.5	7.10	19.375	
2,000.0	1,987.9	1,996.7	1,993.4	4.9	3.8	-154.17	-81.1	-20.0	146.9	139.4	7.51	19.552	
2,100.0	2,086.8	2,096.3	2,092.6	5.2	4.1	-153.97	-88.0	-23.7	156.3	148.4	7.93	19.707	
2,200.0	2,185.8	2,195.8	2,191.9	5.5	4.3	-153.79	-94.9	-27.3	165.7	157.3	8.35	19.845	
2,300.0	2,284.7	2,295.4	2,291.1	5.8	4.5	-153.63	-101.8	-30.9	175.1	166.3	8.77	19.967	
2,400.0	2,383.7	2,395.0	2,390.4	6.1	4.7	-153.49	-108.6	-34.5	184.4	175.3	9.19	20.077	
2,500.0	2,482.6	2,494.5	2,489.6	6.4	4.9	-153.36	-115.5	-38.2	193.8	184.2	9.61	20.176	
2,600.0	2,581.5	2,594.1	2,588.9	6.7	5.1	-153.25	-122.4	-41.8	203.2	193.2	10.03	20.266	
2,700.0	2,680.5	2,693.6	2,688.2	7.0	5.4	-153.14	-129.3	-45.4	212.6	202.1	10.45	20.348	
2,800.0	2,779.4	2,793.2	2,787.4	7.3	5.6	-153.04	-136.2	-49.0	222.0	211.1	10.87	20.422	
2,900.0	2,878.4	2,892.8	2,886.7	7.6	5.8	-152.95	-143.1	-52.6	231.4	220.1	11.29	20.491	
3,000.0	2,977.3	2,992.3	2,985.9	7.9	6.0	-152.87	-149.9	-56.3	240.8	229.0	11.71	20.554	
3,100.0	3,076.2	3,091.9	3,085.2	8.2	6.2	-152.80	-156.8	-59.9	250.1	238.0	12.14	20.612	
3,200.0	3,175.2	3,191.4	3,184.4	8.5	6.5	-152.73	-163.7	-63.5	259.5	247.0	12.56	20.665	
3,300.0	3,274.1	3,291.0	3,283.7	8.8	6.7	-152.66	-170.6	-67.1	268.9	255.9	12.98	20.715	
3,400.0	3,373.1	3,390.5	3,382.9	9.1	6.9	-152.60	-177.5	-70.8	278.3	264.9	13.40	20.761	
3,500.0	3,472.0	3,490.1	3,482.2	9.4	7.1	-152.54	-184.4	-74.4	287.7	273.9	13.83	20.804	
3,600.0	3,570.9	3,589.7	3,581.4	9.8	7.3	-152.49	-191.2	-78.0	297.1	282.8	14.25	20.845	
3,700.0	3,669.9	3,689.2	3,680.7	10.1	7.5	-152.44	-198.1	-81.6	306.5	291.8	14.68	20.882	
3,800.0	3,768.8	3,788.8	3,779.9	10.4	7.8	-152.39	-205.0	-85.3	315.9	300.8	15.10	20.918	
3,900.0	3,867.8	3,888.3	3,879.2	10.7	8.0	-152.35	-211.9	-88.9	325.2	309.7	15.52	20.951	
4,000.0	3,966.7	3,987.9	3,978.4	11.0	8.2	-152.30	-218.8	-92.5	334.6	318.7	15.95	20.982	
4,100.0	4,065.7	4,087.4	4,077.7	11.3	8.4	-152.26	-225.6	-96.1	344.0	327.7	16.37	21.012	
4,200.0	4,164.6	4,187.0	4,177.0	11.6	8.6	-152.23	-232.5	-99.7	353.4	336.6	16.80	21.040	
4,300.0	4,263.5	4,286.6	4,276.2	11.9	8.9	-152.19	-239.4	-103.4	362.8	345.6	17.22	21.066	
4,400.0	4,362.5	4,386.1	4,375.5	12.2	9.1	-152.16	-246.3	-107.0	372.2	354.5	17.65	21.091	
4,500.0	4,461.4	4,485.7	4,474.7	12.5	9.3	-152.13	-253.2	-110.6	381.6	363.5	18.07	21.115	
4,600.0	4,560.4	4,585.2	4,574.0	12.8	9.5	-152.09	-260.1	-114.2	391.0	372.5	18.50	21.138	
4,700.0	4,659.3	4,684.8	4,673.2	13.1	9.7	-152.07	-266.9	-117.9	400.4	381.4	18.92	21.159	
4,800.0	4,758.2	4,784.4	4,772.5	13.5	10.0	-152.04	-273.8	-121.5	409.8	390.4	19.35	21.180	
4,900.0	4,857.2	4,883.9	4,871.7	13.8	10.2	-152.01	-280.7	-125.1	419.1	399.4	19.77	21.199	
5,000.0	4,956.1	4,983.5	4,971.0	14.1	10.4	-151.99	-287.6	-128.7	428.5	408.3	20.20	21.218	
5,100.0	5,055.1	5,083.0	5,070.2	14.4	10.6	-151.96	-294.5	-132.4	437.9	417.3	20.62	21.236	

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 4B-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 4B-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	5,154.0	5,182.6	5,169.5	14.7	10.8	-151.94	-301.4	-136.0	447.3	426.3	21.05	21.253	
5,300.0	5,253.0	5,282.1	5,268.7	15.0	11.1	-151.92	-308.2	-139.6	456.7	435.2	21.47	21.269	
5,400.0	5,351.9	5,381.7	5,368.0	15.3	11.3	-151.89	-315.1	-143.2	466.1	444.2	21.90	21.285	
5,500.0	5,450.8	5,481.3	5,467.3	15.6	11.5	-151.87	-322.0	-146.8	475.5	453.2	22.32	21.300	
5,600.0	5,549.8	5,580.8	5,566.5	15.9	11.7	-151.85	-328.9	-150.5	484.9	462.1	22.75	21.314	
5,700.0	5,648.7	5,680.4	5,665.8	16.2	11.9	-151.83	-335.8	-154.1	494.3	471.1	23.18	21.328	
5,800.0	5,747.7	5,779.9	5,765.0	16.5	12.2	-151.82	-342.7	-157.7	503.7	480.1	23.60	21.341	
5,900.0	5,846.6	5,879.5	5,864.3	16.9	12.4	-151.80	-349.5	-161.3	513.1	489.0	24.03	21.354	
6,000.0	5,945.5	5,979.0	5,963.5	17.2	12.6	-151.78	-356.4	-165.0	522.4	498.0	24.45	21.366	
6,100.0	6,044.5	6,078.6	6,062.8	17.5	12.8	-151.76	-363.3	-168.6	531.8	507.0	24.88	21.378	
6,200.0	6,143.4	6,178.2	6,162.0	17.8	13.0	-151.75	-370.2	-172.2	541.2	515.9	25.30	21.389	
6,300.0	6,242.4	6,277.7	6,261.3	18.1	13.3	-151.73	-377.1	-175.8	550.6	524.9	25.73	21.400	
6,400.0	6,341.3	6,377.3	6,360.5	18.4	13.5	-151.72	-384.0	-179.4	560.0	533.9	26.16	21.411	
6,500.0	6,440.2	6,476.8	6,459.8	18.7	13.7	-151.70	-390.8	-183.1	569.4	542.8	26.58	21.421	
6,600.0	6,539.2	6,576.4	6,559.0	19.0	13.9	-151.69	-397.7	-186.7	578.8	551.8	27.01	21.431	
6,700.0	6,638.2	6,677.8	6,660.2	19.3	14.1	-177.36	-400.8	-190.4	588.1	560.9	27.25	21.579	
6,800.0	6,737.0	6,779.2	6,761.0	19.5	14.1	134.28	-389.9	-194.1	597.4	570.2	27.17	21.991	
6,900.0	6,834.0	6,880.2	6,858.7	19.6	14.1	114.97	-365.1	-197.6	606.5	579.6	26.89	22.554	
7,000.0	6,927.2	6,980.6	6,951.4	19.7	13.9	106.19	-327.1	-201.0	615.3	588.8	26.51	23.211	
7,100.0	7,014.7	7,080.4	7,037.5	19.7	13.8	101.13	-276.8	-204.2	623.6	597.5	26.11	23.882	
7,200.0	7,095.0	7,179.8	7,115.4	19.8	13.6	97.76	-215.3	-207.0	631.2	605.4	25.80	24.471	
7,300.0	7,166.5	7,278.7	7,183.8	19.8	13.5	95.34	-144.0	-209.5	638.0	612.4	25.65	24.871	
7,400.0	7,227.6	7,377.1	7,241.4	19.9	13.5	93.53	-64.3	-211.6	643.9	618.1	25.77	24.987	
7,500.0	7,277.4	7,475.1	7,287.4	20.1	13.7	92.16	22.1	-213.3	648.7	622.5	26.20	24.763	
7,600.0	7,314.7	7,572.7	7,321.2	20.4	14.0	91.15	113.7	-214.5	652.3	625.3	26.96	24.193	
7,700.0	7,338.9	7,670.0	7,342.1	20.8	14.6	90.46	208.6	-215.3	654.7	626.6	28.06	23.333	
7,800.0	7,349.5	7,767.0	7,349.9	21.3	15.3	90.05	305.1	-215.6	655.8	626.3	29.44	22.271	
7,900.0	7,350.0	7,866.6	7,350.0	21.9	16.2	90.00	404.8	-215.6	655.8	624.6	31.25	20.986	
8,000.0	7,350.0	7,966.6	7,350.0	22.7	17.2	90.00	504.8	-215.6	655.8	622.5	33.35	19.665	
8,100.0	7,350.0	8,066.6	7,350.0	23.6	18.3	90.00	604.8	-215.6	655.8	620.2	35.67	18.385	
8,200.0	7,350.0	8,166.6	7,350.0	24.5	19.5	90.00	704.8	-215.6	655.8	617.7	38.18	17.179	
8,300.0	7,350.0	8,266.6	7,350.0	25.6	20.8	90.00	804.8	-215.6	655.8	615.0	40.83	16.063	
8,400.0	7,350.0	8,366.6	7,350.0	26.7	22.2	90.00	904.8	-215.6	655.8	612.2	43.60	15.041	
8,500.0	7,350.0	8,466.6	7,350.0	27.9	23.6	90.00	1,004.8	-215.6	655.8	609.4	46.47	14.112	
8,600.0	7,350.0	8,566.6	7,350.0	29.1	25.1	90.00	1,104.8	-215.6	655.8	606.4	49.43	13.268	
8,700.0	7,350.0	8,666.6	7,350.0	30.4	26.6	90.00	1,204.8	-215.6	655.8	603.4	52.45	12.503	
8,800.0	7,350.0	8,766.6	7,350.0	31.7	28.1	90.00	1,304.8	-215.6	655.8	600.3	55.53	11.810	
8,900.0	7,350.0	8,866.6	7,350.0	33.1	29.6	90.00	1,404.8	-215.6	655.8	597.2	58.66	11.180	
9,000.0	7,350.0	8,966.6	7,350.0	34.5	31.2	90.00	1,504.8	-215.6	655.8	594.0	61.83	10.607	
9,100.0	7,350.0	9,066.6	7,350.0	36.0	32.8	90.00	1,604.8	-215.6	655.8	590.8	65.03	10.084	
9,200.0	7,350.0	9,166.6	7,350.0	37.4	34.4	90.00	1,704.8	-215.6	655.8	587.6	68.27	9.607	
9,300.0	7,350.0	9,266.6	7,350.0	38.9	36.0	90.00	1,804.8	-215.6	655.8	584.3	71.53	9.169	
9,400.0	7,350.0	9,366.6	7,350.0	40.4	37.6	90.00	1,904.8	-215.6	655.8	581.0	74.81	8.767	
9,500.0	7,350.0	9,466.6	7,350.0	42.0	39.3	90.00	2,004.8	-215.6	655.8	577.7	78.11	8.396	
9,600.0	7,350.0	9,566.6	7,350.0	43.5	40.9	90.00	2,104.8	-215.6	655.8	574.4	81.43	8.054	
9,700.0	7,350.0	9,666.6	7,350.0	45.1	42.6	90.00	2,204.8	-215.6	655.8	571.1	84.77	7.737	
9,800.0	7,350.0	9,766.6	7,350.0	46.7	44.3	90.00	2,304.8	-215.6	655.8	567.7	88.11	7.443	
9,900.0	7,350.0	9,866.6	7,350.0	48.2	45.9	90.00	2,404.8	-215.6	655.8	564.4	91.47	7.170	
10,000.0	7,350.0	9,966.6	7,350.0	49.8	47.6	90.00	2,504.8	-215.6	655.8	561.0	94.84	6.915	
10,100.0	7,350.0	10,066.6	7,350.0	51.5	49.3	90.00	2,604.8	-215.6	655.8	557.6	98.22	6.677	
10,200.0	7,350.0	10,166.6	7,350.0	53.1	51.0	90.00	2,704.8	-215.6	655.8	554.2	101.61	6.454	
10,300.0	7,350.0	10,266.6	7,350.0	54.7	52.7	90.00	2,804.8	-215.6	655.8	550.8	105.01	6.245	

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 4B-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 4B-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	7,350.0	10,366.6	7,350.0	56.3	54.4	90.00	2,904.8	-215.6	655.8	547.4	108.41	6.049	
10,500.0	7,350.0	10,466.6	7,350.0	58.0	56.1	90.00	3,004.8	-215.6	655.8	544.0	111.82	5.865	
10,600.0	7,350.0	10,566.6	7,350.0	59.6	57.8	90.00	3,104.8	-215.6	655.8	540.6	115.24	5.691	
10,700.0	7,350.0	10,666.6	7,350.0	61.3	59.5	90.00	3,204.8	-215.6	655.8	537.2	118.66	5.527	
10,800.0	7,350.0	10,766.6	7,350.0	62.9	61.2	90.00	3,304.8	-215.6	655.8	533.7	122.09	5.372	
10,900.0	7,350.0	10,866.6	7,350.0	64.6	62.9	90.00	3,404.8	-215.6	655.8	530.3	125.52	5.225	
11,000.0	7,350.0	10,966.6	7,350.0	66.3	64.6	90.00	3,504.8	-215.6	655.8	526.9	128.95	5.086	
11,100.0	7,350.0	11,066.6	7,350.0	67.9	66.3	90.00	3,604.8	-215.6	655.8	523.4	132.39	4.954	
11,200.0	7,350.0	11,166.6	7,350.0	69.6	68.0	90.00	3,704.8	-215.6	655.8	520.0	135.84	4.828	
11,300.0	7,350.0	11,266.6	7,350.0	71.3	69.8	90.00	3,804.8	-215.6	655.8	516.5	139.28	4.709	
11,344.6	7,350.0	11,311.3	7,350.0	72.1	70.5	90.00	3,849.4	-215.6	655.8	515.0	140.82	4.657	
11,400.0	7,350.0	11,358.3	7,350.0	73.0	71.3	90.00	3,896.5	-215.3	656.1	513.5	142.59	4.602	
11,500.0	7,350.0	11,440.8	7,350.0	74.7	72.8	90.00	3,978.9	-213.1	658.8	513.1	145.73	4.521	
11,600.0	7,350.0	11,540.7	7,350.0	76.4	74.5	90.00	4,078.7	-209.2	662.7	513.5	149.19	4.442	
11,700.0	7,350.0	11,640.6	7,350.0	78.1	76.2	90.00	4,178.6	-205.2	666.7	514.0	152.64	4.368	
11,800.0	7,350.0	11,740.5	7,350.0	79.8	77.9	90.00	4,278.4	-201.3	670.6	514.5	156.10	4.296	
11,900.0	7,350.0	11,840.4	7,350.0	81.5	79.6	90.00	4,378.3	-197.4	674.5	515.0	159.55	4.228	
11,934.7	7,350.0	11,875.1	7,350.0	82.1	80.2	90.00	4,412.9	-196.0	675.9	515.2	160.76	4.205	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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	89.98	0.0	30.2	30.2				
100.0	100.0	100.0	100.0	0.2	0.2	89.98	0.0	30.2	30.2	29.9	0.30	99.363	
200.0	200.0	200.0	200.0	0.3	0.3	89.98	0.0	30.2	30.2	29.5	0.65	46.231	
300.0	300.0	300.0	300.0	0.5	0.5	89.98	0.0	30.2	30.2	29.2	1.00	30.123	CC, ES
400.0	400.0	400.0	400.0	0.7	0.7	-154.34	0.0	30.2	31.0	29.6	1.35	22.920	
500.0	500.0	500.0	500.0	0.9	0.8	-156.27	0.0	30.2	33.3	31.6	1.70	19.610	
600.0	599.9	599.9	599.9	1.0	1.0	-158.95	0.0	30.2	37.4	35.3	2.05	18.236	
700.0	699.7	699.7	699.7	1.2	1.2	-161.85	0.0	30.2	43.1	40.7	2.40	17.981	
800.0	799.4	799.4	799.4	1.4	1.4	-164.59	0.0	30.2	50.6	47.9	2.75	18.439	
900.0	898.9	898.9	898.9	1.7	1.5	-167.01	0.0	30.2	59.9	56.8	3.09	19.378	
1,000.0	998.3	998.3	998.3	1.9	1.7	-169.04	0.0	30.2	71.0	67.6	3.44	20.655	
1,100.0	1,097.4	1,097.4	1,097.4	2.2	1.9	-170.71	0.0	30.2	83.9	80.1	3.78	22.179	
1,200.0	1,196.4	1,196.4	1,196.4	2.5	2.1	-172.06	0.0	30.2	98.1	94.0	4.13	23.778	
1,300.0	1,295.3	1,295.3	1,295.3	2.8	2.2	-173.08	0.0	30.2	112.5	108.0	4.47	25.153	
1,400.0	1,394.2	1,394.3	1,394.3	3.1	2.4	-173.87	0.0	30.2	126.9	122.1	4.82	26.337	
1,500.0	1,493.2	1,493.2	1,493.2	3.4	2.6	-174.50	0.0	30.2	141.4	136.2	5.17	27.366	
1,600.0	1,592.1	1,592.1	1,592.1	3.6	2.8	-175.01	0.0	30.2	155.8	150.3	5.51	28.269	
1,700.0	1,691.1	1,691.1	1,691.1	3.9	2.9	-175.44	0.0	30.2	170.3	164.4	5.86	29.066	
1,800.0	1,790.0	1,790.0	1,790.0	4.2	3.1	-175.79	0.0	30.2	184.8	178.6	6.21	29.776	
1,900.0	1,888.9	1,889.0	1,889.0	4.6	3.3	-176.10	0.0	30.2	199.2	192.7	6.55	30.412	
2,000.0	1,987.9	1,988.9	1,988.9	4.9	3.4	-176.19	-0.7	30.2	213.5	206.6	6.90	30.943	
2,100.0	2,086.8	2,089.1	2,089.1	5.2	3.6	-175.85	-3.1	30.4	227.3	220.0	7.25	31.337	
2,200.0	2,185.8	2,189.4	2,189.3	5.5	3.8	-175.14	-7.3	30.8	240.5	232.9	7.61	31.610	
2,300.0	2,284.7	2,289.7	2,289.4	5.8	4.0	-174.12	-13.2	31.3	253.3	245.4	7.97	31.774	
2,400.0	2,383.7	2,390.0	2,389.4	6.1	4.2	-172.84	-20.9	31.9	265.8	257.4	8.35	31.837	
2,500.0	2,482.6	2,489.6	2,488.6	6.4	4.4	-171.35	-30.1	32.7	278.0	269.2	8.73	31.824	
2,600.0	2,581.5	2,588.6	2,587.2	6.7	4.6	-169.94	-39.5	33.5	290.2	281.1	9.13	31.795	
2,700.0	2,680.5	2,687.6	2,685.7	7.0	4.8	-168.65	-49.0	34.3	302.7	293.2	9.53	31.760	
2,800.0	2,779.4	2,786.6	2,784.2	7.3	5.0	-167.46	-58.4	35.1	315.3	305.4	9.94	31.720	
2,900.0	2,878.4	2,885.6	2,882.8	7.6	5.2	-166.36	-67.9	35.9	328.0	317.7	10.35	31.677	
3,000.0	2,977.3	2,984.6	2,981.3	7.9	5.4	-165.34	-77.3	36.7	340.8	330.1	10.78	31.631	
3,100.0	3,076.2	3,083.6	3,079.9	8.2	5.6	-164.39	-86.8	37.5	353.8	342.6	11.20	31.585	
3,200.0	3,175.2	3,182.6	3,178.4	8.5	5.8	-163.51	-96.2	38.3	366.8	355.2	11.63	31.538	
3,300.0	3,274.1	3,281.6	3,277.0	8.8	6.0	-162.70	-105.7	39.1	379.9	367.8	12.06	31.491	
3,400.0	3,373.1	3,380.6	3,375.5	9.1	6.2	-161.93	-115.1	39.9	393.0	380.5	12.50	31.444	
3,500.0	3,472.0	3,479.6	3,474.0	9.4	6.5	-161.22	-124.6	40.7	406.3	393.3	12.94	31.399	
3,600.0	3,570.9	3,578.6	3,572.6	9.8	6.7	-160.55	-134.0	41.5	419.6	406.2	13.38	31.354	
3,700.0	3,669.9	3,677.6	3,671.1	10.1	6.9	-159.92	-143.5	42.3	432.9	419.1	13.83	31.311	
3,800.0	3,768.8	3,776.6	3,769.7	10.4	7.1	-159.33	-152.9	43.1	446.3	432.0	14.27	31.270	
3,900.0	3,867.8	3,875.6	3,868.2	10.7	7.3	-158.77	-162.4	43.8	459.7	445.0	14.72	31.230	
4,000.0	3,966.7	3,974.6	3,966.8	11.0	7.6	-158.25	-171.8	44.6	473.2	458.0	15.17	31.191	
4,100.0	4,065.7	4,073.6	4,065.3	11.3	7.8	-157.75	-181.3	45.4	486.7	471.1	15.62	31.154	
4,200.0	4,164.6	4,172.6	4,163.8	11.6	8.0	-157.29	-190.7	46.2	500.3	484.2	16.08	31.119	
4,300.0	4,263.5	4,271.6	4,262.4	11.9	8.3	-156.84	-200.2	47.0	513.8	497.3	16.53	31.085	
4,400.0	4,362.5	4,370.6	4,360.9	12.2	8.5	-156.42	-209.6	47.8	527.4	510.4	16.99	31.052	
4,500.0	4,461.4	4,469.6	4,459.5	12.5	8.7	-156.02	-219.1	48.6	541.1	523.6	17.44	31.021	
4,600.0	4,560.4	4,568.6	4,558.0	12.8	8.9	-155.64	-228.5	49.4	554.7	536.8	17.90	30.991	
4,700.0	4,659.3	4,667.6	4,656.6	13.1	9.2	-155.28	-238.0	50.2	568.4	550.0	18.36	30.962	
4,800.0	4,758.2	4,766.6	4,755.1	13.5	9.4	-154.93	-247.4	51.0	582.1	563.3	18.82	30.935	
4,900.0	4,857.2	4,865.6	4,853.6	13.8	9.6	-154.60	-256.9	51.8	595.8	576.5	19.28	30.909	
5,000.0	4,956.1	4,964.6	4,952.2	14.1	9.9	-154.29	-266.3	52.6	609.6	589.8	19.74	30.884	
5,100.0	5,055.1	5,063.6	5,050.7	14.4	10.1	-153.99	-275.8	53.4	623.3	603.1	20.20	30.860	

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 4B-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 4B-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	5,154.0	5,162.6	5,149.3	14.7	10.3	-153.70	-285.2	54.2	637.1	616.4	20.66	30.837	
5,300.0	5,253.0	5,261.6	5,247.8	15.0	10.6	-153.43	-294.7	55.0	650.9	629.7	21.12	30.816	
5,400.0	5,351.9	5,360.6	5,346.4	15.3	10.8	-153.16	-304.1	55.8	664.7	643.1	21.58	30.795	
5,500.0	5,450.8	5,459.6	5,444.9	15.6	11.0	-152.91	-313.6	56.6	678.5	656.4	22.05	30.775	
5,600.0	5,549.8	5,558.6	5,543.4	15.9	11.3	-152.67	-323.0	57.4	692.3	669.8	22.51	30.755	
5,700.0	5,648.7	5,657.6	5,642.0	16.2	11.5	-152.43	-332.5	58.2	706.1	683.2	22.97	30.737	
5,800.0	5,747.7	5,756.6	5,740.5	16.5	11.7	-152.21	-341.9	59.0	720.0	696.6	23.44	30.719	
5,900.0	5,846.6	5,855.6	5,839.1	16.9	12.0	-151.99	-351.4	59.8	733.9	710.0	23.90	30.702	
6,000.0	5,945.5	5,954.6	5,937.6	17.2	12.2	-151.78	-360.8	60.6	747.7	723.4	24.37	30.686	
6,100.0	6,044.5	6,053.6	6,036.1	17.5	12.4	-151.58	-370.3	61.3	761.6	736.8	24.83	30.670	
6,200.0	6,143.4	6,152.6	6,134.7	17.8	12.7	-151.39	-379.7	62.1	775.5	750.2	25.30	30.655	
6,300.0	6,242.4	6,251.6	6,233.2	18.1	12.9	-151.20	-389.2	62.9	789.4	763.6	25.76	30.641	
6,400.0	6,341.3	6,350.6	6,331.8	18.4	13.1	-151.02	-398.6	63.7	803.3	777.1	26.23	30.627	
6,500.0	6,440.2	6,453.5	6,434.5	18.7	13.3	-151.23	-402.9	64.6	817.0	790.4	26.58	30.735	
6,600.0	6,539.2	6,554.3	6,534.8	19.0	13.3	-152.42	-392.9	65.4	830.4	803.7	26.69	31.115	
6,700.0	6,638.2	6,649.3	6,627.0	19.3	13.2	-179.88	-370.7	66.1	844.2	817.7	26.53	31.825	
6,800.0	6,737.0	6,740.3	6,711.9	19.5	13.1	129.93	-338.2	66.8	858.9	832.8	26.15	32.852	
6,900.0	6,834.0	6,828.3	6,789.6	19.6	12.9	108.93	-296.7	67.4	874.3	848.5	25.73	33.974	
7,000.0	6,927.2	6,914.0	6,859.6	19.7	12.7	98.63	-247.5	68.0	889.7	864.3	25.37	35.070	
7,100.0	7,014.7	7,000.0	6,923.6	19.7	12.6	92.19	-190.1	68.5	904.6	879.5	25.11	36.034	
7,200.0	7,095.0	7,079.7	6,976.3	19.8	12.5	87.69	-130.4	68.9	918.8	893.8	25.01	36.738	
7,300.0	7,166.5	7,160.4	7,022.5	19.8	12.5	84.29	-64.3	69.3	931.7	906.6	25.08	37.146	
7,400.0	7,227.6	7,239.9	7,060.6	19.9	12.6	81.69	5.5	69.6	943.0	917.6	25.35	37.196	
7,500.0	7,277.4	7,318.6	7,090.5	20.1	12.9	79.72	78.3	69.9	952.3	926.5	25.82	36.882	
7,600.0	7,314.7	7,400.0	7,112.7	20.4	13.3	78.28	156.5	70.0	959.5	933.0	26.51	36.198	
7,700.0	7,338.9	7,474.2	7,125.1	20.8	13.8	77.36	229.6	70.1	964.4	937.0	27.38	35.226	
7,800.0	7,349.5	7,551.5	7,130.0	21.3	14.4	76.89	306.7	70.2	966.8	938.3	28.45	33.982	
7,900.0	7,350.0	7,649.6	7,130.0	21.9	15.3	76.85	404.8	70.2	966.9	936.8	30.18	32.040	
8,000.0	7,350.0	7,749.6	7,130.0	22.7	16.4	76.85	504.8	70.2	966.9	934.7	32.25	29.984	
8,100.0	7,350.0	7,849.6	7,130.0	23.6	17.5	76.85	604.8	70.2	966.9	932.4	34.53	28.000	
8,200.0	7,350.0	7,949.6	7,130.0	24.5	18.8	76.85	704.8	70.2	966.9	929.9	36.99	26.138	
8,300.0	7,350.0	8,049.6	7,130.0	25.6	20.1	76.85	804.8	70.2	966.9	927.3	39.60	24.420	
8,400.0	7,350.0	8,149.6	7,130.0	26.7	21.5	76.85	904.8	70.2	966.9	924.6	42.31	22.851	
8,500.0	7,350.0	8,249.6	7,130.0	27.9	23.0	76.85	1,004.8	70.2	966.9	921.8	45.13	21.427	
8,600.0	7,350.0	8,349.6	7,130.0	29.1	24.5	76.85	1,104.8	70.2	966.9	918.9	48.02	20.136	
8,700.0	7,350.0	8,449.6	7,130.0	30.4	26.0	76.85	1,204.8	70.2	966.9	916.0	50.98	18.968	
8,800.0	7,350.0	8,549.6	7,130.0	31.7	27.6	76.85	1,304.8	70.2	966.9	912.9	53.99	17.910	
8,900.0	7,350.0	8,649.6	7,130.0	33.1	29.1	76.85	1,404.8	70.2	966.9	909.9	57.05	16.950	
9,000.0	7,350.0	8,749.6	7,130.0	34.5	30.7	76.85	1,504.8	70.2	966.9	906.8	60.14	16.077	
9,100.0	7,350.0	8,849.6	7,130.0	36.0	32.3	76.85	1,604.8	70.2	966.9	903.7	63.27	15.282	
9,200.0	7,350.0	8,949.6	7,130.0	37.4	33.9	76.85	1,704.8	70.2	966.9	900.5	66.43	14.556	
9,300.0	7,350.0	9,049.6	7,130.0	38.9	35.6	76.85	1,804.8	70.2	966.9	897.3	69.61	13.890	
9,400.0	7,350.0	9,149.6	7,130.0	40.4	37.2	76.85	1,904.8	70.2	966.9	894.1	72.82	13.279	
9,500.0	7,350.0	9,249.6	7,130.0	42.0	38.9	76.85	2,004.8	70.2	966.9	890.9	76.04	12.716	
9,600.0	7,350.0	9,350.5	7,130.0	43.5	40.6	76.85	2,105.8	70.2	966.9	887.6	79.29	12.195	
9,700.0	7,350.0	9,466.4	7,130.0	45.1	42.5	76.83	2,221.6	68.9	965.9	883.1	82.80	11.665	
9,800.0	7,350.0	9,566.4	7,130.0	46.7	44.2	76.81	2,321.6	67.1	964.1	878.1	86.06	11.203	
9,900.0	7,350.0	9,666.4	7,130.0	48.2	45.9	76.78	2,421.6	65.3	962.4	873.0	89.32	10.774	
10,000.0	7,350.0	9,766.4	7,130.0	49.8	47.6	76.76	2,521.5	63.6	960.6	868.0	92.60	10.374	
10,100.0	7,350.0	9,866.4	7,130.0	51.5	49.2	76.73	2,621.5	61.8	958.9	863.0	95.89	10.000	
10,200.0	7,350.0	9,966.3	7,130.0	53.1	50.9	76.71	2,721.5	60.0	957.1	858.0	99.18	9.650	
10,300.0	7,350.0	10,066.3	7,130.0	54.7	52.6	76.69	2,821.4	58.2	955.4	852.9	102.48	9.323	

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 4B-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 4B-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	7,350.0	10,166.3	7,130.0	56.3	54.3	76.66	2,921.4	56.4	953.7	847.9	105.79	9.015	
10,500.0	7,350.0	10,266.3	7,130.0	58.0	56.1	76.64	3,021.4	54.6	951.9	842.8	109.10	8.725	
10,600.0	7,350.0	10,366.3	7,130.0	59.6	57.8	76.61	3,121.3	52.8	950.2	837.8	112.42	8.452	
10,700.0	7,350.0	10,466.3	7,130.0	61.3	59.5	76.59	3,221.3	51.0	948.4	832.7	115.74	8.195	
10,800.0	7,350.0	10,566.2	7,130.0	62.9	61.2	76.56	3,321.3	49.2	946.7	827.6	119.06	7.951	
10,900.0	7,350.0	10,666.2	7,130.0	64.6	62.9	76.54	3,421.2	47.5	945.0	822.6	122.39	7.721	
11,000.0	7,350.0	10,766.2	7,130.0	66.3	64.6	76.51	3,521.2	45.7	943.2	817.5	125.72	7.502	
11,100.0	7,350.0	10,866.2	7,130.0	67.9	66.4	76.48	3,621.2	43.9	941.5	812.4	129.06	7.295	
11,200.0	7,350.0	10,966.2	7,130.0	69.6	68.1	76.46	3,721.2	42.1	939.8	807.4	132.39	7.098	
11,300.0	7,350.0	11,066.2	7,130.0	71.3	69.8	76.43	3,821.1	40.3	938.0	802.3	135.73	6.911	
11,400.0	7,350.0	11,166.2	7,130.0	73.0	71.5	76.41	3,921.1	38.5	936.3	797.2	139.07	6.732	
11,500.0	7,350.0	11,266.1	7,130.0	74.7	73.3	76.38	4,021.1	36.7	934.5	792.1	142.42	6.562	
11,600.0	7,350.0	11,366.1	7,130.0	76.4	75.0	76.36	4,121.0	34.9	932.8	787.0	145.76	6.399	
11,700.0	7,350.0	11,466.1	7,130.0	78.1	76.7	76.33	4,221.0	33.2	931.1	782.0	149.11	6.244	
11,800.0	7,350.0	11,566.1	7,130.0	79.8	78.4	76.30	4,321.0	31.4	929.3	776.9	152.46	6.096	
11,900.0	7,350.0	11,664.3	7,130.0	81.5	80.1	76.28	4,419.1	29.6	927.6	771.8	155.77	5.955	
11,914.3	7,350.0	11,664.3	7,130.0	81.7	80.1	76.28	4,419.1	29.6	927.5	771.5	156.01	5.945	
11,934.7	7,350.0	11,664.3	7,130.0	82.1	80.1	76.28	4,419.1	29.6	927.7	771.3	156.36	5.933	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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	90.00	0.0	37.4	37.4				
100.0	100.0	100.0	100.0	0.2	0.2	90.00	0.0	37.4	37.4	37.1	0.30	123.284	
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	37.4	37.4	36.8	0.65	57.360	
300.0	300.0	300.0	300.0	0.5	0.5	90.00	0.0	37.4	37.4	36.4	1.00	37.375	CC, ES
400.0	400.0	400.0	400.0	0.7	0.7	-154.18	0.0	37.4	38.2	36.9	1.35	28.297	
500.0	500.0	500.0	500.0	0.9	0.8	-155.78	0.0	37.4	40.6	38.9	1.70	23.879	
600.0	599.9	599.9	599.9	1.0	1.0	-158.07	0.0	37.4	44.6	42.6	2.05	21.765	
700.0	699.7	699.7	699.7	1.2	1.2	-160.64	0.0	37.4	50.3	47.9	2.40	20.978	SF
800.0	799.4	799.1	799.1	1.4	1.4	-162.37	-0.8	37.8	58.0	55.3	2.75	21.109	
900.0	898.9	898.3	898.3	1.7	1.5	-162.68	-3.1	38.8	67.8	64.7	3.10	21.880	
1,000.0	998.3	997.3	997.2	1.9	1.7	-162.07	-7.0	40.6	79.8	76.3	3.46	23.062	
1,100.0	1,097.4	1,096.1	1,095.8	2.2	1.9	-161.01	-12.4	43.0	93.8	89.9	3.82	24.512	
1,200.0	1,196.4	1,194.9	1,194.4	2.5	2.1	-160.34	-17.9	45.5	109.1	104.9	4.20	25.989	
1,300.0	1,295.3	1,293.7	1,293.0	2.8	2.3	-159.86	-23.5	48.0	124.6	120.1	4.58	27.215	
1,400.0	1,394.2	1,392.4	1,391.6	3.1	2.5	-159.50	-29.1	50.5	140.1	135.2	4.96	28.237	
1,500.0	1,493.2	1,491.2	1,490.2	3.4	2.7	-159.20	-34.7	52.9	155.6	150.3	5.35	29.100	
1,600.0	1,592.1	1,590.0	1,588.8	3.6	2.9	-158.96	-40.3	55.4	171.2	165.4	5.74	29.838	
1,700.0	1,691.1	1,688.8	1,687.4	3.9	3.1	-158.75	-45.8	57.9	186.7	180.5	6.13	30.475	
1,800.0	1,790.0	1,787.6	1,786.0	4.2	3.3	-158.58	-51.4	60.4	202.2	195.7	6.52	31.030	
1,900.0	1,888.9	1,886.4	1,884.6	4.6	3.5	-158.44	-57.0	62.9	217.7	210.8	6.91	31.518	
2,000.0	1,987.9	1,985.2	1,983.2	4.9	3.7	-158.31	-62.6	65.4	233.2	225.9	7.30	31.950	
2,100.0	2,086.8	2,084.0	2,081.8	5.2	3.9	-158.20	-68.2	67.9	248.7	241.0	7.69	32.334	
2,200.0	2,185.8	2,182.8	2,180.4	5.5	4.1	-158.10	-73.7	70.4	264.2	256.2	8.09	32.679	
2,300.0	2,284.7	2,281.5	2,279.0	5.8	4.3	-158.01	-79.3	72.9	279.8	271.3	8.48	32.990	
2,400.0	2,383.7	2,380.3	2,377.6	6.1	4.5	-157.94	-84.9	75.4	295.3	286.4	8.87	33.271	
2,500.0	2,482.6	2,479.1	2,476.2	6.4	4.7	-157.86	-90.5	77.9	310.8	301.5	9.27	33.527	
2,600.0	2,581.5	2,577.9	2,574.8	6.7	4.9	-157.80	-96.1	80.4	326.3	316.7	9.67	33.760	
2,700.0	2,680.5	2,676.7	2,673.4	7.0	5.1	-157.74	-101.7	82.9	341.8	331.8	10.06	33.975	
2,800.0	2,779.4	2,775.5	2,772.0	7.3	5.3	-157.69	-107.2	85.4	357.4	346.9	10.46	34.172	
2,900.0	2,878.4	2,874.3	2,870.6	7.6	5.5	-157.64	-112.8	87.9	372.9	362.0	10.85	34.354	
3,000.0	2,977.3	2,973.1	2,969.1	7.9	5.7	-157.60	-118.4	90.4	388.4	377.1	11.25	34.522	
3,100.0	3,076.2	3,071.8	3,067.7	8.2	5.9	-157.56	-124.0	92.9	403.9	392.3	11.65	34.678	
3,200.0	3,175.2	3,170.6	3,166.3	8.5	6.1	-157.52	-129.6	95.4	419.4	407.4	12.04	34.824	
3,300.0	3,274.1	3,269.4	3,264.9	8.8	6.3	-157.48	-135.1	97.9	435.0	422.5	12.44	34.959	
3,400.0	3,373.1	3,368.2	3,363.5	9.1	6.5	-157.45	-140.7	100.4	450.5	437.6	12.84	35.086	
3,500.0	3,472.0	3,467.0	3,462.1	9.4	6.7	-157.42	-146.3	102.9	466.0	452.8	13.24	35.205	
3,600.0	3,570.9	3,565.8	3,560.7	9.8	6.9	-157.39	-151.9	105.3	481.5	467.9	13.63	35.317	
3,700.0	3,669.9	3,664.6	3,659.3	10.1	7.1	-157.36	-157.5	107.8	497.0	483.0	14.03	35.422	
3,800.0	3,768.8	3,763.4	3,757.9	10.4	7.3	-157.34	-163.0	110.3	512.6	498.1	14.43	35.521	
3,900.0	3,867.8	3,862.1	3,856.5	10.7	7.5	-157.31	-168.6	112.8	528.1	513.3	14.83	35.614	
4,000.0	3,966.7	3,960.9	3,955.1	11.0	7.7	-157.29	-174.2	115.3	543.6	528.4	15.23	35.703	
4,100.0	4,065.7	4,059.7	4,053.7	11.3	7.9	-157.27	-179.8	117.8	559.1	543.5	15.62	35.786	
4,200.0	4,164.6	4,158.5	4,152.3	11.6	8.1	-157.25	-185.4	120.3	574.7	558.6	16.02	35.866	
4,300.0	4,263.5	4,257.3	4,250.9	11.9	8.3	-157.23	-190.9	122.8	590.2	573.8	16.42	35.941	
4,400.0	4,362.5	4,356.1	4,349.5	12.2	8.5	-157.21	-196.5	125.3	605.7	588.9	16.82	36.013	
4,500.0	4,461.4	4,454.9	4,448.1	12.5	8.7	-157.20	-202.1	127.8	621.2	604.0	17.22	36.081	
4,600.0	4,560.4	4,553.7	4,546.7	12.8	8.9	-157.18	-207.7	130.3	636.7	619.1	17.62	36.146	
4,700.0	4,659.3	4,652.4	4,645.3	13.1	9.1	-157.16	-213.3	132.8	652.3	634.3	18.01	36.208	
4,800.0	4,758.2	4,751.2	4,743.9	13.5	9.3	-157.15	-218.8	135.3	667.8	649.4	18.41	36.267	
4,900.0	4,857.2	4,850.0	4,842.5	13.8	9.5	-157.14	-224.4	137.8	683.3	664.5	18.81	36.324	
5,000.0	4,956.1	4,948.8	4,941.1	14.1	9.7	-157.12	-230.0	140.3	698.8	679.6	19.21	36.378	
5,100.0	5,055.1	5,047.6	5,039.7	14.4	9.9	-157.11	-235.6	142.8	714.4	694.8	19.61	36.430	

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 4B-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 4B-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	5,154.0	5,146.4	5,138.3	14.7	10.1	-157.10	-241.2	145.3	729.9	709.9	20.01	36.480	
5,300.0	5,253.0	5,245.2	5,236.9	15.0	10.3	-157.08	-246.8	147.8	745.4	725.0	20.41	36.527	
5,400.0	5,351.9	5,344.0	5,335.5	15.3	10.5	-157.07	-252.3	150.3	760.9	740.1	20.81	36.573	
5,500.0	5,450.8	5,442.7	5,434.1	15.6	10.7	-157.06	-257.9	152.8	776.5	755.2	21.20	36.617	
5,600.0	5,549.8	5,541.5	5,532.7	15.9	10.9	-157.05	-263.5	155.3	792.0	770.4	21.60	36.660	
5,700.0	5,648.7	5,640.3	5,631.3	16.2	11.1	-157.04	-269.1	157.7	807.5	785.5	22.00	36.701	
5,800.0	5,747.7	5,739.1	5,729.9	16.5	11.3	-157.03	-274.7	160.2	823.0	800.6	22.40	36.740	
5,900.0	5,846.6	5,837.9	5,828.5	16.9	11.5	-157.02	-280.2	162.7	838.5	815.7	22.80	36.778	
6,000.0	5,945.5	5,936.7	5,927.1	17.2	11.7	-157.01	-285.8	165.2	854.1	830.9	23.20	36.814	
6,100.0	6,044.5	6,035.5	6,025.7	17.5	11.9	-157.01	-291.4	167.7	869.6	846.0	23.60	36.850	
6,200.0	6,143.4	6,134.3	6,124.3	17.8	12.1	-157.00	-297.0	170.2	885.1	861.1	24.00	36.884	
6,300.0	6,242.4	6,233.0	6,222.9	18.1	12.3	-156.99	-302.6	172.7	900.6	876.2	24.40	36.917	
6,400.0	6,341.3	6,331.8	6,321.5	18.4	12.5	-156.98	-308.1	175.2	916.2	891.4	24.80	36.949	
6,500.0	6,440.2	6,430.6	6,420.1	18.7	12.7	-156.97	-313.7	177.7	931.7	906.5	25.19	36.979	
6,600.0	6,539.2	6,523.3	6,512.7	19.0	12.9	-157.17	-315.6	180.1	947.4	921.9	25.52	37.132	
6,700.0	6,638.2	6,612.1	6,601.0	19.3	12.9	176.37	-306.6	182.3	964.0	938.4	25.62	37.623	
6,800.0	6,737.0	6,700.0	6,686.5	19.5	12.9	127.06	-287.0	184.4	980.8	955.3	25.53	38.418	
6,900.0	6,834.0	6,784.9	6,766.4	19.6	12.9	106.97	-258.2	186.5	997.3	972.0	25.37	39.317	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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	90.45	-0.4	45.0	45.0				
100.0	100.0	100.0	100.0	0.2	0.2	90.45	-0.4	45.0	45.0	44.7	0.30	148.130	
200.0	200.0	200.0	200.0	0.3	0.3	90.45	-0.4	45.0	45.0	44.3	0.65	68.920	
300.0	300.0	300.0	300.0	0.5	0.5	90.45	-0.4	45.0	45.0	44.0	1.00	44.907	CC, ES
400.0	400.0	400.0	400.0	0.7	0.7	-153.64	-0.4	45.0	45.8	44.4	1.35	33.880	
500.0	500.0	500.0	500.0	0.9	0.8	-155.02	-0.4	45.0	48.1	46.4	1.70	28.307	
600.0	599.9	599.9	599.9	1.0	1.0	-157.03	-0.4	45.0	52.1	50.1	2.05	25.422	
700.0	699.7	699.1	699.1	1.2	1.2	-158.68	-1.0	45.6	58.3	55.9	2.40	24.305	SF
800.0	799.4	798.0	798.0	1.4	1.4	-159.34	-2.9	47.3	67.2	64.5	2.75	24.440	
900.0	898.9	896.6	896.4	1.7	1.6	-159.26	-6.0	50.2	78.8	75.7	3.11	25.368	
1,000.0	998.3	994.7	994.3	1.9	1.7	-158.73	-10.3	54.3	93.0	89.5	3.47	26.819	
1,100.0	1,097.4	1,092.2	1,091.5	2.2	1.9	-157.96	-15.8	59.4	109.9	106.1	3.84	28.616	
1,200.0	1,196.4	1,189.4	1,188.4	2.5	2.1	-157.09	-22.4	65.6	129.0	124.8	4.22	30.545	
1,300.0	1,295.3	1,287.4	1,285.9	2.8	2.4	-156.34	-29.4	72.2	148.6	144.0	4.62	32.172	
1,400.0	1,394.2	1,385.5	1,383.5	3.1	2.6	-155.77	-36.5	78.8	168.1	163.1	5.02	33.520	
1,500.0	1,493.2	1,483.6	1,481.1	3.4	2.8	-155.31	-43.5	85.3	187.7	182.3	5.42	34.652	
1,600.0	1,592.1	1,581.6	1,578.7	3.6	3.0	-154.94	-50.5	91.9	207.3	201.5	5.82	35.613	
1,700.0	1,691.1	1,679.7	1,676.3	3.9	3.3	-154.64	-57.5	98.4	226.9	220.6	6.23	36.440	
1,800.0	1,790.0	1,777.7	1,773.9	4.2	3.5	-154.38	-64.5	105.0	246.5	239.8	6.63	37.156	
1,900.0	1,888.9	1,875.8	1,871.5	4.6	3.7	-154.17	-71.5	111.6	266.0	259.0	7.04	37.783	
2,000.0	1,987.9	1,973.8	1,969.0	4.9	3.9	-153.98	-78.6	118.1	285.6	278.2	7.45	38.336	
2,100.0	2,086.8	2,071.9	2,066.6	5.2	4.2	-153.81	-85.6	124.7	305.2	297.4	7.86	38.827	
2,200.0	2,185.8	2,170.0	2,164.2	5.5	4.4	-153.67	-92.6	131.3	324.8	316.6	8.27	39.265	
2,300.0	2,284.7	2,268.0	2,261.8	5.8	4.6	-153.54	-99.6	137.8	344.4	335.8	8.69	39.659	
2,400.0	2,383.7	2,366.1	2,359.4	6.1	4.9	-153.43	-106.6	144.4	364.1	355.0	9.10	40.014	
2,500.0	2,482.6	2,464.1	2,457.0	6.4	5.1	-153.32	-113.7	150.9	383.7	374.1	9.51	40.337	
2,600.0	2,581.5	2,562.2	2,554.5	6.7	5.3	-153.23	-120.7	157.5	403.3	393.3	9.93	40.631	
2,700.0	2,680.5	2,660.2	2,652.1	7.0	5.6	-153.15	-127.7	164.1	422.9	412.5	10.34	40.900	
2,800.0	2,779.4	2,758.3	2,749.7	7.3	5.8	-153.07	-134.7	170.6	442.5	431.7	10.75	41.147	
2,900.0	2,878.4	2,856.4	2,847.3	7.6	6.1	-153.00	-141.7	177.2	462.1	450.9	11.17	41.374	
3,000.0	2,977.3	2,954.4	2,944.9	7.9	6.3	-152.94	-148.7	183.8	481.7	470.1	11.58	41.584	
3,100.0	3,076.2	3,052.5	3,042.5	8.2	6.5	-152.88	-155.8	190.3	501.3	489.3	12.00	41.779	
3,200.0	3,175.2	3,150.5	3,140.1	8.5	6.8	-152.82	-162.8	196.9	520.9	508.5	12.41	41.960	
3,300.0	3,274.1	3,248.6	3,237.6	8.8	7.0	-152.77	-169.8	203.4	540.5	527.7	12.83	42.129	
3,400.0	3,373.1	3,346.6	3,335.2	9.1	7.2	-152.72	-176.8	210.0	560.2	546.9	13.25	42.286	
3,500.0	3,472.0	3,444.7	3,432.8	9.4	7.5	-152.68	-183.8	216.6	579.8	566.1	13.66	42.434	
3,600.0	3,570.9	3,542.8	3,530.4	9.8	7.7	-152.64	-190.8	223.1	599.4	585.3	14.08	42.572	
3,700.0	3,669.9	3,640.8	3,628.0	10.1	8.0	-152.60	-197.9	229.7	619.0	604.5	14.50	42.702	
3,800.0	3,768.8	3,738.9	3,725.6	10.4	8.2	-152.56	-204.9	236.3	638.6	623.7	14.91	42.824	
3,900.0	3,867.8	3,836.9	3,823.2	10.7	8.4	-152.53	-211.9	242.8	658.2	642.9	15.33	42.940	
4,000.0	3,966.7	3,935.0	3,920.7	11.0	8.7	-152.50	-218.9	249.4	677.8	662.1	15.75	43.049	
4,100.0	4,065.7	4,033.0	4,018.3	11.3	8.9	-152.47	-225.9	255.9	697.5	681.3	16.16	43.152	
4,200.0	4,164.6	4,131.1	4,115.9	11.6	9.1	-152.44	-232.9	262.5	717.1	700.5	16.58	43.249	
4,300.0	4,263.5	4,229.2	4,213.5	11.9	9.4	-152.41	-240.0	269.1	736.7	719.7	17.00	43.342	
4,400.0	4,362.5	4,327.2	4,311.1	12.2	9.6	-152.38	-247.0	275.6	756.3	738.9	17.41	43.430	
4,500.0	4,461.4	4,425.3	4,408.7	12.5	9.9	-152.36	-254.0	282.2	775.9	758.1	17.83	43.514	
4,600.0	4,560.4	4,523.3	4,506.3	12.8	10.1	-152.34	-261.0	288.8	795.5	777.3	18.25	43.593	
4,700.0	4,659.3	4,621.4	4,603.8	13.1	10.3	-152.31	-268.0	295.3	815.1	796.5	18.67	43.669	
4,800.0	4,758.2	4,719.4	4,701.4	13.5	10.6	-152.29	-275.0	301.9	834.8	815.7	19.08	43.742	
4,900.0	4,857.2	4,817.5	4,799.0	13.8	10.8	-152.27	-282.1	308.4	854.4	834.9	19.50	43.811	
5,000.0	4,956.1	4,915.6	4,896.6	14.1	11.1	-152.25	-289.1	315.0	874.0	854.1	19.92	43.878	
5,100.0	5,055.1	5,013.6	4,994.2	14.4	11.3	-152.24	-296.1	321.6	893.6	873.3	20.34	43.941	

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 4B-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 4B-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	5,154.0	5,111.7	5,091.8	14.7	11.5	-152.22	-303.1	328.1	913.2	892.5	20.75	44.002	
5,300.0	5,253.0	5,209.7	5,189.3	15.0	11.8	-152.20	-310.1	334.7	932.8	911.7	21.17	44.060	
5,400.0	5,351.9	5,307.8	5,286.9	15.3	12.0	-152.19	-317.1	341.3	952.4	930.9	21.59	44.116	
5,500.0	5,450.8	5,405.8	5,384.5	15.6	12.2	-152.17	-324.2	347.8	972.1	950.1	22.01	44.170	
5,600.0	5,549.8	5,503.9	5,482.1	15.9	12.5	-152.16	-331.2	354.4	991.7	969.3	22.43	44.222	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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 4I-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	90.40	-0.4	52.5	52.5				
100.0	100.0	100.0	100.0	0.2	0.2	90.40	-0.4	52.5	52.5	52.2	0.30	172.970	
200.0	200.0	200.0	200.0	0.3	0.3	90.40	-0.4	52.5	52.5	51.9	0.65	80.477	
300.0	300.0	300.0	300.0	0.5	0.5	90.40	-0.4	52.5	52.5	51.5	1.00	52.437	CC, ES
400.0	400.0	400.0	400.0	0.7	0.7	-153.63	-0.4	52.5	53.3	52.0	1.35	39.465	
500.0	500.0	500.0	500.0	0.9	0.8	-154.81	-0.4	52.5	55.7	54.0	1.70	32.742	
600.0	599.9	599.0	599.0	1.0	1.0	-156.07	-0.8	53.2	60.3	58.3	2.05	29.449	
700.0	699.7	697.9	697.8	1.2	1.2	-156.82	-2.3	55.4	68.0	65.6	2.40	28.345	SF
800.0	799.4	796.3	796.2	1.4	1.4	-157.11	-4.7	58.9	78.6	75.9	2.75	28.572	
900.0	898.9	894.2	893.9	1.7	1.6	-157.08	-8.0	63.7	92.2	89.1	3.11	29.654	
1,000.0	998.3	991.5	990.9	1.9	1.8	-156.85	-12.2	70.0	108.7	105.2	3.47	31.302	
1,100.0	1,097.4	1,088.0	1,087.0	2.2	2.0	-156.50	-17.3	77.5	128.1	124.2	3.84	33.330	
1,200.0	1,196.4	1,183.7	1,182.1	2.5	2.2	-156.10	-23.3	86.2	150.0	145.8	4.22	35.517	
1,300.0	1,295.3	1,279.1	1,276.7	2.8	2.4	-155.52	-30.1	96.3	173.3	168.7	4.61	37.572	
1,400.0	1,394.2	1,376.2	1,373.0	3.1	2.7	-154.96	-37.4	107.0	197.1	192.1	5.01	39.339	
1,500.0	1,493.2	1,473.3	1,469.2	3.4	3.0	-154.52	-44.6	117.7	220.9	215.5	5.41	40.827	
1,600.0	1,592.1	1,570.4	1,565.4	3.6	3.2	-154.17	-51.9	128.4	244.8	239.0	5.81	42.094	
1,700.0	1,691.1	1,667.6	1,661.7	3.9	3.5	-153.87	-59.2	139.1	268.6	262.4	6.22	43.184	
1,800.0	1,790.0	1,764.7	1,757.9	4.2	3.8	-153.63	-66.5	149.8	292.5	285.8	6.63	44.131	
1,900.0	1,888.9	1,861.8	1,854.2	4.6	4.0	-153.42	-73.8	160.5	316.3	309.3	7.04	44.961	
2,000.0	1,987.9	1,958.9	1,950.4	4.9	4.3	-153.25	-81.0	171.2	340.2	332.7	7.44	45.693	
2,100.0	2,086.8	2,056.0	2,046.6	5.2	4.6	-153.09	-88.3	182.0	364.0	356.2	7.86	46.344	
2,200.0	2,185.8	2,153.1	2,142.9	5.5	4.8	-152.96	-95.6	192.7	387.9	379.6	8.27	46.926	
2,300.0	2,284.7	2,250.2	2,239.1	5.8	5.1	-152.84	-102.9	203.4	411.8	403.1	8.68	47.450	
2,400.0	2,383.7	2,347.3	2,335.4	6.1	5.4	-152.73	-110.2	214.1	435.6	426.5	9.09	47.923	
2,500.0	2,482.6	2,444.4	2,431.6	6.4	5.7	-152.63	-117.4	224.8	459.5	450.0	9.50	48.353	
2,600.0	2,581.5	2,541.5	2,527.8	6.7	6.0	-152.55	-124.7	235.5	483.4	473.5	9.92	48.745	
2,700.0	2,680.5	2,638.6	2,624.1	7.0	6.2	-152.47	-132.0	246.2	507.2	496.9	10.33	49.104	
2,800.0	2,779.4	2,735.7	2,720.3	7.3	6.5	-152.40	-139.3	256.9	531.1	520.4	10.74	49.434	
2,900.0	2,878.4	2,832.8	2,816.6	7.6	6.8	-152.33	-146.5	267.7	555.0	543.8	11.16	49.738	
3,000.0	2,977.3	2,929.9	2,912.8	7.9	7.1	-152.27	-153.8	278.4	578.9	567.3	11.57	50.019	
3,100.0	3,076.2	3,027.0	3,009.0	8.2	7.3	-152.22	-161.1	289.1	602.7	590.7	11.99	50.280	
3,200.0	3,175.2	3,124.2	3,105.3	8.5	7.6	-152.17	-168.4	299.8	626.6	614.2	12.40	50.522	
3,300.0	3,274.1	3,221.3	3,201.5	8.8	7.9	-152.12	-175.7	310.5	650.5	637.7	12.82	50.749	
3,400.0	3,373.1	3,318.4	3,297.8	9.1	8.2	-152.08	-182.9	321.2	674.4	661.1	13.23	50.960	
3,500.0	3,472.0	3,415.5	3,394.0	9.4	8.5	-152.04	-190.2	331.9	698.2	684.6	13.65	51.158	
3,600.0	3,570.9	3,512.6	3,490.2	9.8	8.8	-152.00	-197.5	342.6	722.1	708.0	14.06	51.343	
3,700.0	3,669.9	3,609.7	3,586.5	10.1	9.0	-151.96	-204.8	353.3	746.0	731.5	14.48	51.518	
3,800.0	3,768.8	3,706.8	3,682.7	10.4	9.3	-151.93	-212.1	364.1	769.9	755.0	14.90	51.682	
3,900.0	3,867.8	3,803.9	3,779.0	10.7	9.6	-151.90	-219.3	374.8	793.7	778.4	15.31	51.837	
4,000.0	3,966.7	3,901.0	3,875.2	11.0	9.9	-151.87	-226.6	385.5	817.6	801.9	15.73	51.984	
4,100.0	4,065.7	3,998.1	3,971.4	11.3	10.2	-151.84	-233.9	396.2	841.5	825.3	16.14	52.122	
4,200.0	4,164.6	4,095.2	4,067.7	11.6	10.4	-151.81	-241.2	406.9	865.4	848.8	16.56	52.254	
4,300.0	4,263.5	4,192.3	4,163.9	11.9	10.7	-151.79	-248.4	417.6	889.2	872.3	16.98	52.379	
4,400.0	4,362.5	4,289.4	4,260.2	12.2	11.0	-151.77	-255.7	428.3	913.1	895.7	17.39	52.497	
4,500.0	4,461.4	4,386.5	4,356.4	12.5	11.3	-151.74	-263.0	439.0	937.0	919.2	17.81	52.610	
4,600.0	4,560.4	4,483.7	4,452.6	12.8	11.6	-151.72	-270.3	449.7	960.9	942.6	18.23	52.717	
4,700.0	4,659.3	4,580.8	4,548.9	13.1	11.9	-151.70	-277.6	460.5	984.7	966.1	18.64	52.820	

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 4B-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 4B-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	90.36	-0.4	60.1	60.1				
100.0	100.0	100.0	100.0	0.2	0.2	90.36	-0.4	60.1	60.1	59.8	0.30	197.810	
200.0	200.0	200.0	200.0	0.3	0.3	90.36	-0.4	60.1	60.1	59.4	0.65	92.035	
300.0	300.0	300.0	300.0	0.5	0.5	90.36	-0.4	60.1	60.1	59.1	1.00	59.968	CC, ES
400.0	400.0	400.0	400.0	0.7	0.7	-153.62	-0.4	60.1	60.9	59.5	1.35	45.050	
500.0	500.0	499.0	499.0	0.9	0.8	-154.26	-0.8	60.8	64.0	62.3	1.70	37.650	
600.0	599.9	597.8	597.8	1.0	1.0	-154.71	-2.1	63.0	70.1	68.1	2.05	34.244	
700.0	699.7	696.3	696.2	1.2	1.2	-154.96	-4.1	66.7	79.3	76.9	2.40	33.072	SF
800.0	799.4	794.3	794.0	1.4	1.4	-155.05	-7.1	71.9	91.6	88.8	2.75	33.260	
900.0	898.9	891.7	891.1	1.7	1.6	-155.01	-10.8	78.4	106.9	103.8	3.11	34.324	
1,000.0	998.3	988.3	987.3	1.9	1.8	-154.90	-15.3	86.3	125.1	121.6	3.48	35.969	
1,100.0	1,097.4	1,084.1	1,082.5	2.2	2.0	-154.73	-20.5	95.6	146.3	142.5	3.85	38.005	
1,200.0	1,196.4	1,179.0	1,176.6	2.5	2.3	-154.56	-26.4	106.1	170.2	165.9	4.23	40.210	
1,300.0	1,295.3	1,273.8	1,270.4	2.8	2.6	-154.24	-33.1	117.9	195.4	190.8	4.62	42.290	
1,400.0	1,394.2	1,370.4	1,366.0	3.1	2.8	-153.91	-40.2	130.3	221.1	216.0	5.02	44.060	
1,500.0	1,493.2	1,467.1	1,461.6	3.4	3.1	-153.66	-47.3	142.8	246.7	241.3	5.42	45.551	
1,600.0	1,592.1	1,563.7	1,557.1	3.6	3.4	-153.45	-54.3	155.3	272.4	266.6	5.82	46.821	
1,700.0	1,691.1	1,660.4	1,652.7	3.9	3.7	-153.28	-61.4	167.7	298.0	291.8	6.22	47.915	
1,800.0	1,790.0	1,757.0	1,748.3	4.2	4.0	-153.14	-68.4	180.2	323.7	317.1	6.62	48.866	
1,900.0	1,888.9	1,853.7	1,843.9	4.6	4.3	-153.01	-75.5	192.6	349.4	342.4	7.03	49.699	
2,000.0	1,987.9	1,950.3	1,939.5	4.9	4.6	-152.91	-82.5	205.1	375.1	367.6	7.44	50.436	
2,100.0	2,086.8	2,047.0	2,035.0	5.2	4.9	-152.81	-89.6	217.5	400.7	392.9	7.84	51.091	
2,200.0	2,185.8	2,143.6	2,130.6	5.5	5.1	-152.73	-96.6	230.0	426.4	418.1	8.25	51.677	
2,300.0	2,284.7	2,240.2	2,226.2	5.8	5.4	-152.66	-103.7	242.4	452.1	443.4	8.66	52.204	
2,400.0	2,383.7	2,336.9	2,321.8	6.1	5.7	-152.60	-110.8	254.9	477.8	468.7	9.07	52.681	
2,500.0	2,482.6	2,433.5	2,417.4	6.4	6.0	-152.54	-117.8	267.3	503.4	493.9	9.48	53.115	
2,600.0	2,581.5	2,530.2	2,513.0	6.7	6.3	-152.49	-124.9	279.8	529.1	519.2	9.89	53.510	
2,700.0	2,680.5	2,626.8	2,608.5	7.0	6.6	-152.44	-131.9	292.2	554.8	544.5	10.30	53.873	
2,800.0	2,779.4	2,723.5	2,704.1	7.3	6.9	-152.40	-139.0	304.7	580.5	569.7	10.71	54.206	
2,900.0	2,878.4	2,820.1	2,799.7	7.6	7.2	-152.36	-146.0	317.1	606.1	595.0	11.12	54.513	
3,000.0	2,977.3	2,916.8	2,895.3	7.9	7.5	-152.32	-153.1	329.6	631.8	620.3	11.53	54.797	
3,100.0	3,076.2	3,013.4	2,990.9	8.2	7.8	-152.29	-160.2	342.0	657.5	645.5	11.94	55.061	
3,200.0	3,175.2	3,110.1	3,086.4	8.5	8.1	-152.26	-167.2	354.5	683.2	670.8	12.35	55.306	
3,300.0	3,274.1	3,206.7	3,182.0	8.8	8.4	-152.23	-174.3	366.9	708.8	696.1	12.76	55.535	
3,400.0	3,373.1	3,303.4	3,277.6	9.1	8.7	-152.20	-181.3	379.4	734.5	721.3	13.18	55.749	
3,500.0	3,472.0	3,400.0	3,373.2	9.4	9.0	-152.18	-188.4	391.8	760.2	746.6	13.59	55.949	
3,600.0	3,570.9	3,496.6	3,468.8	9.8	9.3	-152.15	-195.4	404.3	785.9	771.9	14.00	56.137	
3,700.0	3,669.9	3,593.3	3,564.3	10.1	9.6	-152.13	-202.5	416.7	811.6	797.1	14.41	56.314	
3,800.0	3,768.8	3,689.9	3,659.9	10.4	9.9	-152.11	-209.6	429.2	837.2	822.4	14.82	56.481	
3,900.0	3,867.8	3,786.6	3,755.5	10.7	10.2	-152.09	-216.6	441.6	862.9	847.7	15.24	56.638	
4,000.0	3,966.7	3,883.2	3,851.1	11.0	10.5	-152.07	-223.7	454.1	888.6	872.9	15.65	56.786	
4,100.0	4,065.7	3,979.9	3,946.7	11.3	10.8	-152.06	-230.7	466.5	914.3	898.2	16.06	56.927	
4,200.0	4,164.6	4,076.5	4,042.2	11.6	11.1	-152.04	-237.8	479.0	939.9	923.5	16.47	57.060	
4,300.0	4,263.5	4,173.2	4,137.8	11.9	11.4	-152.02	-244.8	491.5	965.6	948.7	16.89	57.187	
4,400.0	4,362.5	4,269.8	4,233.4	12.2	11.7	-152.01	-251.9	503.9	991.3	974.0	17.30	57.307	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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	90.32	-0.4	67.6	67.6				
100.0	100.0	100.0	100.0	0.2	0.2	90.32	-0.4	67.6	67.6	67.3	0.30	222.651	
200.0	200.0	200.0	200.0	0.3	0.3	90.32	-0.4	67.6	67.6	67.0	0.65	103.592	
266.7	266.7	266.7	266.7	0.4	0.4	90.32	-0.4	67.6	67.6	66.7	0.89	76.369	CC
300.0	300.0	300.0	300.0	0.5	0.5	90.32	-0.4	67.6	67.6	66.6	1.00	67.500	ES
400.0	400.0	398.9	398.9	0.7	0.7	-153.32	-0.7	68.4	69.2	67.8	1.35	51.288	
500.0	500.0	497.7	497.6	0.9	0.9	-153.40	-1.8	70.7	73.9	72.2	1.70	43.548	
600.0	599.9	596.1	596.0	1.0	1.0	-153.53	-3.5	74.6	81.7	79.7	2.05	39.944	
700.0	699.7	694.2	693.9	1.2	1.2	-153.66	-5.9	80.0	92.7	90.3	2.40	38.654	SF
800.0	799.4	791.6	791.0	1.4	1.4	-153.78	-8.9	86.9	106.8	104.0	2.75	38.775	
900.0	898.9	888.4	887.3	1.7	1.6	-153.88	-12.6	95.2	123.9	120.8	3.11	39.807	
1,000.0	998.3	984.3	982.6	1.9	1.9	-153.96	-16.9	105.0	144.1	140.6	3.48	41.445	
1,100.0	1,097.4	1,079.2	1,076.8	2.2	2.1	-154.01	-21.7	116.0	167.3	163.4	3.85	43.496	
1,200.0	1,196.4	1,173.1	1,169.7	2.5	2.4	-154.06	-27.2	128.4	193.1	188.9	4.22	45.731	
1,300.0	1,295.3	1,266.3	1,261.7	2.8	2.7	-153.97	-33.2	142.0	220.5	215.9	4.61	47.865	
1,400.0	1,394.2	1,359.7	1,353.6	3.1	3.0	-153.76	-39.8	157.0	249.2	244.2	4.99	49.893	
1,500.0	1,493.2	1,455.3	1,447.8	3.4	3.3	-153.55	-46.7	172.6	278.2	272.9	5.39	51.623	
1,600.0	1,592.1	1,551.0	1,541.9	3.6	3.7	-153.38	-53.6	188.3	307.3	301.5	5.79	53.099	
1,700.0	1,691.1	1,646.7	1,636.0	3.9	4.0	-153.24	-60.5	204.0	336.4	330.2	6.19	54.372	
1,800.0	1,790.0	1,742.4	1,730.2	4.2	4.3	-153.12	-67.5	219.7	365.5	358.9	6.59	55.480	
1,900.0	1,888.9	1,838.0	1,824.3	4.6	4.6	-153.02	-74.4	235.3	394.5	387.5	6.99	56.452	
2,000.0	1,987.9	1,933.7	1,918.4	4.9	5.0	-152.94	-81.3	251.0	423.6	416.2	7.39	57.312	
2,100.0	2,086.8	2,029.4	2,012.6	5.2	5.3	-152.86	-88.2	266.7	452.7	444.9	7.79	58.078	
2,200.0	2,185.8	2,125.1	2,106.7	5.5	5.7	-152.80	-95.1	282.4	481.8	473.6	8.20	58.763	
2,300.0	2,284.7	2,220.8	2,200.8	5.8	6.0	-152.74	-102.0	298.0	510.8	502.2	8.60	59.381	
2,400.0	2,383.7	2,316.4	2,294.9	6.1	6.3	-152.69	-108.9	313.7	539.9	530.9	9.01	59.940	
2,500.0	2,482.6	2,412.1	2,389.1	6.4	6.7	-152.64	-115.9	329.4	569.0	559.6	9.41	60.448	
2,600.0	2,581.5	2,507.8	2,483.2	6.7	7.0	-152.60	-122.8	345.1	598.1	588.2	9.82	60.912	
2,700.0	2,680.5	2,603.5	2,577.3	7.0	7.4	-152.56	-129.7	360.7	627.1	616.9	10.22	61.338	
2,800.0	2,779.4	2,699.1	2,671.5	7.3	7.7	-152.52	-136.6	376.4	656.2	645.6	10.63	61.729	
2,900.0	2,878.4	2,794.8	2,765.6	7.6	8.0	-152.49	-143.5	392.1	685.3	674.3	11.04	62.090	
3,000.0	2,977.3	2,890.5	2,859.7	7.9	8.4	-152.46	-150.4	407.8	714.4	702.9	11.44	62.424	
3,100.0	3,076.2	2,986.2	2,953.9	8.2	8.7	-152.43	-157.4	423.4	743.5	731.6	11.85	62.734	
3,200.0	3,175.2	3,081.9	3,048.0	8.5	9.1	-152.41	-164.3	439.1	772.5	760.3	12.26	63.023	
3,300.0	3,274.1	3,177.5	3,142.1	8.8	9.4	-152.38	-171.2	454.8	801.6	788.9	12.67	63.292	
3,400.0	3,373.1	3,273.2	3,236.3	9.1	9.8	-152.36	-178.1	470.5	830.7	817.6	13.07	63.544	
3,500.0	3,472.0	3,368.9	3,330.4	9.4	10.1	-152.34	-185.0	486.2	859.8	846.3	13.48	63.780	
3,600.0	3,570.9	3,464.6	3,424.5	9.8	10.4	-152.32	-191.9	501.8	888.8	875.0	13.89	64.002	
3,700.0	3,669.9	3,560.3	3,518.7	10.1	10.8	-152.31	-198.9	517.5	917.9	903.6	14.30	64.210	
3,800.0	3,768.8	3,655.9	3,612.8	10.4	11.1	-152.29	-205.8	533.2	947.0	932.3	14.70	64.406	
3,900.0	3,867.8	3,751.6	3,706.9	10.7	11.5	-152.27	-212.7	548.9	976.1	961.0	15.11	64.592	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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	90.30	-0.4	75.2	75.2				
100.0	100.0	100.0	100.0	0.2	0.2	90.30	-0.4	75.2	75.2	74.9	0.30	247.492	
166.7	166.7	166.7	166.7	0.3	0.3	90.30	-0.4	75.2	75.2	74.6	0.54	140.130	CC
200.0	200.0	200.0	200.0	0.3	0.3	90.30	-0.4	75.2	75.2	74.5	0.65	115.153	ES
300.0	300.0	298.8	298.8	0.5	0.5	90.52	-0.7	76.0	76.0	75.0	1.00	75.932	
400.0	400.0	397.5	397.4	0.7	0.7	-152.73	-1.6	78.4	79.2	77.8	1.35	58.781	
500.0	500.0	495.9	495.8	0.9	0.9	-152.54	-3.1	82.3	85.6	83.9	1.70	50.473	
600.0	599.9	594.0	593.7	1.0	1.1	-152.50	-5.1	87.9	95.1	93.1	2.05	46.506	
700.0	699.7	691.6	691.0	1.2	1.3	-152.58	-7.7	94.9	107.8	105.4	2.40	44.964	
800.0	799.4	788.5	787.5	1.4	1.5	-152.72	-10.9	103.5	123.6	120.8	2.75	44.903	SF
900.0	898.9	884.6	883.0	1.7	1.7	-152.89	-14.6	113.4	142.5	139.4	3.11	45.796	
1,000.0	998.3	979.8	977.3	1.9	2.0	-153.06	-18.9	124.8	164.4	160.9	3.47	47.327	
1,100.0	1,097.4	1,073.9	1,070.5	2.2	2.3	-153.23	-23.6	137.5	189.4	185.5	3.84	49.296	
1,200.0	1,196.4	1,166.9	1,162.3	2.5	2.6	-153.41	-28.8	151.4	217.0	212.8	4.22	51.466	
1,300.0	1,295.3	1,259.1	1,253.0	2.8	2.9	-153.47	-34.5	166.6	246.2	241.6	4.60	53.555	
1,400.0	1,394.2	1,350.4	1,342.7	3.1	3.2	-153.40	-40.6	183.0	276.8	271.8	4.98	55.577	
1,500.0	1,493.2	1,440.8	1,431.1	3.4	3.6	-153.24	-47.1	200.6	308.8	303.4	5.36	57.553	
1,600.0	1,592.1	1,535.0	1,523.1	3.6	3.9	-153.06	-54.2	219.6	341.5	335.8	5.76	59.295	
1,700.0	1,691.1	1,629.4	1,615.3	3.9	4.3	-152.91	-61.3	238.7	374.3	368.2	6.16	60.794	
1,800.0	1,790.0	1,723.9	1,707.5	4.2	4.7	-152.78	-68.4	257.8	407.1	400.6	6.56	62.099	
1,900.0	1,888.9	1,818.4	1,799.8	4.6	5.1	-152.67	-75.5	276.9	439.9	433.0	6.96	63.246	
2,000.0	1,987.9	1,912.8	1,892.0	4.9	5.5	-152.58	-82.7	296.0	472.7	465.4	7.36	64.260	
2,100.0	2,086.8	2,007.3	1,984.3	5.2	5.9	-152.50	-89.8	315.2	505.5	497.8	7.76	65.163	
2,200.0	2,185.8	2,101.8	2,076.5	5.5	6.3	-152.43	-96.9	334.3	538.3	530.2	8.16	65.972	
2,300.0	2,284.7	2,196.2	2,168.7	5.8	6.6	-152.37	-104.0	353.4	571.1	562.6	8.56	66.701	
2,400.0	2,383.7	2,290.7	2,261.0	6.1	7.0	-152.31	-111.1	372.5	603.9	595.0	8.97	67.361	
2,500.0	2,482.6	2,385.2	2,353.2	6.4	7.4	-152.26	-118.2	391.6	636.7	627.4	9.37	67.961	
2,600.0	2,581.5	2,479.6	2,445.5	6.7	7.8	-152.21	-125.4	410.7	669.5	659.8	9.77	68.509	
2,700.0	2,680.5	2,574.1	2,537.7	7.0	8.2	-152.17	-132.5	429.8	702.3	692.1	10.18	69.012	
2,800.0	2,779.4	2,668.6	2,629.9	7.3	8.6	-152.13	-139.6	448.9	735.1	724.5	10.58	69.474	
2,900.0	2,878.4	2,763.0	2,722.2	7.6	9.0	-152.10	-146.7	468.0	767.9	756.9	10.99	69.901	
3,000.0	2,977.3	2,857.5	2,814.4	7.9	9.4	-152.07	-153.8	487.1	800.7	789.3	11.39	70.296	
3,100.0	3,076.2	2,952.0	2,906.7	8.2	9.8	-152.04	-160.9	506.2	833.5	821.7	11.80	70.663	
3,200.0	3,175.2	3,046.4	2,998.9	8.5	10.2	-152.01	-168.1	525.3	866.3	854.1	12.20	71.004	
3,300.0	3,274.1	3,140.9	3,091.1	8.8	10.6	-151.99	-175.2	544.4	899.1	886.5	12.61	71.323	
3,400.0	3,373.1	3,235.4	3,183.4	9.1	11.0	-151.96	-182.3	563.5	931.9	918.9	13.01	71.621	
3,500.0	3,472.0	3,329.8	3,275.6	9.4	11.4	-151.94	-189.4	582.6	964.7	951.3	13.42	71.900	
3,600.0	3,570.9	3,424.3	3,367.9	9.8	11.8	-151.92	-196.5	601.7	997.5	983.7	13.82	72.162	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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	-67.70	192.0	-468.0	505.9				
100.0	100.0	101.3	101.3	0.2	0.2	-67.69	192.0	-468.0	505.9	505.5	0.33	1,548.718	
200.0	200.0	201.5	201.5	0.3	0.4	-67.67	192.2	-467.9	505.8	505.1	0.67	750.414	
300.0	300.0	301.7	301.7	0.5	0.5	-67.63	192.5	-467.6	505.7	504.7	1.02	495.098	
400.0	400.0	401.8	401.8	0.7	0.7	48.90	192.9	-467.3	505.0	503.6	1.37	367.611	
500.0	500.0	502.0	502.0	0.9	0.9	49.22	193.4	-466.9	503.1	501.4	1.72	291.759	
600.0	599.9	602.0	602.0	1.0	1.0	49.71	194.1	-466.5	500.1	498.0	2.08	240.537	
700.0	699.7	702.0	701.9	1.2	1.2	50.38	194.8	-465.9	496.0	493.5	2.44	203.257	
800.0	799.4	801.7	801.7	1.4	1.4	51.25	195.7	-465.2	490.7	487.9	2.81	174.645	
900.0	898.9	910.6	910.6	1.7	1.6	52.44	196.6	-463.8	484.0	480.8	3.21	150.766	
1,000.0	998.3	1,020.6	1,020.5	1.9	1.8	53.73	195.0	-460.4	473.8	470.2	3.62	130.720	
1,100.0	1,097.4	1,134.0	1,133.7	2.2	2.0	55.20	190.7	-454.6	459.8	455.8	4.06	113.176	
1,200.0	1,196.4	1,243.4	1,242.6	2.5	2.2	56.66	184.2	-447.3	443.0	438.4	4.51	98.209	
1,300.0	1,295.3	1,351.7	1,350.1	2.8	2.4	57.96	174.8	-438.3	423.5	418.6	4.96	85.336	
1,400.0	1,394.2	1,453.0	1,450.5	3.1	2.7	59.27	165.1	-428.7	402.8	397.4	5.41	74.411	
1,500.0	1,493.2	1,555.0	1,551.4	3.4	2.9	60.94	155.6	-417.2	381.1	375.2	5.88	64.857	
1,600.0	1,592.1	1,661.4	1,656.5	3.6	3.2	62.91	145.0	-404.0	358.4	352.0	6.36	56.368	
1,700.0	1,691.1	1,765.0	1,758.2	3.9	3.6	65.07	132.4	-388.7	332.8	325.9	6.84	48.622	
1,800.0	1,790.0	1,865.7	1,856.7	4.2	3.9	67.49	119.3	-373.0	306.5	299.2	7.34	41.779	
1,900.0	1,888.9	1,963.9	1,952.5	4.6	4.3	70.31	105.3	-356.2	279.0	271.1	7.84	35.569	
2,000.0	1,987.9	2,059.9	2,046.1	4.9	4.7	73.71	91.7	-339.7	252.2	243.8	8.37	30.124	
2,100.0	2,086.8	2,158.0	2,141.4	5.2	5.1	78.10	77.2	-321.7	225.1	216.1	8.94	25.167	
2,200.0	2,185.8	2,252.1	2,232.6	5.5	5.5	83.45	62.9	-303.8	198.9	189.3	9.56	20.795	
2,300.0	2,284.7	2,344.9	2,322.9	5.8	5.9	90.16	49.6	-286.7	175.9	165.6	10.25	17.150	
2,400.0	2,383.7	2,439.1	2,414.6	6.1	6.2	98.67	36.5	-269.5	156.6	145.6	11.03	14.201	
2,500.0	2,482.6	2,534.8	2,507.8	6.4	6.6	109.19	23.4	-252.2	142.0	130.1	11.85	11.985	
2,600.0	2,581.5	2,631.4	2,601.6	6.7	7.1	121.84	8.8	-234.2	132.1	119.5	12.62	10.470	
2,683.8	2,664.4	2,710.7	2,678.4	6.9	7.4	133.30	-3.8	-219.0	129.1	116.0	13.10	9.860	CC, ES
2,700.0	2,680.5	2,725.9	2,693.2	7.0	7.5	135.50	-6.2	-216.2	129.3	116.1	13.17	9.817	SF
2,800.0	2,779.4	2,820.8	2,785.3	7.3	7.9	148.42	-20.6	-199.3	134.5	121.1	13.46	9.991	
2,900.0	2,878.4	2,914.2	2,876.2	7.6	8.3	159.73	-34.6	-182.7	146.8	133.2	13.63	10.770	
3,000.0	2,977.3	3,009.1	2,968.4	7.9	8.7	169.27	-48.3	-165.0	165.2	151.4	13.78	11.987	
3,100.0	3,076.2	3,104.1	3,060.9	8.2	9.1	176.83	-62.2	-147.9	186.8	172.8	13.99	13.352	
3,200.0	3,175.2	3,198.8	3,153.0	8.5	9.5	-177.23	-75.9	-130.6	211.2	196.9	14.27	14.801	
3,300.0	3,274.1	3,294.7	3,246.4	8.8	9.9	-172.58	-89.3	-113.6	237.1	222.5	14.60	16.247	
3,400.0	3,373.1	3,389.6	3,338.9	9.1	10.4	-168.95	-102.5	-97.1	263.9	248.9	14.96	17.636	
3,500.0	3,472.0	3,484.5	3,431.3	9.4	10.8	-165.89	-116.0	-80.2	291.7	276.4	15.35	19.001	
3,600.0	3,570.9	3,579.2	3,523.5	9.8	11.2	-163.39	-129.4	-63.5	320.1	304.4	15.76	20.319	
3,700.0	3,669.9	3,673.1	3,615.1	10.1	11.6	-161.36	-142.3	-46.8	349.3	333.1	16.18	21.592	
3,800.0	3,768.8	3,765.5	3,704.9	10.4	12.0	-159.56	-155.6	-29.8	379.2	362.6	16.60	22.845	
3,900.0	3,867.8	3,855.8	3,792.6	10.7	12.4	-158.06	-168.5	-12.5	410.2	393.2	17.02	24.097	
4,000.0	3,966.7	3,953.6	3,887.4	11.0	12.9	-156.62	-182.7	6.9	442.1	424.6	17.47	25.304	
4,100.0	4,065.7	4,044.1	3,975.1	11.3	13.3	-155.41	-196.3	24.3	473.6	455.7	17.91	26.439	
4,200.0	4,164.6	4,144.2	4,072.0	11.6	13.7	-154.21	-211.5	44.2	506.0	487.6	18.38	27.535	
4,300.0	4,263.5	4,239.4	4,164.6	11.9	14.2	-153.33	-225.0	61.8	537.1	518.2	18.82	28.539	
4,400.0	4,362.5	4,334.3	4,257.0	12.2	14.6	-152.60	-237.9	79.4	568.4	549.1	19.26	29.509	
4,500.0	4,461.4	4,442.4	4,362.5	12.5	15.0	-151.95	-251.7	98.6	599.0	579.2	19.73	30.359	
4,600.0	4,560.4	4,542.0	4,460.0	12.8	15.4	-151.48	-263.8	114.3	627.5	607.4	20.18	31.098	
4,700.0	4,659.3	4,641.4	4,557.5	13.1	15.8	-151.04	-275.9	129.8	656.1	635.5	20.63	31.804	
4,800.0	4,758.2	4,748.5	4,662.7	13.5	16.2	-150.63	-288.6	145.1	683.3	662.2	21.10	32.391	
4,900.0	4,857.2	4,841.6	4,754.3	13.8	16.5	-150.33	-299.4	158.2	710.4	688.8	21.53	32.994	
5,000.0	4,956.1	4,949.5	4,860.5	14.1	16.9	-150.04	-311.4	172.5	736.6	714.6	21.99	33.490	

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 4B-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 4B-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

Survey Program: 843-Geolink MWD

Offset Site Error: 0.0 ft

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,055.1	5,052.6	4,962.3	14.4	17.2	-149.82	-322.4	184.9	761.6	739.1	22.44	33.939	
5,200.0	5,154.0	5,155.6	5,064.2	14.7	17.5	-149.76	-331.4	196.9	786.1	763.3	22.87	34.373	
5,300.0	5,253.0	5,260.2	5,168.0	15.0	17.8	-149.82	-338.9	208.0	809.6	786.3	23.30	34.747	
5,400.0	5,351.9	5,366.1	5,273.0	15.3	18.1	-149.84	-346.9	218.4	832.3	808.5	23.74	35.060	
5,500.0	5,450.8	5,465.1	5,371.4	15.6	18.4	-149.89	-353.9	227.2	854.1	830.0	24.15	35.360	
5,600.0	5,549.8	5,575.7	5,481.3	15.9	18.6	-150.00	-360.9	236.5	875.3	850.7	24.59	35.597	
5,700.0	5,648.7	5,671.4	5,576.6	16.2	18.9	-150.10	-366.7	244.0	896.0	871.0	24.99	35.853	
5,800.0	5,747.7	5,774.7	5,679.4	16.5	19.1	-150.27	-372.0	251.8	916.4	891.0	25.40	36.074	
5,900.0	5,846.6	5,883.5	5,787.9	16.9	19.3	-150.46	-377.1	259.3	936.0	910.2	25.81	36.263	
6,000.0	5,945.5	5,997.8	5,902.0	17.2	19.5	-150.79	-380.3	265.5	954.2	928.0	26.21	36.406	
6,100.0	6,044.5	6,109.6	6,013.7	17.5	19.7	-151.11	-382.9	269.7	970.8	944.1	26.62	36.471	
6,200.0	6,143.4	6,225.3	6,129.3	17.8	19.8	-151.44	-385.6	272.8	986.3	959.3	27.02	36.498	
6,300.0	6,242.4	6,340.1	6,244.0	18.1	20.0	-151.81	-387.2	273.4	999.7	972.3	27.40	36.478	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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
9,100.0	7,350.0	7,318.0	7,318.0	36.0	12.8	90.00	2,045.1	5.3	981.0	935.8	45.29	21.659	
9,200.0	7,350.0	7,318.0	7,318.0	37.4	12.8	90.00	2,045.1	5.3	940.4	893.5	46.91	20.047	
9,300.0	7,350.0	7,318.0	7,318.0	38.9	12.8	90.00	2,045.1	5.3	909.0	860.5	48.54	18.727	
9,400.0	7,350.0	7,318.0	7,318.0	40.4	12.8	90.00	2,045.1	5.3	887.9	837.7	50.18	17.692	
9,500.0	7,350.0	7,318.0	7,318.0	42.0	12.8	90.00	2,045.1	5.3	877.6	825.8	51.83	16.932	
9,540.3	7,350.0	7,318.0	7,318.0	42.6	12.8	90.00	2,045.1	5.3	876.7	824.2	52.50	16.699	CC, ES
9,600.0	7,350.0	7,318.0	7,318.0	43.5	12.8	90.00	2,045.1	5.3	878.7	825.2	53.49	16.427	
9,700.0	7,350.0	7,318.0	7,318.0	45.1	12.8	90.00	2,045.1	5.3	891.1	836.0	55.16	16.155	
9,800.0	7,350.0	7,318.0	7,318.0	46.7	12.8	90.00	2,045.1	5.3	914.4	857.5	56.83	16.088	SF
9,900.0	7,350.0	7,318.0	7,318.0	48.2	12.8	90.00	2,045.1	5.3	947.6	889.1	58.51	16.195	
10,000.0	7,350.0	7,318.0	7,318.0	49.8	12.8	90.00	2,045.1	5.3	989.9	929.7	60.20	16.444	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Kiyota 4B-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 4B-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 4B-35H-O367
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.42°