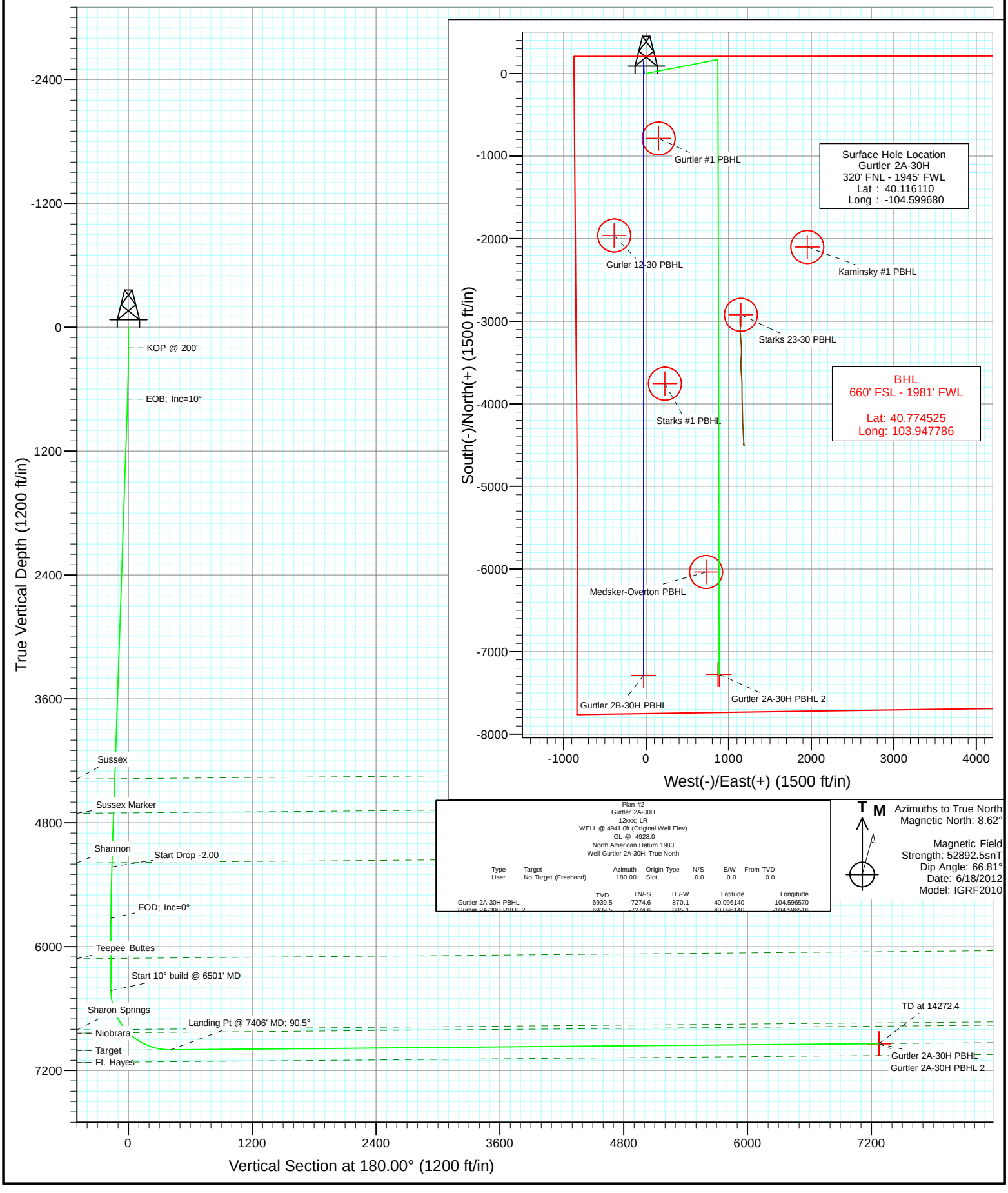
ENCANA

Project: DJ Wattenberg
Site: NWNW S30-T2N-R64W (Gurtler)
Well: Gurtler 2A-30H
Wellbore: Hz
Design: Plan #2

CATHEDRAL



Plan #2
Gurtler 2A-30H
12xxx; LR
WELL @ 4941.0ft (Original Well Elev)
GL @ 4928.0
North American Datum 1983
Well Gurtler 2A-30H, True North

Type	Target	Azimuth	Origin Type	N/S	E/W	From TVD
User	No Target (Freehand)	180.00	Slot	0.0	0.0	0.0

	TVD	+N/-S	+E/-W	Latitude	Longitude
Gurtler 2A-30H PBHL	6939.5	-7274.6	870.1	40.096140	-104.596570
Gurtler 2A-30H PBHL 2	6939.5	-7274.6	885.1	40.096140	-104.596516

T M
Azimuths to True North
Magnetic North: 8.62°

Magnetic Field
Strength: 52892.5snT
Dip Angle: 66.81°
Date: 6/18/2012
Model: IGRF2010

Planning Report

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Gurtler 2A-30H
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site:	NWNW S30-T2N-R64W (Gurtler)	**North Reference:**	True
Well:	Gurtler 2A-30H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

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 NWNW S30-T2N-R64W (Gurtler)

Site Position:		**Northing:**	1,286,423.76 ft	**Latitude:**	40.116110
From:	Lat/Long	**Easting:**	3,251,800.62 ft	**Longitude:**	-104.599680
Position Uncertainty:	0.0 ft	**Slot Radius:**	13.200 in	**Grid Convergence:**	0.58 °

Well Gurtler 2A-30H

Well Position	**+N/-S**	0.0 ft	**Northing:**	1,286,423.76 ft	**Latitude:**	40.116110
	+E/-W	0.0 ft	**Easting:**	3,251,800.62 ft	**Longitude:**	-104.599680
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,928.0 ft

Wellbore Hz

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/18/2012	8.62	66.81	52,893

Design Plan #2

Audit Notes:

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

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	180.00

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
700.0	10.00	79.00	697.5	8.3	42.7	2.00	2.00	0.00	79.00	
5,300.0	10.00	79.00	5,227.6	160.7	826.8	0.00	0.00	0.00	0.00	
5,800.0	0.00	0.00	5,725.0	169.0	869.6	2.00	-2.00	0.00	180.00	
6,501.4	0.00	0.00	6,426.5	169.0	869.6	0.00	0.00	0.00	0.00	
7,406.4	90.50	179.88	6,999.4	-408.9	870.8	10.00	10.00	0.00	179.88	
14,272.4	90.50	179.88	6,939.5	-7,274.6	885.1	0.00	0.00	0.00	0.00	Gurtler 2A-30H PBHL

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Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site:	NWNW S30-T2N-R64W (Gurtler)	**North Reference:**	True
Well:	Gurtler 2A-30H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	2.00	79.00	300.0	0.3	1.7	-0.3	2.00	2.00	
400.0	4.00	79.00	399.8	1.3	6.9	-1.3	2.00	2.00	
500.0	6.00	79.00	499.5	3.0	15.4	-3.0	2.00	2.00	
600.0	8.00	79.00	598.7	5.3	27.4	-5.3	2.00	2.00	
700.0	10.00	79.00	697.5	8.3	42.7	-8.3	2.00	2.00	
800.0	10.00	79.00	795.9	11.6	59.8	-11.6	0.00	0.00	
900.0	10.00	79.00	894.4	14.9	76.8	-14.9	0.00	0.00	
1,000.0	10.00	79.00	992.9	18.2	93.9	-18.2	0.00	0.00	
1,100.0	10.00	79.00	1,091.4	21.6	110.9	-21.6	0.00	0.00	
1,200.0	10.00	79.00	1,189.9	24.9	128.0	-24.9	0.00	0.00	
1,300.0	10.00	79.00	1,288.4	28.2	145.0	-28.2	0.00	0.00	
1,400.0	10.00	79.00	1,386.8	31.5	162.0	-31.5	0.00	0.00	
1,500.0	10.00	79.00	1,485.3	34.8	179.1	-34.8	0.00	0.00	
1,600.0	10.00	79.00	1,583.8	38.1	196.1	-38.1	0.00	0.00	
1,700.0	10.00	79.00	1,682.3	41.4	213.2	-41.4	0.00	0.00	
1,800.0	10.00	79.00	1,780.8	44.8	230.2	-44.8	0.00	0.00	
1,900.0	10.00	79.00	1,879.2	48.1	247.3	-48.1	0.00	0.00	
2,000.0	10.00	79.00	1,977.7	51.4	264.3	-51.4	0.00	0.00	
2,100.0	10.00	79.00	2,076.2	54.7	281.4	-54.7	0.00	0.00	
2,200.0	10.00	79.00	2,174.7	58.0	298.4	-58.0	0.00	0.00	
2,300.0	10.00	79.00	2,273.2	61.3	315.5	-61.3	0.00	0.00	
2,400.0	10.00	79.00	2,371.6	64.6	332.5	-64.6	0.00	0.00	
2,500.0	10.00	79.00	2,470.1	67.9	349.5	-67.9	0.00	0.00	
2,600.0	10.00	79.00	2,568.6	71.3	366.6	-71.3	0.00	0.00	
2,700.0	10.00	79.00	2,667.1	74.6	383.6	-74.6	0.00	0.00	
2,800.0	10.00	79.00	2,765.6	77.9	400.7	-77.9	0.00	0.00	
2,900.0	10.00	79.00	2,864.0	81.2	417.7	-81.2	0.00	0.00	
3,000.0	10.00	79.00	2,962.5	84.5	434.8	-84.5	0.00	0.00	
3,100.0	10.00	79.00	3,061.0	87.8	451.8	-87.8	0.00	0.00	
3,200.0	10.00	79.00	3,159.5	91.1	468.9	-91.1	0.00	0.00	
3,300.0	10.00	79.00	3,258.0	94.5	485.9	-94.5	0.00	0.00	
3,400.0	10.00	79.00	3,356.4	97.8	503.0	-97.8	0.00	0.00	
3,500.0	10.00	79.00	3,454.9	101.1	520.0	-101.1	0.00	0.00	
3,600.0	10.00	79.00	3,553.4	104.4	537.1	-104.4	0.00	0.00	
3,700.0	10.00	79.00	3,651.9	107.7	554.1	-107.7	0.00	0.00	
3,800.0	10.00	79.00	3,750.4	111.0	571.1	-111.0	0.00	0.00	
3,900.0	10.00	79.00	3,848.9	114.3	588.2	-114.3	0.00	0.00	
4,000.0	10.00	79.00	3,947.3	117.6	605.2	-117.6	0.00	0.00	
4,100.0	10.00	79.00	4,045.8	121.0	622.3	-121.0	0.00	0.00	
4,200.0	10.00	79.00	4,144.3	124.3	639.3	-124.3	0.00	0.00	
4,300.0	10.00	79.00	4,242.8	127.6	656.4	-127.6	0.00	0.00	
4,400.0	10.00	79.00	4,341.3	130.9	673.4	-130.9	0.00	0.00	
4,500.0	10.00	79.00	4,439.7	134.2	690.5	-134.2	0.00	0.00	
4,600.0	10.00	79.00	4,538.2	137.5	707.5	-137.5	0.00	0.00	
4,700.0	10.00	79.00	4,636.7	140.8	724.6	-140.8	0.00	0.00	
4,800.0	10.00	79.00	4,735.2	144.2	741.6	-144.2	0.00	0.00	
4,900.0	10.00	79.00	4,833.7	147.5	758.6	-147.5	0.00	0.00	
5,000.0	10.00	79.00	4,932.1	150.8	775.7	-150.8	0.00	0.00	
5,100.0	10.00	79.00	5,030.6	154.1	792.7	-154.1	0.00	0.00	

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Project:	DJ Wattenberg	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site:	NWNW S30-T2N-R64W (Gurtler)	**North Reference:**	True
Well:	Gurtler 2A-30H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

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
5,200.0	10.00	79.00	5,129.1	157.4	809.8	-157.4	0.00	0.00	
5,300.0	10.00	79.00	5,227.6	160.7	826.8	-160.7	0.00	0.00	
5,400.0	8.00	79.00	5,326.3	163.7	842.2	-163.7	2.00	-2.00	
5,500.0	6.00	79.00	5,425.6	166.0	854.1	-166.0	2.00	-2.00	
5,600.0	4.00	79.00	5,525.2	167.7	862.7	-167.7	2.00	-2.00	
5,700.0	2.00	79.00	5,625.1	168.7	867.8	-168.7	2.00	-2.00	
5,800.0	0.00	0.00	5,725.0	169.0	869.6	-169.0	2.00	-2.00	
5,900.0	0.00	0.00	5,825.0	169.0	869.6	-169.0	0.00	0.00	
6,000.0	0.00	0.00	5,925.0	169.0	869.6	-169.0	0.00	0.00	
6,100.0	0.00	0.00	6,025.0	169.0	869.6	-169.0	0.00	0.00	
6,200.0	0.00	0.00	6,125.0	169.0	869.6	-169.0	0.00	0.00	
6,300.0	0.00	0.00	6,225.0	169.0	869.6	-169.0	0.00	0.00	
6,400.0	0.00	0.00	6,325.0	169.0	869.6	-169.0	0.00	0.00	
6,500.0	0.00	0.00	6,425.0	169.0	869.6	-169.0	0.00	0.00	
6,501.4	0.00	0.00	6,426.5	169.0	869.6	-169.0	0.00	0.00	
6,600.0	9.86	179.88	6,524.6	160.6	869.6	-160.6	10.00	10.00	
6,700.0	19.86	179.88	6,621.1	135.0	869.6	-135.0	10.00	10.00	
6,800.0	29.86	179.88	6,711.7	93.0	869.7	-93.0	10.00	10.00	
6,900.0	39.86	179.88	6,793.7	35.9	869.8	-35.9	10.00	10.00	
7,000.0	49.86	179.88	6,864.5	-34.5	870.0	34.5	10.00	10.00	
7,100.0	59.86	179.88	6,922.0	-116.2	870.1	116.2	10.00	10.00	
7,200.0	69.86	179.88	6,964.4	-206.6	870.3	206.6	10.00	10.00	
7,300.0	79.86	179.88	6,990.5	-303.0	870.5	303.0	10.00	10.00	
7,400.0	89.86	179.88	6,999.4	-402.5	870.7	402.5	10.00	10.00	
7,406.4	90.50	179.88	6,999.4	-408.9	870.8	408.9	10.00	10.00	
7,500.0	90.50	179.88	6,998.6	-502.5	871.0	502.5	0.00	0.00	
7,600.0	90.50	179.88	6,997.7	-602.5	871.2	602.5	0.00	0.00	
7,700.0	90.50	179.88	6,996.9	-702.5	871.4	702.5	0.00	0.00	
7,800.0	90.50	179.88	6,996.0	-802.5	871.6	802.5	0.00	0.00	
7,900.0	90.50	179.88	6,995.1	-902.5	871.8	902.5	0.00	0.00	
8,000.0	90.50	179.88	6,994.2	-1,002.5	872.0	1,002.5	0.00	0.00	
8,100.0	90.50	179.88	6,993.4	-1,102.5	872.2	1,102.5	0.00	0.00	
8,200.0	90.50	179.88	6,992.5	-1,202.5	872.4	1,202.5	0.00	0.00	
8,300.0	90.50	179.88	6,991.6	-1,302.5	872.6	1,302.5	0.00	0.00	
8,400.0	90.50	179.88	6,990.7	-1,402.5	872.8	1,402.5	0.00	0.00	
8,500.0	90.50	179.88	6,989.9	-1,502.5	873.0	1,502.5	0.00	0.00	
8,600.0	90.50	179.88	6,989.0	-1,602.5	873.3	1,602.5	0.00	0.00	
8,700.0	90.50	179.88	6,988.1	-1,702.4	873.5	1,702.4	0.00	0.00	
8,800.0	90.50	179.88	6,987.3	-1,802.4	873.7	1,802.4	0.00	0.00	
8,900.0	90.50	179.88	6,986.4	-1,902.4	873.9	1,902.4	0.00	0.00	
9,000.0	90.50	179.88	6,985.5	-2,002.4	874.1	2,002.4	0.00	0.00	
9,100.0	90.50	179.88	6,984.6	-2,102.4	874.3	2,102.4	0.00	0.00	
9,200.0	90.50	179.88	6,983.8	-2,202.4	874.5	2,202.4	0.00	0.00	
9,300.0	90.50	179.88	6,982.9	-2,302.4	874.7	2,302.4	0.00	0.00	
9,400.0	90.50	179.88	6,982.0	-2,402.4	874.9	2,402.4	0.00	0.00	
9,500.0	90.50	179.88	6,981.1	-2,502.4	875.1	2,502.4	0.00	0.00	
9,600.0	90.50	179.88	6,980.3	-2,602.4	875.3	2,602.4	0.00	0.00	
9,700.0	90.50	179.88	6,979.4	-2,702.4	875.5	2,702.4	0.00	0.00	
9,800.0	90.50	179.88	6,978.5	-2,802.4	875.8	2,802.4	0.00	0.00	
9,900.0	90.50	179.88	6,977.7	-2,902.4	876.0	2,902.4	0.00	0.00	
10,000.0	90.50	179.88	6,976.8	-3,002.4	876.2	3,002.4	0.00	0.00	
10,100.0	90.50	179.88	6,975.9	-3,102.4	876.4	3,102.4	0.00	0.00	

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Well:	Gurtler 2A-30H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

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
10,200.0	90.50	179.88	6,975.0	-3,202.4	876.6	3,202.4	0.00	0.00	
10,300.0	90.50	179.88	6,974.2	-3,302.4	876.8	3,302.4	0.00	0.00	
10,400.0	90.50	179.88	6,973.3	-3,402.4	877.0	3,402.4	0.00	0.00	
10,500.0	90.50	179.88	6,972.4	-3,502.4	877.2	3,502.4	0.00	0.00	
10,600.0	90.50	179.88	6,971.5	-3,602.4	877.4	3,602.4	0.00	0.00	
10,700.0	90.50	179.88	6,970.7	-3,702.4	877.6	3,702.4	0.00	0.00	
10,800.0	90.50	179.88	6,969.8	-3,802.4	877.8	3,802.4	0.00	0.00	
10,900.0	90.50	179.88	6,968.9	-3,902.4	878.1	3,902.4	0.00	0.00	
11,000.0	90.50	179.88	6,968.1	-4,002.4	878.3	4,002.4	0.00	0.00	
11,100.0	90.50	179.88	6,967.2	-4,102.4	878.5	4,102.4	0.00	0.00	
11,200.0	90.50	179.88	6,966.3	-4,202.3	878.7	4,202.3	0.00	0.00	
11,300.0	90.50	179.88	6,965.4	-4,302.3	878.9	4,302.3	0.00	0.00	
11,400.0	90.50	179.88	6,964.6	-4,402.3	879.1	4,402.3	0.00	0.00	
11,500.0	90.50	179.88	6,963.7	-4,502.3	879.3	4,502.3	0.00	0.00	
11,600.0	90.50	179.88	6,962.8	-4,602.3	879.5	4,602.3	0.00	0.00	
11,700.0	90.50	179.88	6,961.9	-4,702.3	879.7	4,702.3	0.00	0.00	
11,800.0	90.50	179.88	6,961.1	-4,802.3	879.9	4,802.3	0.00	0.00	
11,900.0	90.50	179.88	6,960.2	-4,902.3	880.1	4,902.3	0.00	0.00	
12,000.0	90.50	179.88	6,959.3	-5,002.3	880.4	5,002.3	0.00	0.00	
12,100.0	90.50	179.88	6,958.5	-5,102.3	880.6	5,102.3	0.00	0.00	
12,200.0	90.50	179.88	6,957.6	-5,202.3	880.8	5,202.3	0.00	0.00	
12,300.0	90.50	179.88	6,956.7	-5,302.3	881.0	5,302.3	0.00	0.00	
12,400.0	90.50	179.88	6,955.8	-5,402.3	881.2	5,402.3	0.00	0.00	
12,500.0	90.50	179.88	6,955.0	-5,502.3	881.4	5,502.3	0.00	0.00	
12,600.0	90.50	179.88	6,954.1	-5,602.3	881.6	5,602.3	0.00	0.00	
12,700.0	90.50	179.88	6,953.2	-5,702.3	881.8	5,702.3	0.00	0.00	
12,800.0	90.50	179.88	6,952.3	-5,802.3	882.0	5,802.3	0.00	0.00	
12,900.0	90.50	179.88	6,951.5	-5,902.3	882.2	5,902.3	0.00	0.00	
13,000.0	90.50	179.88	6,950.6	-6,002.3	882.4	6,002.3	0.00	0.00	
13,100.0	90.50	179.88	6,949.7	-6,102.3	882.7	6,102.3	0.00	0.00	
13,200.0	90.50	179.88	6,948.9	-6,202.3	882.9	6,202.3	0.00	0.00	
13,300.0	90.50	179.88	6,948.0	-6,302.3	883.1	6,302.3	0.00	0.00	
13,400.0	90.50	179.88	6,947.1	-6,402.3	883.3	6,402.3	0.00	0.00	
13,500.0	90.50	179.88	6,946.2	-6,502.3	883.5	6,502.3	0.00	0.00	
13,600.0	90.50	179.88	6,945.4	-6,602.2	883.7	6,602.2	0.00	0.00	
13,700.0	90.50	179.88	6,944.5	-6,702.2	883.9	6,702.2	0.00	0.00	
13,800.0	90.50	179.88	6,943.6	-6,802.2	884.1	6,802.2	0.00	0.00	
13,900.0	90.50	179.88	6,942.7	-6,902.2	884.3	6,902.2	0.00	0.00	
14,000.0	90.50	179.88	6,941.9	-7,002.2	884.5	7,002.2	0.00	0.00	
14,100.0	90.50	179.88	6,941.0	-7,102.2	884.7	7,102.2	0.00	0.00	
14,200.0	90.50	179.88	6,940.1	-7,202.2	884.9	7,202.2	0.00	0.00	
14,272.4	90.50	179.88	6,939.5	-7,274.6	885.1	7,274.6	0.00	0.00	

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Gurtler 2A-30H
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site:	NWNW S30-T2N-R64W (Gurtler)	**North Reference:**	True
Well:	Gurtler 2A-30H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

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
Gurtler 2A-30H PBHL 2 - plan hits target center - Point	0.00	0.00	6,939.5	-7,274.6	885.1	1,279,158.49	3,252,759.54	40.096140	-104.596516
Gurtler 2A-30H PBHL - plan misses target center by 15.0ft at 14272.4ft MD (6939.5 TVD, -7274.6 N, 885.1 E) - Point	0.00	0.00	6,939.5	-7,274.6	870.1	1,279,158.33	3,252,744.49	40.096140	-104.596570

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,432.4	4,372.0	Sussex		-0.50	180.00
4,770.6	4,705.0	Sussex Marker		-0.50	180.00
5,259.2	5,186.0	Shannon		-0.50	180.00
6,189.4	6,113.0	Teepee Buttes		-0.50	180.00
6,911.3	6,802.0	Sharon Springs		-0.50	180.00
6,954.8	6,834.0	Niobrara		-0.50	180.00

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
200.0	200.0	0.0	0.0	KOP @ 200'
700.0	697.5	8.3	42.7	EOB; Inc=10°
5,300.0	5,227.6	160.7	826.8	Start Drop -2.00
5,800.0	5,725.0	169.0	869.6	EOD; Inc=0°
6,501.4	6,426.5	169.0	869.6	Start 10° build @ 6501' MD
7,406.4	6,999.4	-408.9	870.8	Landing Pt @ 7406' MD; 90.5°
14,272.4	6,939.5	-7,274.6	885.1	TD at 14272.4

EnCana Oil & Gas (USA) Inc

DJ Wattenberg
NWNW S30-T2N-R64W (Gurtler)
Gurtler 2A-30H
Hz
Plan #2

Anticollision Report

20 June, 2012

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Reference Plan #2

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	**Error Model:**	Systematic Ellipse
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0ft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**		

Survey Tool Program **Date** 6/20/2012

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	14,272.4	Plan #2 (Hz)	MWD	Geolink MWD

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
NWNW S30-T2N-R64W (Gurtler)						
Gurtler #1 (Existing) - Existing - Existing	7,782.5	6,965.1	720.5	688.8	22.695	CC
Gurtler #1 (Existing) - Existing - Existing	7,800.0	6,965.0	720.7	688.7	22.533	ES
Gurtler #1 (Existing) - Existing - Existing	8,000.0	6,963.2	752.6	717.8	21.586	SF
Gurtler 12-30 (Existing) - Existing - Existing	8,956.6	6,939.9	1,261.1	1,211.0	25.168	CC, ES
Gurtler 12-30 (Existing) - Existing - Existing	9,500.0	6,935.1	1,373.2	1,314.0	23.183	SF
Gurtler 2B-30H - Hz - Plan #1	200.0	200.0	25.2	24.5	38.561	CC, ES
Gurtler 2B-30H - Hz - Plan #1	14,272.4	14,187.7	915.9	656.4	3.528	SF
Kaminsky #1 (Existing) - Existing - Existing	9,101.6	6,976.6	1,077.7	1,025.1	20.492	CC, ES
Kaminsky #1 (Existing) - Existing - Existing	9,500.0	6,973.1	1,149.0	1,089.7	19.375	SF
Medsker-Overton #1 (Existing) - Existing - Existing	13,033.9	6,969.3	156.3	35.9	1.298	Level 3, CC, ES, SF
Starks #1 (Existing) - Existing - Existing	10,753.1	6,949.2	650.1	569.3	8.051	CC, ES
Starks #1 (Existing) - Existing - Existing	10,800.0	6,948.8	651.7	570.2	7.992	SF
Starks 23-30 (Existing) - Existing - Existing	9,920.4	6,957.5	271.9	205.5	4.093	CC, ES, SF
Starks 24-30 (Existing) - Existing - Existing	11,506.2	7,152.7	306.9	195.3	2.749	CC, ES, SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Gurtler #1 (Existing) - Existing - Existing

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
0.0	0.0	0.0	0.0	0.0	0.0	169.13	-786.5	151.0	801.5				
100.0	100.0	69.0	69.0	0.2	0.1	169.13	-786.5	151.0	800.9	800.6	0.27	2,940.722	
200.0	200.0	169.0	169.0	0.3	0.3	169.13	-786.5	151.0	800.9	800.2	0.62	1,288.925	
300.0	300.0	269.0	269.0	0.5	0.5	90.25	-786.5	151.0	800.9	799.9	0.97	822.189	
400.0	399.8	368.8	368.8	0.7	0.6	90.63	-786.5	151.0	800.9	799.6	1.34	596.122	
500.0	499.5	468.5	468.5	0.9	0.8	91.25	-786.5	151.0	801.0	799.3	1.74	459.554	
600.0	598.7	567.7	567.7	1.2	1.0	92.10	-786.5	151.0	801.4	799.2	2.18	367.016	
700.0	697.5	666.5	666.5	1.5	1.2	93.19	-786.5	151.0	802.1	799.5	2.67	300.145	
800.0	795.9	764.9	764.9	1.8	1.3	94.41	-786.5	151.0	803.3	800.1	3.17	253.145	
900.0	894.4	863.4	863.4	2.2	1.5	95.62	-786.5	151.0	804.8	801.2	3.68	218.702	
1,000.0	992.9	961.9	961.9	2.5	1.7	96.83	-786.5	151.0	806.8	802.6	4.19	192.561	
1,100.0	1,091.4	1,060.4	1,060.4	2.9	1.9	98.03	-786.5	151.0	809.0	804.3	4.70	172.135	
1,200.0	1,189.9	1,158.9	1,158.9	3.2	2.0	99.23	-786.5	151.0	811.7	806.5	5.21	155.792	
1,300.0	1,288.4	1,257.4	1,257.4	3.6	2.2	100.42	-786.5	151.0	814.7	809.0	5.72	142.458	
1,400.0	1,386.8	1,355.8	1,355.8	3.9	2.4	101.60	-786.5	151.0	818.1	811.8	6.23	131.399	
1,500.0	1,485.3	1,454.3	1,454.3	4.3	2.5	102.77	-786.5	151.0	821.8	815.0	6.73	122.101	
1,600.0	1,583.8	1,552.8	1,552.8	4.6	2.7	103.92	-786.5	151.0	825.8	818.6	7.23	114.192	
1,700.0	1,682.3	1,651.3	1,651.3	5.0	2.9	105.07	-786.5	151.0	830.3	822.5	7.73	107.397	
1,800.0	1,780.8	1,749.8	1,749.8	5.3	3.1	106.21	-786.5	151.0	835.0	826.8	8.23	101.509	
1,900.0	1,879.2	1,848.2	1,848.2	5.7	3.2	107.33	-786.5	151.0	840.1	831.4	8.72	96.368	
2,000.0	1,977.7	1,946.7	1,946.7	6.0	3.4	108.44	-786.5	151.0	845.5	836.3	9.21	91.851	
2,100.0	2,076.2	2,045.2	2,045.2	6.4	3.6	109.53	-786.5	151.0	851.2	841.5	9.69	87.857	
2,200.0	2,174.7	2,143.7	2,143.7	6.7	3.7	110.61	-786.5	151.0	857.3	847.1	10.17	84.310	
2,300.0	2,273.2	2,242.2	2,242.2	7.1	3.9	111.67	-786.5	151.0	863.6	853.0	10.64	81.143	
2,400.0	2,371.6	2,340.6	2,340.6	7.4	4.1	112.72	-786.5	151.0	870.2	859.1	11.11	78.305	
2,500.0	2,470.1	2,439.1	2,439.1	7.8	4.3	113.75	-786.5	151.0	877.2	865.6	11.58	75.753	
2,600.0	2,568.6	2,537.6	2,537.6	8.1	4.4	114.77	-786.5	151.0	884.4	872.4	12.04	73.450	
2,700.0	2,667.1	2,636.1	2,636.1	8.5	4.6	115.77	-786.5	151.0	891.9	879.4	12.50	71.365	
2,800.0	2,765.6	2,734.6	2,734.6	8.8	4.8	116.76	-786.5	151.0	899.7	886.8	12.95	69.472	
2,900.0	2,864.0	2,833.0	2,833.0	9.2	4.9	117.72	-786.5	151.0	907.7	894.3	13.40	67.751	
3,000.0	2,962.5	2,931.5	2,931.5	9.5	5.1	118.67	-786.5	151.0	916.1	902.2	13.84	66.181	
3,100.0	3,061.0	3,030.0	3,030.0	9.9	5.3	119.61	-786.5	151.0	924.6	910.3	14.28	64.747	
3,200.0	3,159.5	3,128.5	3,128.5	10.2	5.5	120.52	-786.5	151.0	933.4	918.7	14.71	63.434	
3,300.0	3,258.0	3,227.0	3,227.0	10.6	5.6	121.42	-786.5	151.0	942.4	927.3	15.14	62.230	
3,400.0	3,356.4	3,325.4	3,325.4	11.0	5.8	122.30	-786.5	151.0	951.7	936.1	15.57	61.124	
3,500.0	3,454.9	3,423.9	3,423.9	11.3	6.0	123.17	-786.5	151.0	961.2	945.2	15.99	60.107	
3,600.0	3,553.4	3,522.4	3,522.4	11.7	6.1	124.02	-786.5	151.0	970.9	954.5	16.41	59.170	
3,700.0	3,651.9	3,620.9	3,620.9	12.0	6.3	124.85	-786.5	151.0	980.8	964.0	16.82	58.307	
3,800.0	3,750.4	3,719.4	3,719.4	12.4	6.5	125.67	-786.5	151.0	991.0	973.7	17.23	57.510	
3,900.0	3,848.9	3,817.9	3,817.9	12.7	6.7	126.47	-786.5	151.0	1,001.3	983.7	17.64	56.773	
4,000.0	3,947.3	3,916.3	3,916.3	13.1	6.8	127.25	-786.5	151.0	1,011.8	993.8	18.04	56.092	
4,100.0	4,045.8	4,014.8	4,014.8	13.4	7.0	128.02	-786.5	151.0	1,022.5	1,004.1	18.44	55.462	
4,200.0	4,144.3	4,113.3	4,113.3	13.8	7.2	128.77	-786.5	151.0	1,033.4	1,014.6	18.83	54.878	
4,300.0	4,242.8	4,211.8	4,211.8	14.1	7.4	129.50	-786.5	151.0	1,044.5	1,025.2	19.22	54.337	
4,400.0	4,341.3	4,310.3	4,310.3	14.5	7.5	130.23	-786.5	151.0	1,055.7	1,036.1	19.61	53.835	
4,500.0	4,439.7	4,408.7	4,408.7	14.8	7.7	130.93	-786.5	151.0	1,067.1	1,047.1	19.99	53.369	
4,600.0	4,538.2	4,507.2	4,507.2	15.2	7.9	131.62	-786.5	151.0	1,078.6	1,058.3	20.38	52.937	
4,700.0	4,636.7	4,605.7	4,605.7	15.5	8.0	132.30	-786.5	151.0	1,090.4	1,069.6	20.75	52.535	
4,800.0	4,735.2	4,704.2	4,704.2	15.9	8.2	132.96	-786.5	151.0	1,102.2	1,081.1	21.13	52.162	
4,900.0	4,833.7	4,802.7	4,802.7	16.2	8.4	133.61	-786.5	151.0	1,114.2	1,092.7	21.50	51.814	
5,000.0	4,932.1	4,901.1	4,901.1	16.6	8.6	134.24	-786.5	151.0	1,126.4	1,104.5	21.87	51.492	
5,100.0	5,030.6	4,999.6	4,999.6	17.0	8.7	134.87	-786.5	151.0	1,138.6	1,116.4	22.24	51.191	

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 Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Gurtler #1 (Existing) - Existing - Existing

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
5,200.0	5,129.1	5,098.1	5,098.1	17.3	8.9	135.47	-786.5	151.0	1,151.0	1,128.4	22.61	50.912	
5,300.0	5,227.6	5,196.6	5,196.6	17.7	9.1	136.07	-786.5	151.0	1,163.6	1,140.6	22.97	50.652	
5,400.0	5,326.3	5,295.3	5,295.3	18.0	9.2	136.75	-786.5	151.0	1,175.0	1,151.7	23.30	50.418	
5,500.0	5,425.6	5,394.6	5,394.6	18.2	9.4	137.28	-786.5	151.0	1,183.9	1,160.3	23.62	50.120	
5,600.0	5,525.2	5,494.2	5,494.2	18.4	9.6	137.65	-786.5	151.0	1,190.4	1,166.4	23.92	49.756	
5,700.0	5,625.1	5,594.1	5,594.1	18.5	9.8	137.87	-786.5	151.0	1,194.2	1,170.0	24.21	49.325	
5,800.0	5,725.0	5,694.0	5,694.0	18.6	9.9	-143.06	-786.5	151.0	1,195.5	1,171.1	24.47	48.861	
5,900.0	5,825.0	5,794.0	5,794.0	18.7	10.1	-143.06	-786.5	151.0	1,195.5	1,170.8	24.76	48.276	
6,000.0	5,925.0	5,894.0	5,894.0	18.8	10.3	-143.06	-786.5	151.0	1,195.5	1,170.5	25.06	47.703	
6,100.0	6,025.0	5,994.0	5,994.0	18.9	10.5	-143.06	-786.5	151.0	1,195.5	1,170.2	25.36	47.141	
6,200.0	6,125.0	6,094.0	6,094.0	19.0	10.6	-143.06	-786.5	151.0	1,195.5	1,169.9	25.66	46.591	
6,300.0	6,225.0	6,194.0	6,194.0	19.1	10.8	-143.06	-786.5	151.0	1,195.5	1,169.6	25.96	46.052	
6,400.0	6,325.0	6,294.0	6,294.0	19.2	11.0	-143.06	-786.5	151.0	1,195.5	1,169.3	26.26	45.523	
6,501.4	6,426.5	6,395.5	6,395.5	19.3	11.2	-143.06	-786.5	151.0	1,195.5	1,169.0	26.57	44.998	
6,550.0	6,475.0	6,444.0	6,444.0	19.4	11.2	37.22	-786.5	151.0	1,193.9	1,167.2	26.64	44.813	
6,600.0	6,524.6	6,493.6	6,493.6	19.4	11.3	37.72	-786.5	151.0	1,188.8	1,162.2	26.56	44.755	
6,650.0	6,573.4	6,542.4	6,542.4	19.4	11.4	38.57	-786.5	151.0	1,180.3	1,153.9	26.35	44.788	
6,700.0	6,621.1	6,590.1	6,590.1	19.4	11.5	39.79	-786.5	151.0	1,168.5	1,142.5	26.03	44.888	
6,750.0	6,667.3	6,636.3	6,636.3	19.5	11.6	41.39	-786.5	151.0	1,153.6	1,128.0	25.63	45.018	
6,800.0	6,711.7	6,680.7	6,680.7	19.5	11.7	43.42	-786.5	151.0	1,135.8	1,110.6	25.17	45.122	
6,850.0	6,753.9	6,722.9	6,722.9	19.5	11.7	45.89	-786.5	151.0	1,115.2	1,090.5	24.71	45.123	
6,900.0	6,793.7	6,762.7	6,762.7	19.5	11.8	48.83	-786.5	151.0	1,092.2	1,067.9	24.31	44.927	
6,950.0	6,830.6	6,799.6	6,799.6	19.6	11.9	52.24	-786.5	151.0	1,067.2	1,043.1	24.02	44.434	
7,000.0	6,864.5	6,833.5	6,833.5	19.7	11.9	56.12	-786.5	151.0	1,040.3	1,016.5	23.88	43.568	
7,050.0	6,895.0	6,864.0	6,864.0	19.8	12.0	60.41	-786.5	151.0	1,012.2	988.2	23.92	42.308	
7,100.0	6,922.0	6,891.0	6,891.0	19.9	12.0	65.01	-786.5	151.0	983.1	958.9	24.15	40.710	
7,150.0	6,945.1	6,914.1	6,914.1	20.0	12.1	69.78	-786.5	151.0	953.5	929.0	24.51	38.895	
7,200.0	6,964.4	6,933.4	6,933.4	20.2	12.1	74.55	-786.5	151.0	923.9	899.0	24.97	36.999	
7,250.0	6,979.5	6,948.5	6,948.5	20.5	12.1	79.11	-786.5	151.0	894.9	869.4	25.47	35.134	
7,300.0	6,990.5	6,959.5	6,959.5	20.7	12.1	83.28	-786.5	151.0	866.8	840.9	25.98	33.362	
7,350.0	6,997.1	6,966.1	6,966.1	21.0	12.2	86.92	-786.5	151.0	840.3	813.8	26.50	31.706	
7,400.0	6,999.4	6,968.4	6,968.4	21.4	12.2	89.92	-786.5	151.0	815.7	788.7	27.04	30.164	
7,406.4	6,999.4	6,968.4	6,968.4	21.4	12.2	90.26	-786.5	151.0	812.7	785.6	27.12	29.974	
7,500.0	6,998.6	6,967.6	6,967.6	22.1	12.2	90.20	-786.5	151.0	773.9	745.8	28.14	27.504	
7,600.0	6,997.7	6,966.7	6,966.7	23.0	12.2	90.13	-786.5	151.0	743.3	713.9	29.34	25.335	
7,700.0	6,996.9	6,965.9	6,965.9	24.0	12.2	90.06	-786.5	151.0	725.2	694.6	30.63	23.680	
7,782.5	6,996.1	6,965.1	6,965.1	24.8	12.2	90.00	-786.5	151.0	720.5	688.8	31.75	22.695	CC
7,800.0	6,996.0	6,965.0	6,965.0	25.0	12.2	89.99	-786.5	151.0	720.7	688.7	31.99	22.533	ES
7,900.0	6,995.1	6,964.1	6,964.1	26.2	12.2	89.92	-786.5	151.0	730.0	696.6	33.40	21.855	
8,000.0	6,994.2	6,963.2	6,963.2	27.4	12.2	89.85	-786.5	151.0	752.6	717.8	34.87	21.586	SF
8,100.0	6,993.4	6,962.4	6,962.4	28.6	12.2	89.78	-786.5	151.0	787.4	751.0	36.37	21.649	
8,200.0	6,992.5	6,961.5	6,961.5	29.9	12.2	89.71	-786.5	151.0	832.7	794.8	37.90	21.970	
8,300.0	6,991.6	6,960.6	6,960.6	31.3	12.1	89.64	-786.5	151.0	887.1	847.6	39.46	22.479	
8,400.0	6,990.7	6,959.7	6,959.7	32.7	12.1	89.57	-786.5	151.0	948.9	907.9	41.04	23.119	
8,500.0	6,989.9	6,958.9	6,958.9	34.1	12.1	89.50	-786.5	151.0	1,016.8	974.2	42.65	23.844	
8,600.0	6,989.0	6,958.0	6,958.0	35.6	12.1	89.43	-786.5	151.0	1,089.7	1,045.4	44.26	24.619	
8,700.0	6,988.1	6,957.1	6,957.1	37.0	12.1	89.36	-786.5	151.0	1,166.6	1,120.7	45.89	25.420	
8,800.0	6,987.3	6,956.3	6,956.3	38.5	12.1	89.29	-786.5	151.0	1,246.7	1,199.2	47.53	26.229	
8,900.0	6,986.4	6,955.4	6,955.4	40.1	12.1	89.22	-786.5	151.0	1,329.6	1,280.4	49.18	27.033	
9,000.0	6,985.5	6,954.5	6,954.5	41.6	12.1	89.16	-786.5	151.0	1,414.7	1,363.8	50.84	27.824	
9,100.0	6,984.6	6,953.6	6,953.6	43.2	12.1	89.09	-786.5	151.0	1,501.6	1,449.1	52.51	28.596	
9,200.0	6,983.8	6,952.8	6,952.8	44.7	12.1	89.02	-786.5	151.0	1,590.1	1,535.9	54.19	29.345	

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 Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Gurtler #1 (Existing) - Existing - Existing

Survey Program: 0-MWD

Offset Site Error: 0.0 ft

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,300.0	6,982.9	6,951.9	6,951.9	46.3	12.1	88.95	-786.5	151.0	1,679.8	1,623.9	55.87	30.069	
9,400.0	6,982.0	6,951.0	6,951.0	47.9	12.1	88.88	-786.5	151.0	1,770.7	1,713.1	57.55	30.767	
9,500.0	6,981.1	6,950.1	6,950.1	49.5	12.1	88.81	-786.5	151.0	1,862.5	1,803.2	59.24	31.438	
9,600.0	6,980.3	6,949.3	6,949.3	51.1	12.1	88.74	-786.5	151.0	1,955.0	1,894.1	60.94	32.084	
9,700.0	6,979.4	6,948.4	6,948.4	52.8	12.1	88.67	-786.5	151.0	2,048.3	1,985.7	62.63	32.704	
9,800.0	6,978.5	6,947.5	6,947.5	54.4	12.1	88.60	-786.5	151.0	2,142.2	2,077.9	64.33	33.298	
9,900.0	6,977.7	6,946.7	6,946.7	56.1	12.1	88.53	-786.5	151.0	2,236.7	2,170.6	66.04	33.869	
10,000.0	6,976.8	6,945.8	6,945.8	57.7	12.1	88.46	-786.5	151.0	2,331.5	2,263.8	67.75	34.416	
10,100.0	6,975.9	6,944.9	6,944.9	59.4	12.1	88.39	-786.5	151.0	2,426.8	2,357.4	69.45	34.942	
10,200.0	6,975.0	6,944.0	6,944.0	61.0	12.1	88.32	-786.5	151.0	2,522.5	2,451.3	71.17	35.446	
10,300.0	6,974.2	6,943.2	6,943.2	62.7	12.1	88.25	-786.5	151.0	2,618.5	2,545.6	72.88	35.929	
10,400.0	6,973.3	6,942.3	6,942.3	64.4	12.1	88.18	-786.5	151.0	2,714.8	2,640.2	74.59	36.394	
10,500.0	6,972.4	6,941.4	6,941.4	66.0	12.1	88.11	-786.5	151.0	2,811.3	2,735.0	76.31	36.840	
10,600.0	6,971.5	6,940.5	6,940.5	67.7	12.1	88.05	-786.5	151.0	2,908.1	2,830.0	78.03	37.269	
10,700.0	6,970.7	6,939.7	6,939.7	69.4	12.1	87.98	-786.5	151.0	3,005.0	2,925.3	79.75	37.682	
10,800.0	6,969.8	6,938.8	6,938.8	71.1	12.1	87.91	-786.5	151.0	3,102.2	3,020.8	81.47	38.079	
10,900.0	6,968.9	6,937.9	6,937.9	72.8	12.1	87.84	-786.5	151.0	3,199.6	3,116.4	83.19	38.461	
11,000.0	6,968.1	6,937.1	6,937.1	74.5	12.1	87.77	-786.5	151.0	3,297.1	3,212.2	84.91	38.829	
11,100.0	6,967.2	6,936.2	6,936.2	76.1	12.1	87.70	-786.5	151.0	3,394.7	3,308.1	86.64	39.184	
11,200.0	6,966.3	6,935.3	6,935.3	77.8	12.1	87.63	-786.5	151.0	3,492.5	3,404.1	88.36	39.526	
11,300.0	6,965.4	6,934.4	6,934.4	79.5	12.1	87.56	-786.5	151.0	3,590.4	3,500.3	90.09	39.855	
11,400.0	6,964.6	6,933.6	6,933.6	81.2	12.1	87.49	-786.5	151.0	3,688.4	3,596.6	91.81	40.174	
11,500.0	6,963.7	6,932.7	6,932.7	82.9	12.1	87.42	-786.5	151.0	3,786.5	3,693.0	93.54	40.481	
11,600.0	6,962.8	6,931.8	6,931.8	84.7	12.1	87.35	-786.5	151.0	3,884.8	3,789.5	95.26	40.779	
11,700.0	6,961.9	6,930.9	6,930.9	86.4	12.1	87.28	-786.5	151.0	3,983.1	3,886.1	96.99	41.066	
11,800.0	6,961.1	6,930.1	6,930.1	88.1	12.1	87.21	-786.5	151.0	4,081.4	3,982.7	98.72	41.344	
11,900.0	6,960.2	6,929.2	6,929.2	89.8	12.1	87.15	-786.5	151.0	4,179.9	4,079.5	100.45	41.613	
12,000.0	6,959.3	6,928.3	6,928.3	91.5	12.1	87.08	-786.5	151.0	4,278.4	4,176.3	102.18	41.873	
12,100.0	6,958.5	6,927.5	6,927.5	93.2	12.1	87.01	-786.5	151.0	4,377.0	4,273.1	103.90	42.126	
12,200.0	6,957.6	6,926.6	6,926.6	94.9	12.1	86.94	-786.5	151.0	4,475.7	4,370.1	105.63	42.370	
12,300.0	6,956.7	6,925.7	6,925.7	96.6	12.1	86.87	-786.5	151.0	4,574.4	4,467.1	107.36	42.608	
12,400.0	6,955.8	6,924.8	6,924.8	98.4	12.1	86.80	-786.5	151.0	4,673.2	4,564.1	109.09	42.838	
12,500.0	6,955.0	6,924.0	6,924.0	100.1	12.1	86.73	-786.5	151.0	4,772.0	4,661.2	110.82	43.061	
12,600.0	6,954.1	6,923.1	6,923.1	101.8	12.1	86.66	-786.5	151.0	4,870.9	4,758.4	112.55	43.278	
12,700.0	6,953.2	6,922.2	6,922.2	103.5	12.1	86.59	-786.5	151.0	4,969.8	4,855.5	114.28	43.489	
12,800.0	6,952.3	6,921.3	6,921.3	105.3	12.1	86.52	-786.5	151.0	5,068.8	4,952.8	116.01	43.693	
12,900.0	6,951.5	6,920.5	6,920.5	107.0	12.1	86.45	-786.5	151.0	5,167.8	5,050.0	117.74	43.892	
13,000.0	6,950.6	6,919.6	6,919.6	108.7	12.1	86.38	-786.5	151.0	5,266.8	5,147.4	119.47	44.086	
13,100.0	6,949.7	6,918.7	6,918.7	110.4	12.1	86.32	-786.5	151.0	5,365.9	5,244.7	121.20	44.275	
13,200.0	6,948.9	6,917.9	6,917.9	112.2	12.1	86.25	-786.5	151.0	5,465.0	5,342.1	122.93	44.458	
13,300.0	6,948.0	6,917.0	6,917.0	113.9	12.1	86.18	-786.5	151.0	5,564.1	5,439.5	124.65	44.637	
13,400.0	6,947.1	6,916.1	6,916.1	115.6	12.1	86.11	-786.5	151.0	5,663.3	5,536.9	126.38	44.811	
13,500.0	6,946.2	6,915.2	6,915.2	117.3	12.1	86.04	-786.5	151.0	5,762.5	5,634.4	128.11	44.980	
13,600.0	6,945.4	6,914.4	6,914.4	119.1	12.1	85.97	-786.5	151.0	5,861.7	5,731.9	129.84	45.146	
13,700.0	6,944.5	6,913.5	6,913.5	120.8	12.1	85.90	-786.5	151.0	5,961.0	5,829.4	131.57	45.307	
13,800.0	6,943.6	6,912.6	6,912.6	122.5	12.1	85.83	-786.5	151.0	6,060.3	5,927.0	133.30	45.464	
13,900.0	6,942.7	6,911.7	6,911.7	124.3	12.1	85.76	-786.5	151.0	6,159.6	6,024.5	135.02	45.618	
14,000.0	6,941.9	6,910.9	6,910.9	126.0	12.1	85.69	-786.5	151.0	6,258.9	6,122.1	136.75	45.768	
14,100.0	6,941.0	6,910.0	6,910.0	127.7	12.1	85.62	-786.5	151.0	6,358.2	6,219.7	138.48	45.914	
14,200.0	6,940.1	6,909.1	6,909.1	129.5	12.1	85.56	-786.5	151.0	6,457.6	6,317.4	140.21	46.057	
14,272.4	6,939.5	6,908.5	6,908.5	130.7	12.1	85.51	-786.5	151.0	6,529.5	6,388.1	141.46	46.159	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Gurtler 12-30 (Existing) - Existing - Existing

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
0.0	0.0	0.0	0.0	0.0	0.0	-168.84	-1,961.6	-387.1	2,000.0				
100.0	100.0	54.0	54.0	0.2	0.1	-168.84	-1,961.6	-387.1	1,999.5	1,999.2	0.25	8,121.904	
200.0	200.0	154.0	154.0	0.3	0.3	-168.84	-1,961.6	-387.1	1,999.5	1,998.9	0.60	3,359.581	
300.0	300.0	254.0	254.0	0.5	0.4	112.20	-1,961.6	-387.1	2,000.1	1,999.2	0.95	2,111.391	
400.0	399.8	353.8	353.8	0.7	0.6	112.30	-1,961.6	-387.1	2,002.1	2,000.8	1.31	1,524.081	
500.0	499.5	453.5	453.5	0.9	0.8	112.47	-1,961.6	-387.1	2,005.5	2,003.7	1.71	1,175.750	
600.0	598.7	552.7	552.7	1.2	1.0	112.70	-1,961.6	-387.1	2,010.2	2,008.0	2.13	942.515	
700.0	697.5	651.5	651.5	1.5	1.1	112.99	-1,961.6	-387.1	2,016.3	2,013.7	2.60	774.992	
800.0	795.9	749.9	749.9	1.8	1.3	113.44	-1,961.6	-387.1	2,023.2	2,020.2	3.08	656.593	
900.0	894.4	848.4	848.4	2.2	1.5	113.88	-1,961.6	-387.1	2,030.3	2,026.7	3.57	569.303	
1,000.0	992.9	946.9	946.9	2.5	1.7	114.32	-1,961.6	-387.1	2,037.5	2,033.4	4.05	502.635	
1,100.0	1,091.4	1,045.4	1,045.4	2.9	1.8	114.76	-1,961.6	-387.1	2,044.8	2,040.2	4.54	450.207	
1,200.0	1,189.9	1,143.9	1,143.9	3.2	2.0	115.20	-1,961.6	-387.1	2,052.2	2,047.2	5.03	407.973	
1,300.0	1,288.4	1,242.4	1,242.4	3.6	2.2	115.63	-1,961.6	-387.1	2,059.8	2,054.2	5.52	373.266	
1,400.0	1,386.8	1,340.8	1,340.8	3.9	2.3	116.06	-1,961.6	-387.1	2,067.4	2,061.4	6.01	344.263	
1,500.0	1,485.3	1,439.3	1,439.3	4.3	2.5	116.48	-1,961.6	-387.1	2,075.2	2,068.7	6.49	319.683	
1,600.0	1,583.8	1,537.8	1,537.8	4.6	2.7	116.90	-1,961.6	-387.1	2,083.1	2,076.1	6.98	298.596	
1,700.0	1,682.3	1,636.3	1,636.3	5.0	2.9	117.32	-1,961.6	-387.1	2,091.1	2,083.6	7.46	280.315	
1,800.0	1,780.8	1,734.8	1,734.8	5.3	3.0	117.74	-1,961.6	-387.1	2,099.2	2,091.3	7.94	264.323	
1,900.0	1,879.2	1,833.2	1,833.2	5.7	3.2	118.15	-1,961.6	-387.1	2,107.5	2,099.0	8.42	250.220	
2,000.0	1,977.7	1,931.7	1,931.7	6.0	3.4	118.56	-1,961.6	-387.1	2,115.8	2,106.9	8.90	237.693	
2,100.0	2,076.2	2,030.2	2,030.2	6.4	3.5	118.97	-1,961.6	-387.1	2,124.3	2,114.9	9.38	226.497	
2,200.0	2,174.7	2,128.7	2,128.7	6.7	3.7	119.37	-1,961.6	-387.1	2,132.8	2,123.0	9.85	216.433	
2,300.0	2,273.2	2,227.2	2,227.2	7.1	3.9	119.77	-1,961.6	-387.1	2,141.5	2,131.2	10.33	207.340	
2,400.0	2,371.6	2,325.6	2,325.6	7.4	4.1	120.17	-1,961.6	-387.1	2,150.3	2,139.5	10.80	199.086	
2,500.0	2,470.1	2,424.1	2,424.1	7.8	4.2	120.56	-1,961.6	-387.1	2,159.1	2,147.9	11.27	191.562	
2,600.0	2,568.6	2,522.6	2,522.6	8.1	4.4	120.95	-1,961.6	-387.1	2,168.1	2,156.4	11.74	184.678	
2,700.0	2,667.1	2,621.1	2,621.1	8.5	4.6	121.34	-1,961.6	-387.1	2,177.2	2,165.0	12.21	178.356	
2,800.0	2,765.6	2,719.6	2,719.6	8.8	4.7	121.73	-1,961.6	-387.1	2,186.4	2,173.7	12.67	172.532	
2,900.0	2,864.0	2,818.0	2,818.0	9.2	4.9	122.11	-1,961.6	-387.1	2,195.7	2,182.5	13.14	167.151	
3,000.0	2,962.5	2,916.5	2,916.5	9.5	5.1	122.49	-1,961.6	-387.1	2,205.1	2,191.5	13.60	162.164	
3,100.0	3,061.0	3,015.0	3,015.0	9.9	5.3	122.86	-1,961.6	-387.1	2,214.5	2,200.5	14.06	157.532	
3,200.0	3,159.5	3,113.5	3,113.5	10.2	5.4	123.23	-1,961.6	-387.1	2,224.1	2,209.6	14.52	153.219	
3,300.0	3,258.0	3,212.0	3,212.0	10.6	5.6	123.60	-1,961.6	-387.1	2,233.8	2,218.8	14.97	149.194	
3,400.0	3,356.4	3,310.4	3,310.4	11.0	5.8	123.97	-1,961.6	-387.1	2,243.5	2,228.1	15.43	145.429	
3,500.0	3,454.9	3,408.9	3,408.9	11.3	5.9	124.33	-1,961.6	-387.1	2,253.4	2,237.5	15.88	141.902	
3,600.0	3,553.4	3,507.4	3,507.4	11.7	6.1	124.69	-1,961.6	-387.1	2,263.3	2,247.0	16.33	138.591	
3,700.0	3,651.9	3,605.9	3,605.9	12.0	6.3	125.04	-1,961.6	-387.1	2,273.3	2,256.6	16.78	135.477	
3,800.0	3,750.4	3,704.4	3,704.4	12.4	6.5	125.40	-1,961.6	-387.1	2,283.5	2,266.2	17.23	132.544	
3,900.0	3,848.9	3,802.9	3,802.9	12.7	6.6	125.75	-1,961.6	-387.1	2,293.7	2,276.0	17.67	129.777	
4,000.0	3,947.3	3,901.3	3,901.3	13.1	6.8	126.09	-1,961.6	-387.1	2,304.0	2,285.8	18.12	127.163	
4,100.0	4,045.8	3,999.8	3,999.8	13.4	7.0	126.44	-1,961.6	-387.1	2,314.3	2,295.8	18.56	124.691	
4,200.0	4,144.3	4,098.3	4,098.3	13.8	7.2	126.78	-1,961.6	-387.1	2,324.8	2,305.8	19.00	122.349	
4,300.0	4,242.8	4,196.8	4,196.8	14.1	7.3	127.12	-1,961.6	-387.1	2,335.3	2,315.9	19.44	120.127	
4,400.0	4,341.3	4,295.3	4,295.3	14.5	7.5	127.45	-1,961.6	-387.1	2,345.9	2,326.1	19.88	118.018	
4,500.0	4,439.7	4,393.7	4,393.7	14.8	7.7	127.78	-1,961.6	-387.1	2,356.6	2,336.3	20.31	116.013	
4,600.0	4,538.2	4,492.2	4,492.2	15.2	7.8	128.11	-1,961.6	-387.1	2,367.4	2,346.7	20.75	114.106	
4,700.0	4,636.7	4,590.7	4,590.7	15.5	8.0	128.44	-1,961.6	-387.1	2,378.3	2,357.1	21.18	112.289	
4,800.0	4,735.2	4,689.2	4,689.2	15.9	8.2	128.76	-1,961.6	-387.1	2,389.2	2,367.6	21.61	110.556	
4,900.0	4,833.7	4,787.7	4,787.7	16.2	8.4	129.08	-1,961.6	-387.1	2,400.2	2,378.2	22.04	108.903	
5,000.0	4,932.1	4,886.1	4,886.1	16.6	8.5	129.40	-1,961.6	-387.1	2,411.3	2,388.8	22.47	107.323	
5,100.0	5,030.6	4,984.6	4,984.6	17.0	8.7	129.71	-1,961.6	-387.1	2,422.5	2,399.6	22.89	105.813	

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 Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Gurtler 12-30 (Existing) - Existing - Existing

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
5,200.0	5,129.1	5,083.1	5,083.1	17.3	8.9	130.03	-1,961.6	-387.1	2,433.7	2,410.4	23.32	104.369	
5,300.0	5,227.6	5,181.6	5,181.6	17.7	9.0	130.34	-1,961.6	-387.1	2,445.0	2,421.3	23.74	102.985	
5,400.0	5,326.3	5,280.3	5,280.3	18.0	9.2	130.77	-1,961.6	-387.1	2,455.3	2,431.1	24.12	101.780	
5,500.0	5,425.6	5,379.6	5,379.6	18.2	9.4	131.10	-1,961.6	-387.1	2,463.3	2,438.8	24.48	100.637	
5,600.0	5,525.2	5,479.2	5,479.2	18.4	9.6	131.34	-1,961.6	-387.1	2,469.0	2,444.2	24.80	99.545	
5,700.0	5,625.1	5,579.1	5,579.1	18.5	9.7	131.48	-1,961.6	-387.1	2,472.5	2,447.4	25.10	98.495	
5,800.0	5,725.0	5,679.0	5,679.0	18.6	9.9	-149.47	-1,961.6	-387.1	2,473.7	2,448.3	25.36	97.541	
5,900.0	5,825.0	5,779.0	5,779.0	18.7	10.1	-149.47	-1,961.6	-387.1	2,473.7	2,448.0	25.65	96.441	
6,000.0	5,925.0	5,879.0	5,879.0	18.8	10.3	-149.47	-1,961.6	-387.1	2,473.7	2,447.7	25.94	95.362	
6,100.0	6,025.0	5,979.0	5,979.0	18.9	10.4	-149.47	-1,961.6	-387.1	2,473.7	2,447.4	26.23	94.303	
6,200.0	6,125.0	6,079.0	6,079.0	19.0	10.6	-149.47	-1,961.6	-387.1	2,473.7	2,447.1	26.52	93.263	
6,300.0	6,225.0	6,179.0	6,179.0	19.1	10.8	-149.47	-1,961.6	-387.1	2,473.7	2,446.8	26.82	92.242	
6,400.0	6,325.0	6,279.0	6,279.0	19.2	11.0	-149.47	-1,961.6	-387.1	2,473.7	2,446.5	27.11	91.240	
6,501.4	6,426.5	6,380.5	6,380.5	19.3	11.1	-149.47	-1,961.6	-387.1	2,473.7	2,446.2	27.41	90.243	
6,550.0	6,475.0	6,429.0	6,429.0	19.4	11.2	30.77	-1,961.6	-387.1	2,471.9	2,444.4	27.48	89.956	
6,600.0	6,524.6	6,478.6	6,478.6	19.4	11.3	31.13	-1,961.6	-387.1	2,466.4	2,439.0	27.39	90.054	
6,650.0	6,573.4	6,527.4	6,527.4	19.4	11.4	31.74	-1,961.6	-387.1	2,457.2	2,430.0	27.16	90.481	
6,700.0	6,621.1	6,575.1	6,575.1	19.4	11.5	32.63	-1,961.6	-387.1	2,444.4	2,417.6	26.80	91.215	
6,750.0	6,667.3	6,621.3	6,621.3	19.5	11.6	33.82	-1,961.6	-387.1	2,428.1	2,401.8	26.33	92.212	
6,800.0	6,711.7	6,665.7	6,665.7	19.5	11.6	35.32	-1,961.6	-387.1	2,408.5	2,382.8	25.79	93.406	
6,850.0	6,753.9	6,707.9	6,707.9	19.5	11.7	37.19	-1,961.6	-387.1	2,385.8	2,360.6	25.20	94.687	
6,900.0	6,793.7	6,747.7	6,747.7	19.5	11.8	39.47	-1,961.6	-387.1	2,360.1	2,335.5	24.61	95.893	
6,950.0	6,830.6	6,784.6	6,784.6	19.6	11.8	42.21	-1,961.6	-387.1	2,331.7	2,307.6	24.09	96.798	
7,000.0	6,864.5	6,818.5	6,818.5	19.7	11.9	45.47	-1,961.6	-387.1	2,300.9	2,277.2	23.69	97.124	
7,050.0	6,895.0	6,849.0	6,849.0	19.8	12.0	49.29	-1,961.6	-387.1	2,267.9	2,244.4	23.48	96.591	
7,100.0	6,922.0	6,876.0	6,876.0	19.9	12.0	53.73	-1,961.6	-387.1	2,233.0	2,209.5	23.50	95.006	
7,150.0	6,945.1	6,899.1	6,899.1	20.0	12.0	58.79	-1,961.6	-387.1	2,196.6	2,172.8	23.78	92.367	
7,200.0	6,964.4	6,918.4	6,918.4	20.2	12.1	64.43	-1,961.6	-387.1	2,159.0	2,134.7	24.28	88.903	
7,250.0	6,979.5	6,933.5	6,933.5	20.5	12.1	70.55	-1,961.6	-387.1	2,120.5	2,095.6	24.94	85.009	
7,300.0	6,990.5	6,944.5	6,944.5	20.7	12.1	76.98	-1,961.6	-387.1	2,081.5	2,055.8	25.67	81.094	
7,350.0	6,997.1	6,951.1	6,951.1	21.0	12.1	83.49	-1,961.6	-387.1	2,042.3	2,015.9	26.37	77.441	
7,400.0	6,999.4	6,953.4	6,953.4	21.4	12.1	89.82	-1,961.6	-387.1	2,003.3	1,976.3	27.02	74.152	
7,406.4	6,999.4	6,953.4	6,953.4	21.4	12.1	90.61	-1,961.6	-387.1	1,998.3	1,971.2	27.09	73.755	
7,500.0	6,998.6	6,952.6	6,952.6	22.1	12.1	90.58	-1,961.6	-387.1	1,926.6	1,898.5	28.12	68.521	
7,600.0	6,997.7	6,951.7	6,951.7	23.0	12.1	90.54	-1,961.6	-387.1	1,852.2	1,822.9	29.32	63.178	
7,700.0	6,996.9	6,950.9	6,950.9	24.0	12.1	90.50	-1,961.6	-387.1	1,780.2	1,749.6	30.61	58.168	
7,800.0	6,996.0	6,950.0	6,950.0	25.0	12.1	90.46	-1,961.6	-387.1	1,711.1	1,679.2	31.96	53.531	
7,900.0	6,995.1	6,949.1	6,949.1	26.2	12.1	90.42	-1,961.6	-387.1	1,645.2	1,611.8	33.38	49.284	
8,000.0	6,994.2	6,948.2	6,948.2	27.4	12.1	90.38	-1,961.6	-387.1	1,582.8	1,548.0	34.85	45.423	
8,100.0	6,993.4	6,947.4	6,947.4	28.6	12.1	90.34	-1,961.6	-387.1	1,524.5	1,488.1	36.35	41.940	
8,200.0	6,992.5	6,946.5	6,946.5	29.9	12.1	90.30	-1,961.6	-387.1	1,470.6	1,432.7	37.88	38.820	
8,300.0	6,991.6	6,945.6	6,945.6	31.3	12.1	90.26	-1,961.6	-387.1	1,421.8	1,382.3	39.44	36.046	
8,400.0	6,990.7	6,944.7	6,944.7	32.7	12.1	90.22	-1,961.6	-387.1	1,378.5	1,337.4	41.03	33.600	
8,500.0	6,989.9	6,943.9	6,943.9	34.1	12.1	90.18	-1,961.6	-387.1	1,341.2	1,298.6	42.63	31.464	
8,600.0	6,989.0	6,943.0	6,943.0	35.6	12.1	90.14	-1,961.6	-387.1	1,310.5	1,266.3	44.24	29.621	
8,700.0	6,988.1	6,942.1	6,942.1	37.0	12.1	90.10	-1,961.6	-387.1	1,286.9	1,241.1	45.87	28.054	
8,800.0	6,987.3	6,941.3	6,941.3	38.5	12.1	90.06	-1,961.6	-387.1	1,270.8	1,223.3	47.52	26.744	
8,900.0	6,986.4	6,940.4	6,940.4	40.1	12.1	90.02	-1,961.6	-387.1	1,262.4	1,213.2	49.17	25.674	
8,956.6	6,985.9	6,939.9	6,939.9	40.9	12.1	90.00	-1,961.6	-387.1	1,261.1	1,211.0	50.11	25.168	CC, ES
9,000.0	6,985.5	6,939.5	6,939.5	41.6	12.1	89.98	-1,961.6	-387.1	1,261.9	1,211.0	50.83	24.825	
9,100.0	6,984.6	6,938.6	6,938.6	43.2	12.1	89.94	-1,961.6	-387.1	1,269.2	1,216.7	52.50	24.177	
9,200.0	6,983.8	6,937.8	6,937.8	44.7	12.1	89.90	-1,961.6	-387.1	1,284.4	1,230.2	54.17	23.709	

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 Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Gurtler 12-30 (Existing) - Existing - Existing

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
9,300.0	6,982.9	6,936.9	6,936.9	46.3	12.1	89.86	-1,961.6	-387.1	1,307.0	1,251.2	55.85	23.400	
9,400.0	6,982.0	6,936.0	6,936.0	47.9	12.1	89.82	-1,961.6	-387.1	1,336.8	1,279.2	57.54	23.232	
9,500.0	6,981.1	6,935.1	6,935.1	49.5	12.1	89.78	-1,961.6	-387.1	1,373.2	1,314.0	59.23	23.183	SF
9,600.0	6,980.3	6,934.3	6,934.3	51.1	12.1	89.74	-1,961.6	-387.1	1,415.7	1,354.8	60.93	23.236	
9,700.0	6,979.4	6,933.4	6,933.4	52.8	12.1	89.71	-1,961.6	-387.1	1,463.9	1,401.3	62.63	23.374	
9,800.0	6,978.5	6,932.5	6,932.5	54.4	12.1	89.67	-1,961.6	-387.1	1,517.1	1,452.8	64.33	23.583	
9,900.0	6,977.7	6,931.7	6,931.7	56.1	12.1	89.63	-1,961.6	-387.1	1,574.9	1,508.9	66.04	23.849	
10,000.0	6,976.8	6,930.8	6,930.8	57.7	12.1	89.59	-1,961.6	-387.1	1,636.8	1,569.0	67.75	24.160	
10,100.0	6,975.9	6,929.9	6,929.9	59.4	12.1	89.55	-1,961.6	-387.1	1,702.3	1,632.8	69.46	24.508	
10,200.0	6,975.0	6,929.0	6,929.0	61.0	12.1	89.51	-1,961.6	-387.1	1,771.0	1,699.8	71.17	24.883	
10,300.0	6,974.2	6,928.2	6,928.2	62.7	12.1	89.47	-1,961.6	-387.1	1,842.6	1,769.7	72.89	25.279	
10,400.0	6,973.3	6,927.3	6,927.3	64.4	12.1	89.43	-1,961.6	-387.1	1,916.7	1,842.1	74.61	25.691	
10,500.0	6,972.4	6,926.4	6,926.4	66.0	12.1	89.39	-1,961.6	-387.1	1,993.1	1,916.7	76.33	26.113	
10,600.0	6,971.5	6,925.5	6,925.5	67.7	12.1	89.35	-1,961.6	-387.1	2,071.5	1,993.4	78.05	26.541	
10,700.0	6,970.7	6,924.7	6,924.7	69.4	12.1	89.31	-1,961.6	-387.1	2,151.7	2,071.9	79.77	26.974	
10,800.0	6,969.8	6,923.8	6,923.8	71.1	12.1	89.27	-1,961.6	-387.1	2,233.5	2,152.0	81.49	27.406	
10,900.0	6,968.9	6,922.9	6,922.9	72.8	12.1	89.23	-1,961.6	-387.1	2,316.7	2,233.5	83.22	27.838	
11,000.0	6,968.1	6,922.1	6,922.1	74.5	12.1	89.19	-1,961.6	-387.1	2,401.2	2,316.2	84.95	28.267	
11,100.0	6,967.2	6,921.2	6,921.2	76.1	12.1	89.15	-1,961.6	-387.1	2,486.8	2,400.1	86.67	28.692	
11,200.0	6,966.3	6,920.3	6,920.3	77.8	12.1	89.11	-1,961.6	-387.1	2,573.5	2,485.1	88.40	29.111	
11,300.0	6,965.4	6,919.4	6,919.4	79.5	12.1	89.07	-1,961.6	-387.1	2,661.1	2,571.0	90.13	29.525	
11,400.0	6,964.6	6,918.6	6,918.6	81.2	12.1	89.03	-1,961.6	-387.1	2,749.6	2,657.7	91.86	29.932	
11,500.0	6,963.7	6,917.7	6,917.7	82.9	12.1	88.99	-1,961.6	-387.1	2,838.8	2,745.2	93.59	30.331	
11,600.0	6,962.8	6,916.8	6,916.8	84.7	12.1	88.95	-1,961.6	-387.1	2,928.7	2,833.4	95.33	30.723	
11,700.0	6,961.9	6,915.9	6,915.9	86.4	12.1	88.91	-1,961.6	-387.1	3,019.3	2,922.2	97.06	31.108	
11,800.0	6,961.1	6,915.1	6,915.1	88.1	12.1	88.87	-1,961.6	-387.1	3,110.4	3,011.6	98.79	31.485	
11,900.0	6,960.2	6,914.2	6,914.2	89.8	12.1	88.83	-1,961.6	-387.1	3,202.1	3,101.6	100.53	31.853	
12,000.0	6,959.3	6,913.3	6,913.3	91.5	12.1	88.79	-1,961.6	-387.1	3,294.3	3,192.0	102.26	32.214	
12,100.0	6,958.5	6,912.5	6,912.5	93.2	12.1	88.75	-1,961.6	-387.1	3,386.8	3,282.9	104.00	32.567	
12,200.0	6,957.6	6,911.6	6,911.6	94.9	12.1	88.71	-1,961.6	-387.1	3,479.9	3,374.1	105.73	32.912	
12,300.0	6,956.7	6,910.7	6,910.7	96.6	12.1	88.67	-1,961.6	-387.1	3,573.2	3,465.8	107.47	33.250	
12,400.0	6,955.8	6,909.8	6,909.8	98.4	12.1	88.64	-1,961.6	-387.1	3,667.0	3,557.8	109.20	33.579	
12,500.0	6,955.0	6,909.0	6,909.0	100.1	12.1	88.60	-1,961.6	-387.1	3,761.0	3,650.1	110.94	33.901	
12,600.0	6,954.1	6,908.1	6,908.1	101.8	12.1	88.56	-1,961.6	-387.1	3,855.4	3,742.7	112.68	34.216	
12,700.0	6,953.2	6,907.2	6,907.2	103.5	12.1	88.52	-1,961.6	-387.1	3,950.0	3,835.6	114.41	34.523	
12,800.0	6,952.3	6,906.3	6,906.3	105.3	12.1	88.48	-1,961.6	-387.1	4,044.9	3,928.7	116.15	34.824	
12,900.0	6,951.5	6,905.5	6,905.5	107.0	12.1	88.44	-1,961.6	-387.1	4,140.0	4,022.1	117.89	35.117	
13,000.0	6,950.6	6,904.6	6,904.6	108.7	12.1	88.40	-1,961.6	-387.1	4,235.4	4,115.7	119.63	35.404	
13,100.0	6,949.7	6,903.7	6,903.7	110.4	12.0	88.36	-1,961.6	-387.1	4,330.9	4,209.6	121.37	35.684	
13,200.0	6,948.9	6,902.9	6,902.9	112.2	12.0	88.32	-1,961.6	-387.1	4,426.7	4,303.6	123.11	35.958	
13,300.0	6,948.0	6,902.0	6,902.0	113.9	12.0	88.28	-1,961.6	-387.1	4,522.6	4,397.8	124.85	36.226	
13,400.0	6,947.1	6,901.1	6,901.1	115.6	12.0	88.24	-1,961.6	-387.1	4,618.8	4,492.2	126.58	36.487	
13,500.0	6,946.2	6,900.2	6,900.2	117.3	12.0	88.20	-1,961.6	-387.1	4,715.0	4,586.7	128.32	36.743	
13,600.0	6,945.4	6,899.4	6,899.4	119.1	12.0	88.16	-1,961.6	-387.1	4,811.5	4,681.4	130.06	36.993	
13,700.0	6,944.5	6,898.5	6,898.5	120.8	12.0	88.12	-1,961.6	-387.1	4,908.0	4,776.2	131.80	37.238	
13,800.0	6,943.6	6,897.6	6,897.6	122.5	12.0	88.08	-1,961.6	-387.1	5,004.7	4,871.2	133.54	37.477	
13,900.0	6,942.7	6,896.7	6,896.7	124.3	12.0	88.04	-1,961.6	-387.1	5,101.6	4,966.3	135.28	37.710	
14,000.0	6,941.9	6,895.9	6,895.9	126.0	12.0	88.00	-1,961.6	-387.1	5,198.5	5,061.5	137.02	37.939	
14,100.0	6,941.0	6,895.0	6,895.0	127.7	12.0	87.96	-1,961.6	-387.1	5,295.6	5,156.8	138.76	38.163	
14,200.0	6,940.1	6,894.1	6,894.1	129.5	12.0	87.92	-1,961.6	-387.1	5,392.8	5,252.2	140.50	38.382	
14,272.4	6,939.5	6,893.5	6,893.5	130.7	12.0	87.89	-1,961.6	-387.1	5,463.2	5,321.4	141.76	38.537	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Gurtler 2B-30H - Hz - Plan #1

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
0.0	0.0	0.0	0.0	0.0	0.0	-90.02	0.0	-25.2	25.2				
100.0	100.0	100.0	100.0	0.2	0.2	-90.02	0.0	-25.2	25.2	24.9	0.30	82.884	
200.0	200.0	200.0	200.0	0.3	0.3	-90.02	0.0	-25.2	25.2	24.5	0.65	38.561	CC, ES
300.0	300.0	299.9	299.9	0.5	0.5	-166.02	1.7	-25.2	27.0	26.0	1.01	26.857	
400.0	399.8	399.5	399.3	0.7	0.7	-159.11	6.9	-25.5	32.8	31.4	1.37	23.868	
500.0	499.5	498.5	498.0	0.9	0.9	-151.89	15.5	-25.8	43.1	41.4	1.78	24.283	
600.0	598.7	597.0	595.7	1.2	1.2	-146.50	27.0	-26.4	58.0	55.8	2.21	26.223	
700.0	697.5	695.3	693.3	1.5	1.4	-144.46	39.0	-26.9	76.2	73.5	2.67	28.486	
800.0	795.9	793.3	790.7	1.8	1.7	-143.97	51.0	-27.4	95.8	92.6	3.15	30.387	
900.0	894.4	891.4	888.0	2.2	1.9	-143.65	62.9	-27.9	115.4	111.7	3.64	31.726	
1,000.0	992.9	989.5	985.3	2.5	2.2	-143.42	74.8	-28.4	135.0	130.8	4.13	32.715	
1,100.0	1,091.4	1,087.5	1,082.6	2.9	2.5	-143.24	86.8	-29.0	154.6	150.0	4.62	33.471	
1,200.0	1,189.9	1,185.6	1,180.0	3.2	2.7	-143.11	98.7	-29.5	174.2	169.1	5.11	34.067	
1,300.0	1,288.4	1,283.6	1,277.3	3.6	3.0	-143.00	110.6	-30.0	193.8	188.2	5.61	34.548	
1,400.0	1,386.8	1,382.8	1,375.8	3.9	3.3	-142.96	122.5	-30.5	213.3	207.2	6.10	34.948	
1,500.0	1,485.3	1,484.8	1,477.3	4.3	3.5	-143.55	132.0	-30.9	231.6	225.0	6.55	35.325	
1,600.0	1,583.8	1,587.1	1,579.5	4.6	3.7	-144.80	137.8	-31.2	248.3	241.3	6.96	35.686	
1,700.0	1,682.3	1,689.6	1,681.9	5.0	3.8	-146.62	140.0	-31.3	263.6	256.3	7.31	36.085	
1,800.0	1,780.8	1,788.5	1,780.8	5.3	3.9	-148.59	140.1	-31.3	278.3	270.7	7.63	36.478	
1,900.0	1,879.2	1,886.9	1,879.2	5.7	4.1	-150.35	140.1	-31.3	293.4	285.4	7.95	36.898	
2,000.0	1,977.7	1,985.4	1,977.7	6.0	4.2	-151.94	140.1	-31.3	308.6	300.4	8.27	37.329	
2,100.0	2,076.2	2,083.9	2,076.2	6.4	4.4	-153.38	140.1	-31.3	324.1	315.5	8.58	37.761	
2,200.0	2,174.7	2,182.4	2,174.7	6.7	4.5	-154.69	140.1	-31.3	339.8	330.9	8.90	38.187	
2,300.0	2,273.2	2,280.9	2,273.2	7.1	4.7	-155.88	140.1	-31.3	355.6	346.4	9.21	38.604	
2,400.0	2,371.6	2,379.3	2,371.6	7.4	4.8	-156.97	140.1	-31.3	371.5	362.0	9.52	39.008	
2,500.0	2,470.1	2,477.8	2,470.1	7.8	4.9	-157.97	140.1	-31.3	387.6	377.8	9.84	39.397	
2,600.0	2,568.6	2,576.3	2,568.6	8.1	5.1	-158.90	140.1	-31.3	403.8	393.6	10.15	39.771	
2,700.0	2,667.1	2,674.8	2,667.1	8.5	5.3	-159.75	140.1	-31.3	420.1	409.6	10.47	40.129	
2,800.0	2,765.6	2,773.3	2,765.6	8.8	5.4	-160.54	140.1	-31.3	436.4	425.6	10.78	40.470	
2,900.0	2,864.0	2,871.7	2,864.0	9.2	5.6	-161.27	140.1	-31.3	452.9	441.8	11.10	40.796	
3,000.0	2,962.5	2,970.2	2,962.5	9.5	5.7	-161.95	140.1	-31.3	469.4	457.9	11.42	41.106	
3,100.0	3,061.0	3,068.7	3,061.0	9.9	5.9	-162.58	140.1	-31.3	485.9	474.2	11.74	41.401	
3,200.0	3,159.5	3,167.2	3,159.5	10.2	6.0	-163.17	140.1	-31.3	502.5	490.5	12.06	41.682	
3,300.0	3,258.0	3,265.7	3,258.0	10.6	6.2	-163.73	140.1	-31.3	519.2	506.8	12.38	41.949	
3,400.0	3,356.4	3,364.1	3,356.4	11.0	6.3	-164.25	140.1	-31.3	535.9	523.2	12.70	42.203	
3,500.0	3,454.9	3,462.6	3,454.9	11.3	6.5	-164.73	140.1	-31.3	552.7	539.6	13.02	42.445	
3,600.0	3,553.4	3,561.1	3,553.4	11.7	6.7	-165.19	140.1	-31.3	569.5	556.1	13.34	42.675	
3,700.0	3,651.9	3,659.6	3,651.9	12.0	6.8	-165.63	140.1	-31.3	586.3	572.6	13.67	42.894	
3,800.0	3,750.4	3,758.1	3,750.4	12.4	7.0	-166.04	140.1	-31.3	603.1	589.1	13.99	43.102	
3,900.0	3,848.9	3,856.6	3,848.9	12.7	7.1	-166.42	140.1	-31.3	620.0	605.7	14.32	43.301	
4,000.0	3,947.3	3,955.0	3,947.3	13.1	7.3	-166.79	140.1	-31.3	636.9	622.3	14.65	43.490	
4,100.0	4,045.8	4,053.5	4,045.8	13.4	7.5	-167.14	140.1	-31.3	653.8	638.9	14.97	43.671	
4,200.0	4,144.3	4,152.0	4,144.3	13.8	7.6	-167.47	140.1	-31.3	670.8	655.5	15.30	43.843	
4,300.0	4,242.8	4,250.5	4,242.8	14.1	7.8	-167.78	140.1	-31.3	687.8	672.1	15.63	44.008	
4,400.0	4,341.3	4,349.0	4,341.3	14.5	8.0	-168.08	140.1	-31.3	704.8	688.8	15.96	44.165	
4,500.0	4,439.7	4,447.4	4,439.7	14.8	8.1	-168.36	140.1	-31.3	721.8	705.5	16.29	44.316	
4,600.0	4,538.2	4,545.9	4,538.2	15.2	8.3	-168.64	140.1	-31.3	738.8	722.2	16.62	44.460	
4,700.0	4,636.7	4,644.4	4,636.7	15.5	8.4	-168.89	140.1	-31.3	755.8	738.9	16.95	44.598	
4,800.0	4,735.2	4,742.9	4,735.2	15.9	8.6	-169.14	140.1	-31.3	772.9	755.6	17.28	44.730	
4,900.0	4,833.7	4,841.4	4,833.7	16.2	8.8	-169.38	140.1	-31.3	790.0	772.4	17.61	44.857	
5,000.0	4,932.1	4,939.8	4,932.1	16.6	8.9	-169.61	140.1	-31.3	807.0	789.1	17.94	44.978	
5,100.0	5,030.6	5,038.3	5,030.6	17.0	9.1	-169.82	140.1	-31.3	824.1	805.9	18.28	45.095	

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 Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Gurtler 2B-30H - Hz - Plan #1

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
5,200.0	5,129.1	5,136.8	5,129.1	17.3	9.3	-170.03	140.1	-31.3	841.2	822.6	18.61	45.207	
5,300.0	5,227.6	5,235.3	5,227.6	17.7	9.4	-170.23	140.1	-31.3	858.4	839.4	18.94	45.315	
5,400.0	5,326.3	5,334.0	5,326.3	18.0	9.6	-170.46	140.1	-31.3	873.8	854.5	19.31	45.260	
5,500.0	5,425.6	5,433.3	5,425.6	18.2	9.8	-170.63	140.1	-31.3	885.8	866.2	19.66	45.061	
5,600.0	5,525.2	5,532.9	5,525.2	18.4	9.9	-170.75	140.1	-31.3	894.4	874.4	20.00	44.727	
5,700.0	5,625.1	5,632.8	5,625.1	18.5	10.1	-170.82	140.1	-31.3	899.6	879.3	20.32	44.265	
5,800.0	5,725.0	5,732.7	5,725.0	18.6	10.3	-91.84	140.1	-31.3	901.3	880.7	20.64	43.664	
5,900.0	5,825.0	5,832.7	5,825.0	18.7	10.4	-91.84	140.1	-31.3	901.3	880.3	20.98	42.957	
6,000.0	5,925.0	5,932.7	5,925.0	18.8	10.6	-91.84	140.1	-31.3	901.3	880.0	21.32	42.272	
6,100.0	6,025.0	6,032.7	6,025.0	18.9	10.8	-91.84	140.1	-31.3	901.3	879.6	21.66	41.608	
6,200.0	6,125.0	6,132.7	6,125.0	19.0	11.0	-91.84	140.1	-31.3	901.3	879.3	22.00	40.964	
6,300.0	6,225.0	6,232.7	6,225.0	19.1	11.1	-91.84	140.1	-31.3	901.3	879.0	22.34	40.339	
6,400.0	6,325.0	6,332.7	6,325.0	19.2	11.3	-91.84	140.1	-31.3	901.3	878.6	22.68	39.732	
6,501.4	6,426.5	6,434.2	6,426.5	19.3	11.5	-91.84	140.1	-31.3	901.3	878.3	23.03	39.135	
6,550.0	6,475.0	6,481.0	6,473.3	19.4	11.5	88.34	139.0	-31.3	901.3	878.1	23.16	38.912	
6,600.0	6,524.6	6,528.7	6,520.7	19.4	11.6	88.41	134.0	-31.3	901.3	878.0	23.28	38.717	
6,650.0	6,573.4	6,576.5	6,567.7	19.4	11.6	88.50	125.2	-31.3	901.2	877.9	23.37	38.560	
6,700.0	6,621.1	6,624.4	6,613.8	19.4	11.7	88.60	112.4	-31.3	901.2	877.8	23.45	38.426	
6,750.0	6,667.3	6,672.5	6,658.9	19.5	11.7	88.72	95.7	-31.3	901.2	877.7	23.53	38.300	
6,770.7	6,685.9	6,692.4	6,677.1	19.5	11.7	88.76	87.7	-31.3	901.2	877.6	23.56	38.245	
6,800.0	6,711.7	6,720.7	6,702.5	19.5	11.8	88.84	75.3	-31.3	901.2	877.6	23.61	38.164	
6,850.0	6,753.9	6,769.0	6,744.4	19.5	11.8	88.97	51.1	-31.3	901.2	877.5	23.72	37.997	
6,900.0	6,793.7	6,817.6	6,784.3	19.5	11.9	89.10	23.5	-31.3	901.2	877.4	23.86	37.776	
6,950.0	6,830.6	6,866.3	6,821.8	19.6	12.0	89.25	-7.6	-31.3	901.3	877.2	24.05	37.482	
7,000.0	6,864.5	6,915.2	6,856.7	19.7	12.1	89.40	-41.9	-31.3	901.3	877.0	24.30	37.096	
7,050.0	6,895.0	6,964.4	6,888.6	19.8	12.3	89.55	-79.2	-31.3	901.4	876.7	24.63	36.602	
7,100.0	6,922.0	7,013.7	6,917.4	19.9	12.5	89.71	-119.3	-31.3	901.4	876.4	25.04	35.995	
7,150.0	6,945.1	7,063.3	6,942.7	20.0	12.7	89.87	-161.9	-31.3	901.5	876.0	25.56	35.272	
7,200.0	6,964.4	7,113.1	6,964.3	20.2	13.0	90.03	-206.7	-31.3	901.6	875.4	26.18	34.443	
7,250.0	6,979.5	7,163.1	6,982.0	20.5	13.4	90.19	-253.5	-31.3	901.7	874.8	26.90	33.522	
7,300.0	6,990.5	7,213.4	6,995.6	20.7	13.8	90.36	-301.9	-31.3	901.8	874.1	27.72	32.529	
7,350.0	6,997.1	7,263.9	7,005.0	21.0	14.3	90.51	-351.5	-31.3	901.9	873.3	28.64	31.487	
7,400.0	6,999.4	7,314.6	7,010.0	21.4	14.8	90.67	-402.0	-31.2	902.1	872.4	29.65	30.421	
7,406.4	6,999.4	7,321.2	7,010.3	21.4	14.8	90.69	-408.5	-31.2	902.1	872.3	29.79	30.283	
7,500.0	6,998.6	7,415.3	7,010.2	22.1	15.9	90.74	-502.7	-31.2	902.3	870.4	31.85	28.328	
7,600.0	6,997.7	7,515.3	7,009.4	23.0	17.1	90.74	-602.7	-31.2	902.5	868.2	34.26	26.344	
7,700.0	6,996.9	7,615.3	7,008.5	24.0	18.4	90.74	-702.7	-31.2	902.7	865.8	36.84	24.503	
7,800.0	6,996.0	7,715.3	7,007.6	25.0	19.7	90.74	-802.6	-31.2	902.9	863.3	39.57	22.820	
7,900.0	6,995.1	7,815.3	7,006.7	26.2	21.2	90.74	-902.6	-31.2	903.1	860.7	42.41	21.296	
8,000.0	6,994.2	7,915.3	7,005.9	27.4	22.6	90.74	-1,002.6	-31.2	903.3	857.9	45.34	19.922	
8,100.0	6,993.4	8,015.3	7,005.0	28.6	24.1	90.74	-1,102.6	-31.2	903.5	855.1	48.35	18.685	
8,200.0	6,992.5	8,115.3	7,004.1	29.9	25.7	90.74	-1,202.6	-31.2	903.7	852.3	51.43	17.572	
8,300.0	6,991.6	8,215.3	7,003.2	31.3	27.2	90.74	-1,302.6	-31.2	903.9	849.3	54.55	16.569	
8,400.0	6,990.7	8,315.3	7,002.4	32.7	28.8	90.74	-1,402.6	-31.2	904.1	846.4	57.72	15.663	
8,500.0	6,989.9	8,415.3	7,001.5	34.1	30.4	90.74	-1,502.6	-31.2	904.3	843.4	60.93	14.841	
8,600.0	6,989.0	8,515.3	7,000.6	35.6	32.0	90.74	-1,602.6	-31.2	904.5	840.3	64.17	14.096	
8,700.0	6,988.1	8,615.3	6,999.8	37.0	33.7	90.74	-1,702.6	-31.2	904.7	837.3	67.43	13.416	
8,800.0	6,987.3	8,715.3	6,998.9	38.5	35.3	90.74	-1,802.6	-31.2	904.9	834.2	70.72	12.795	
8,900.0	6,986.4	8,815.3	6,998.0	40.1	37.0	90.73	-1,902.6	-31.1	905.1	831.1	74.03	12.226	
9,000.0	6,985.5	8,915.3	6,997.1	41.6	38.6	90.73	-2,002.6	-31.1	905.3	827.9	77.36	11.703	
9,100.0	6,984.6	9,015.3	6,996.3	43.2	40.3	90.73	-2,102.6	-31.1	905.5	824.8	80.70	11.221	
9,200.0	6,983.8	9,115.3	6,995.4	44.7	42.0	90.73	-2,202.6	-31.1	905.7	821.6	84.06	10.775	

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 Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Gurtler 2B-30H - Hz - Plan #1

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
9,300.0	6,982.9	9,215.3	6,994.5	46.3	43.7	90.73	-2,302.6	-31.1	905.9	818.5	87.42	10.362	
9,400.0	6,982.0	9,315.3	6,993.6	47.9	45.4	90.73	-2,402.6	-31.1	906.1	815.3	90.80	9.979	
9,500.0	6,981.1	9,415.3	6,992.8	49.5	47.1	90.73	-2,502.6	-31.1	906.3	812.1	94.19	9.622	
9,600.0	6,980.3	9,515.3	6,991.9	51.1	48.8	90.73	-2,602.6	-31.1	906.5	808.9	97.58	9.290	
9,700.0	6,979.4	9,615.3	6,991.0	52.8	50.5	90.73	-2,702.6	-31.1	906.7	805.7	100.99	8.978	
9,800.0	6,978.5	9,715.3	6,990.2	54.4	52.2	90.73	-2,802.6	-31.1	906.9	802.5	104.40	8.687	
9,900.0	6,977.7	9,815.3	6,989.3	56.1	53.9	90.73	-2,902.6	-31.1	907.1	799.3	107.81	8.414	
10,000.0	6,976.8	9,915.3	6,988.4	57.7	55.6	90.73	-3,002.6	-31.1	907.3	796.1	111.24	8.157	
10,100.0	6,975.9	10,015.3	6,987.5	59.4	57.3	90.73	-3,102.6	-31.1	907.5	792.9	114.66	7.915	
10,200.0	6,975.0	10,115.3	6,986.7	61.0	59.0	90.73	-3,202.6	-31.1	907.7	789.6	118.10	7.686	
10,300.0	6,974.2	10,215.3	6,985.8	62.7	60.7	90.73	-3,302.5	-31.0	907.9	786.4	121.53	7.471	
10,400.0	6,973.3	10,315.3	6,984.9	64.4	62.5	90.73	-3,402.5	-31.0	908.1	783.2	124.97	7.267	
10,500.0	6,972.4	10,415.3	6,984.0	66.0	64.2	90.73	-3,502.5	-31.0	908.3	779.9	128.42	7.073	
10,600.0	6,971.5	10,515.3	6,983.2	67.7	65.9	90.73	-3,602.5	-31.0	908.5	776.7	131.87	6.890	
10,700.0	6,970.7	10,615.3	6,982.3	69.4	67.6	90.73	-3,702.5	-31.0	908.7	773.4	135.32	6.716	
10,800.0	6,969.8	10,715.3	6,981.4	71.1	69.4	90.73	-3,802.5	-31.0	908.9	770.2	138.77	6.550	
10,900.0	6,968.9	10,815.3	6,980.6	72.8	71.1	90.73	-3,902.5	-31.0	909.1	766.9	142.23	6.392	
11,000.0	6,968.1	10,915.3	6,979.7	74.5	72.8	90.73	-4,002.5	-31.0	909.3	763.7	145.68	6.242	
11,100.0	6,967.2	11,015.3	6,978.8	76.1	74.5	90.73	-4,102.5	-31.0	909.5	760.4	149.14	6.098	
11,200.0	6,966.3	11,115.3	6,977.9	77.8	76.3	90.73	-4,202.5	-31.0	909.7	757.1	152.61	5.961	
11,300.0	6,965.4	11,215.3	6,977.1	79.5	78.0	90.73	-4,302.5	-31.0	909.9	753.9	156.07	5.830	
11,400.0	6,964.6	11,315.3	6,976.2	81.2	79.7	90.73	-4,402.5	-31.0	910.1	750.6	159.54	5.705	
11,500.0	6,963.7	11,415.3	6,975.3	82.9	81.5	90.73	-4,502.5	-31.0	910.3	747.3	163.01	5.585	
11,600.0	6,962.8	11,515.3	6,974.4	84.7	83.2	90.73	-4,602.5	-31.0	910.6	744.1	166.48	5.469	
11,700.0	6,961.9	11,615.3	6,973.6	86.4	84.9	90.73	-4,702.5	-31.0	910.8	740.8	169.95	5.359	
11,800.0	6,961.1	11,715.3	6,972.7	88.1	86.7	90.73	-4,802.5	-30.9	911.0	737.5	173.42	5.253	
11,900.0	6,960.2	11,815.3	6,971.8	89.8	88.4	90.73	-4,902.5	-30.9	911.2	734.3	176.90	5.151	
12,000.0	6,959.3	11,915.3	6,971.0	91.5	90.2	90.73	-5,002.5	-30.9	911.4	731.0	180.37	5.053	
12,100.0	6,958.5	12,015.3	6,970.1	93.2	91.9	90.73	-5,102.5	-30.9	911.6	727.7	183.85	4.958	
12,200.0	6,957.6	12,115.3	6,969.2	94.9	93.6	90.73	-5,202.5	-30.9	911.8	724.4	187.33	4.867	
12,300.0	6,956.7	12,215.3	6,968.3	96.6	95.4	90.73	-5,302.5	-30.9	912.0	721.2	190.81	4.779	
12,400.0	6,955.8	12,315.3	6,967.5	98.4	97.1	90.73	-5,402.5	-30.9	912.2	717.9	194.29	4.695	
12,500.0	6,955.0	12,415.3	6,966.6	100.1	98.9	90.73	-5,502.5	-30.9	912.4	714.6	197.77	4.613	
12,600.0	6,954.1	12,515.3	6,965.7	101.8	100.6	90.73	-5,602.5	-30.9	912.6	711.3	201.25	4.534	
12,700.0	6,953.2	12,615.3	6,964.8	103.5	102.3	90.73	-5,702.5	-30.9	912.8	708.0	204.73	4.458	
12,800.0	6,952.3	12,715.3	6,964.0	105.3	104.1	90.73	-5,802.4	-30.9	913.0	704.8	208.22	4.385	
12,900.0	6,951.5	12,815.3	6,963.1	107.0	105.8	90.73	-5,902.4	-30.9	913.2	701.5	211.70	4.313	
13,000.0	6,950.6	12,915.3	6,962.2	108.7	107.6	90.73	-6,002.4	-30.9	913.4	698.2	215.19	4.245	
13,100.0	6,949.7	13,015.3	6,961.4	110.4	109.3	90.73	-6,102.4	-30.9	913.6	694.9	218.67	4.178	
13,200.0	6,948.9	13,115.3	6,960.5	112.2	111.1	90.73	-6,202.4	-30.8	913.8	691.6	222.16	4.113	
13,300.0	6,948.0	13,215.3	6,959.6	113.9	112.8	90.73	-6,302.4	-30.8	914.0	688.3	225.65	4.050	
13,400.0	6,947.1	13,315.3	6,958.7	115.6	114.5	90.73	-6,402.4	-30.8	914.2	685.0	229.14	3.990	
13,500.0	6,946.2	13,415.3	6,957.9	117.3	116.3	90.73	-6,502.4	-30.8	914.4	681.8	232.63	3.931	
13,600.0	6,945.4	13,515.3	6,957.0	119.1	118.0	90.73	-6,602.4	-30.8	914.6	678.5	236.11	3.873	
13,700.0	6,944.5	13,615.3	6,956.1	120.8	119.8	90.73	-6,702.4	-30.8	914.8	675.2	239.60	3.818	
13,800.0	6,943.6	13,715.3	6,955.2	122.5	121.5	90.73	-6,802.4	-30.8	915.0	671.9	243.09	3.764	
13,900.0	6,942.7	13,815.3	6,954.4	124.3	123.3	90.73	-6,902.4	-30.8	915.2	668.6	246.59	3.711	
14,000.0	6,941.9	13,915.3	6,953.5	126.0	125.0	90.73	-7,002.4	-30.8	915.4	665.3	250.08	3.660	
14,100.0	6,941.0	14,015.3	6,952.6	127.7	126.8	90.73	-7,102.4	-30.8	915.6	662.0	253.57	3.611	
14,200.0	6,940.1	14,115.3	6,951.8	129.5	128.5	90.73	-7,202.4	-30.8	915.8	658.7	257.06	3.563	
14,272.4	6,939.5	14,187.7	6,951.1	130.7	129.8	90.73	-7,274.8	-30.8	915.9	656.4	259.59	3.528	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Kaminsky #1 (Existing) - Existing - Existing

Survey Program: 0-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
0.0	0.0	0.0	0.0	0.0	0.0	137.12	-2,101.8	1,952.0	2,868.5				
100.0	100.0	92.0	92.0	0.2	0.2	137.12	-2,101.8	1,952.0	2,868.5	2,868.2	0.31	9,181.141	
200.0	200.0	192.0	192.0	0.3	0.3	137.12	-2,101.8	1,952.0	2,868.5	2,867.8	0.66	4,336.435	
300.0	300.0	292.0	292.0	0.5	0.5	58.16	-2,101.8	1,952.0	2,867.5	2,866.5	1.01	2,830.526	
400.0	399.8	391.8	391.8	0.7	0.7	58.30	-2,101.8	1,952.0	2,864.8	2,863.4	1.38	2,081.133	
500.0	499.5	491.5	491.5	0.9	0.9	58.52	-2,101.8	1,952.0	2,860.2	2,858.4	1.76	1,623.220	
600.0	598.7	590.7	590.7	1.2	1.0	58.84	-2,101.8	1,952.0	2,853.8	2,851.7	2.18	1,309.827	
700.0	697.5	689.5	689.5	1.5	1.2	59.25	-2,101.8	1,952.0	2,845.7	2,843.1	2.63	1,080.160	
800.0	795.9	787.9	787.9	1.8	1.4	59.55	-2,101.8	1,952.0	2,836.8	2,833.7	3.10	913.990	
900.0	894.4	886.4	886.4	2.2	1.5	59.84	-2,101.8	1,952.0	2,827.9	2,824.3	3.58	789.790	
1,000.0	992.9	984.9	984.9	2.5	1.7	60.15	-2,101.8	1,952.0	2,819.1	2,815.1	4.06	693.909	
1,100.0	1,091.4	1,083.4	1,083.4	2.9	1.9	60.45	-2,101.8	1,952.0	2,810.4	2,805.9	4.55	617.858	
1,200.0	1,189.9	1,181.9	1,181.9	3.2	2.1	60.76	-2,101.8	1,952.0	2,801.8	2,796.8	5.04	556.163	
1,300.0	1,288.4	1,280.4	1,280.4	3.6	2.2	61.06	-2,101.8	1,952.0	2,793.3	2,787.7	5.53	505.164	
1,400.0	1,386.8	1,378.8	1,378.8	3.9	2.4	61.37	-2,101.8	1,952.0	2,784.8	2,778.8	6.02	462.334	
1,500.0	1,485.3	1,477.3	1,477.3	4.3	2.6	61.68	-2,101.8	1,952.0	2,776.4	2,769.9	6.52	425.876	
1,600.0	1,583.8	1,575.8	1,575.8	4.6	2.8	62.00	-2,101.8	1,952.0	2,768.1	2,761.1	7.02	394.480	
1,700.0	1,682.3	1,674.3	1,674.3	5.0	2.9	62.31	-2,101.8	1,952.0	2,759.9	2,752.4	7.52	367.169	
1,800.0	1,780.8	1,772.8	1,772.8	5.3	3.1	62.63	-2,101.8	1,952.0	2,751.8	2,743.8	8.02	343.202	
1,900.0	1,879.2	1,871.2	1,871.2	5.7	3.3	62.94	-2,101.8	1,952.0	2,743.8	2,735.2	8.52	322.006	
2,000.0	1,977.7	1,969.7	1,969.7	6.0	3.4	63.26	-2,101.8	1,952.0	2,735.8	2,726.8	9.03	303.130	
2,100.0	2,076.2	2,068.2	2,068.2	6.4	3.6	63.59	-2,101.8	1,952.0	2,727.9	2,718.4	9.53	286.217	
2,200.0	2,174.7	2,166.7	2,166.7	6.7	3.8	63.91	-2,101.8	1,952.0	2,720.2	2,710.1	10.04	270.979	
2,300.0	2,273.2	2,265.2	2,265.2	7.1	4.0	64.23	-2,101.8	1,952.0	2,712.5	2,701.9	10.55	257.182	
2,400.0	2,371.6	2,363.6	2,363.6	7.4	4.1	64.56	-2,101.8	1,952.0	2,704.9	2,693.8	11.06	244.632	
2,500.0	2,470.1	2,462.1	2,462.1	7.8	4.3	64.89	-2,101.8	1,952.0	2,697.4	2,685.8	11.57	233.170	
2,600.0	2,568.6	2,560.6	2,560.6	8.1	4.5	65.22	-2,101.8	1,952.0	2,690.0	2,677.9	12.08	222.661	
2,700.0	2,667.1	2,659.1	2,659.1	8.5	4.6	65.55	-2,101.8	1,952.0	2,682.6	2,670.0	12.59	212.994	
2,800.0	2,765.6	2,757.6	2,757.6	8.8	4.8	65.89	-2,101.8	1,952.0	2,675.4	2,662.3	13.11	204.073	
2,900.0	2,864.0	2,856.0	2,856.0	9.2	5.0	66.22	-2,101.8	1,952.0	2,668.3	2,654.6	13.63	195.816	
3,000.0	2,962.5	2,954.5	2,954.5	9.5	5.2	66.56	-2,101.8	1,952.0	2,661.2	2,647.1	14.14	188.152	
3,100.0	3,061.0	3,053.0	3,053.0	9.9	5.3	66.90	-2,101.8	1,952.0	2,654.3	2,639.6	14.66	181.021	
3,200.0	3,159.5	3,151.5	3,151.5	10.2	5.5	67.24	-2,101.8	1,952.0	2,647.4	2,632.2	15.18	174.371	
3,300.0	3,258.0	3,250.0	3,250.0	10.6	5.7	67.59	-2,101.8	1,952.0	2,640.7	2,625.0	15.70	168.155	
3,400.0	3,356.4	3,348.4	3,348.4	11.0	5.8	67.93	-2,101.8	1,952.0	2,634.0	2,617.8	16.23	162.334	
3,500.0	3,454.9	3,446.9	3,446.9	11.3	6.0	68.28	-2,101.8	1,952.0	2,627.4	2,610.7	16.75	156.871	
3,600.0	3,553.4	3,545.4	3,545.4	11.7	6.2	68.62	-2,101.8	1,952.0	2,621.0	2,603.7	17.27	151.736	
3,700.0	3,651.9	3,643.9	3,643.9	12.0	6.4	68.97	-2,101.8	1,952.0	2,614.6	2,596.8	17.80	146.900	
3,800.0	3,750.4	3,742.4	3,742.4	12.4	6.5	69.33	-2,101.8	1,952.0	2,608.4	2,590.0	18.32	142.340	
3,900.0	3,848.9	3,840.9	3,840.9	12.7	6.7	69.68	-2,101.8	1,952.0	2,602.2	2,583.3	18.85	138.032	
4,000.0	3,947.3	3,939.3	3,939.3	13.1	6.9	70.03	-2,101.8	1,952.0	2,596.1	2,576.8	19.38	133.957	
4,100.0	4,045.8	4,037.8	4,037.8	13.4	7.0	70.39	-2,101.8	1,952.0	2,590.2	2,570.3	19.91	130.098	
4,200.0	4,144.3	4,136.3	4,136.3	13.8	7.2	70.75	-2,101.8	1,952.0	2,584.3	2,563.9	20.44	126.438	
4,300.0	4,242.8	4,234.8	4,234.8	14.1	7.4	71.11	-2,101.8	1,952.0	2,578.6	2,557.6	20.97	122.963	
4,400.0	4,341.3	4,333.3	4,333.3	14.5	7.6	71.47	-2,101.8	1,952.0	2,572.9	2,551.4	21.50	119.660	
4,500.0	4,439.7	4,431.7	4,431.7	14.8	7.7	71.83	-2,101.8	1,952.0	2,567.4	2,545.3	22.03	116.517	
4,600.0	4,538.2	4,530.2	4,530.2	15.2	7.9	72.19	-2,101.8	1,952.0	2,561.9	2,539.4	22.57	113.523	
4,700.0	4,636.7	4,628.7	4,628.7	15.5	8.1	72.56	-2,101.8	1,952.0	2,556.6	2,533.5	23.10	110.669	
4,800.0	4,735.2	4,727.2	4,727.2	15.9	8.3	72.93	-2,101.8	1,952.0	2,551.4	2,527.7	23.64	107.944	
4,900.0	4,833.7	4,825.7	4,825.7	16.2	8.4	73.29	-2,101.8	1,952.0	2,546.3	2,522.1	24.17	105.342	
5,000.0	4,932.1	4,924.1	4,924.1	16.6	8.6	73.66	-2,101.8	1,952.0	2,541.3	2,516.6	24.71	102.855	
5,100.0	5,030.6	5,022.6	5,022.6	17.0	8.8	74.04	-2,101.8	1,952.0	2,536.4	2,511.1	25.24	100.475	

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 Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Kaminsky #1 (Existing) - Existing - Existing

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
5,200.0	5,129.1	5,121.1	5,121.1	17.3	8.9	74.41	-2,101.8	1,952.0	2,531.6	2,505.8	25.78	98.196	
5,300.0	5,227.6	5,219.6	5,219.6	17.7	9.1	74.78	-2,101.8	1,952.0	2,526.9	2,500.6	26.32	96.012	
5,400.0	5,326.3	5,318.3	5,318.3	18.0	9.3	75.04	-2,101.8	1,952.0	2,522.8	2,496.0	26.80	94.128	
5,500.0	5,425.6	5,417.6	5,417.6	18.2	9.5	75.25	-2,101.8	1,952.0	2,519.6	2,492.4	27.23	92.527	
5,600.0	5,525.2	5,517.2	5,517.2	18.4	9.6	75.39	-2,101.8	1,952.0	2,517.4	2,489.8	27.61	91.186	
5,700.0	5,625.1	5,617.1	5,617.1	18.5	9.8	75.48	-2,101.8	1,952.0	2,516.1	2,488.2	27.93	90.082	
5,800.0	5,725.0	5,717.0	5,717.0	18.6	10.0	154.51	-2,101.8	1,952.0	2,515.7	2,487.4	28.21	89.178	
5,900.0	5,825.0	5,817.0	5,817.0	18.7	10.2	154.51	-2,101.8	1,952.0	2,515.7	2,487.2	28.48	88.327	
6,000.0	5,925.0	5,917.0	5,917.0	18.8	10.3	154.51	-2,101.8	1,952.0	2,515.7	2,486.9	28.75	87.489	
6,100.0	6,025.0	6,017.0	6,017.0	18.9	10.5	154.51	-2,101.8	1,952.0	2,515.7	2,486.6	29.03	86.663	
6,200.0	6,125.0	6,117.0	6,117.0	19.0	10.7	154.51	-2,101.8	1,952.0	2,515.7	2,486.3	29.30	85.849	
6,300.0	6,225.0	6,217.0	6,217.0	19.1	10.9	154.51	-2,101.8	1,952.0	2,515.7	2,486.1	29.58	85.047	
6,400.0	6,325.0	6,317.0	6,317.0	19.2	11.0	154.51	-2,101.8	1,952.0	2,515.7	2,485.8	29.86	84.257	
6,501.4	6,426.5	6,418.5	6,418.5	19.3	11.2	154.51	-2,101.8	1,952.0	2,515.7	2,485.5	30.14	83.468	
6,550.0	6,475.0	6,467.0	6,467.0	19.4	11.3	-25.47	-2,101.8	1,952.0	2,513.8	2,483.6	30.18	83.307	
6,600.0	6,524.6	6,516.6	6,516.6	19.4	11.4	-25.78	-2,101.8	1,952.0	2,508.0	2,478.0	30.03	83.527	
6,650.0	6,573.4	6,565.4	6,565.4	19.4	11.5	-26.32	-2,101.8	1,952.0	2,498.4	2,468.7	29.69	84.156	
6,700.0	6,621.1	6,613.1	6,613.1	19.4	11.5	-27.10	-2,101.8	1,952.0	2,484.9	2,455.7	29.17	85.199	
6,750.0	6,667.3	6,659.3	6,659.3	19.5	11.6	-28.15	-2,101.8	1,952.0	2,467.8	2,439.3	28.48	86.658	
6,800.0	6,711.7	6,703.7	6,703.7	19.5	11.7	-29.49	-2,101.8	1,952.0	2,447.2	2,419.5	27.64	88.530	
6,850.0	6,753.9	6,745.9	6,745.9	19.5	11.8	-31.18	-2,101.8	1,952.0	2,423.2	2,396.5	26.69	90.785	
6,900.0	6,793.7	6,785.7	6,785.7	19.5	11.8	-33.27	-2,101.8	1,952.0	2,396.0	2,370.4	25.67	93.344	
6,950.0	6,830.6	6,822.6	6,822.6	19.6	11.9	-35.82	-2,101.8	1,952.0	2,366.0	2,341.4	24.64	96.028	
7,000.0	6,864.5	6,856.5	6,856.5	19.7	12.0	-38.93	-2,101.8	1,952.0	2,333.3	2,309.7	23.69	98.494	
7,050.0	6,895.0	6,887.0	6,887.0	19.8	12.0	-42.69	-2,101.8	1,952.0	2,298.3	2,275.4	22.94	100.181	
7,100.0	6,922.0	6,914.0	6,914.0	19.9	12.1	-47.19	-2,101.8	1,952.0	2,261.2	2,238.7	22.53	100.343	
7,150.0	6,945.1	6,937.1	6,937.1	20.0	12.1	-52.54	-2,101.8	1,952.0	2,222.4	2,199.8	22.60	98.331	
7,200.0	6,964.4	6,956.4	6,956.4	20.2	12.1	-58.77	-2,101.8	1,952.0	2,182.2	2,159.0	23.19	94.093	
7,250.0	6,979.5	6,971.5	6,971.5	20.5	12.2	-65.85	-2,101.8	1,952.0	2,140.9	2,116.7	24.21	88.443	
7,300.0	6,990.5	6,982.5	6,982.5	20.7	12.2	-73.60	-2,101.8	1,952.0	2,098.9	2,073.5	25.39	82.656	
7,350.0	6,997.1	6,989.1	6,989.1	21.0	12.2	-81.71	-2,101.8	1,952.0	2,056.5	2,030.1	26.44	77.792	
7,400.0	6,999.4	6,991.4	6,991.4	21.4	12.2	-89.77	-2,101.8	1,952.0	2,014.2	1,987.1	27.09	74.357	
7,406.4	6,999.4	6,991.4	6,991.4	21.4	12.2	-90.79	-2,101.8	1,952.0	2,008.7	1,981.6	27.14	74.023	
7,500.0	6,998.6	6,990.6	6,990.6	22.1	12.2	-90.74	-2,101.8	1,952.0	1,930.4	1,902.3	28.16	68.547	
7,600.0	6,997.7	6,989.7	6,989.7	23.0	12.2	-90.70	-2,101.8	1,952.0	1,848.3	1,819.0	29.36	62.944	
7,700.0	6,996.9	6,988.9	6,988.9	24.0	12.2	-90.65	-2,101.8	1,952.0	1,768.0	1,737.4	30.65	57.676	
7,800.0	6,996.0	6,988.0	6,988.0	25.0	12.2	-90.60	-2,101.8	1,952.0	1,689.9	1,657.9	32.02	52.781	
7,900.0	6,995.1	6,987.1	6,987.1	26.2	12.2	-90.56	-2,101.8	1,952.0	1,614.1	1,580.7	33.44	48.275	
8,000.0	6,994.2	6,986.2	6,986.2	27.4	12.2	-90.51	-2,101.8	1,952.0	1,541.1	1,506.2	34.90	44.156	
8,100.0	6,993.4	6,985.4	6,985.4	28.6	12.2	-90.46	-2,101.8	1,952.0	1,471.3	1,434.9	36.41	40.414	
8,200.0	6,992.5	6,984.5	6,984.5	29.9	12.2	-90.42	-2,101.8	1,952.0	1,405.1	1,367.2	37.94	37.035	
8,300.0	6,991.6	6,983.6	6,983.6	31.3	12.2	-90.37	-2,101.8	1,952.0	1,343.2	1,303.7	39.50	34.002	
8,400.0	6,990.7	6,982.7	6,982.7	32.7	12.2	-90.33	-2,101.8	1,952.0	1,286.0	1,244.9	41.09	31.300	
8,500.0	6,989.9	6,981.9	6,981.9	34.1	12.2	-90.28	-2,101.8	1,952.0	1,234.3	1,191.6	42.69	28.914	
8,600.0	6,989.0	6,981.0	6,981.0	35.6	12.2	-90.23	-2,101.8	1,952.0	1,188.8	1,144.4	44.31	26.830	
8,700.0	6,988.1	6,980.1	6,980.1	37.0	12.2	-90.19	-2,101.8	1,952.0	1,150.1	1,104.2	45.94	25.037	
8,800.0	6,987.3	6,979.3	6,979.3	38.5	12.2	-90.14	-2,101.8	1,952.0	1,119.1	1,071.6	47.58	23.521	
8,900.0	6,986.4	6,978.4	6,978.4	40.1	12.2	-90.09	-2,101.8	1,952.0	1,096.4	1,047.2	49.23	22.270	
9,000.0	6,985.5	6,977.5	6,977.5	41.6	12.2	-90.05	-2,101.8	1,952.0	1,082.5	1,031.6	50.90	21.269	
9,100.0	6,984.6	6,976.6	6,976.6	43.2	12.2	-90.00	-2,101.8	1,952.0	1,077.7	1,025.2	52.56	20.503	
9,101.6	6,984.6	6,976.6	6,976.6	43.2	12.2	-90.00	-2,101.8	1,952.0	1,077.7	1,025.1	52.59	20.492	CC, ES
9,200.0	6,983.8	6,975.8	6,975.8	44.7	12.2	-89.95	-2,101.8	1,952.0	1,082.2	1,028.0	54.24	19.952	

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 Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Kaminsky #1 (Existing) - Existing - Existing

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
9,300.0	6,982.9	6,974.9	6,974.9	46.3	12.2	-89.91	-2,101.8	1,952.0	1,095.8	1,039.9	55.92	19.595	
9,400.0	6,982.0	6,974.0	6,974.0	47.9	12.2	-89.86	-2,101.8	1,952.0	1,118.3	1,060.7	57.61	19.411	
9,500.0	6,981.1	6,973.1	6,973.1	49.5	12.2	-89.82	-2,101.8	1,952.0	1,149.0	1,089.7	59.30	19.375	SF
9,600.0	6,980.3	6,972.3	6,972.3	51.1	12.2	-89.77	-2,101.8	1,952.0	1,187.4	1,126.4	61.00	19.465	
9,700.0	6,979.4	6,971.4	6,971.4	52.8	12.2	-89.72	-2,101.8	1,952.0	1,232.7	1,170.0	62.70	19.660	
9,800.0	6,978.5	6,970.5	6,970.5	54.4	12.2	-89.68	-2,101.8	1,952.0	1,284.2	1,219.8	64.40	19.940	
9,900.0	6,977.7	6,969.7	6,969.7	56.1	12.2	-89.63	-2,101.8	1,952.0	1,341.2	1,275.1	66.11	20.288	
10,000.0	6,976.8	6,968.8	6,968.8	57.7	12.2	-89.58	-2,101.8	1,952.0	1,403.0	1,335.2	67.82	20.688	
10,100.0	6,975.9	6,967.9	6,967.9	59.4	12.2	-89.54	-2,101.8	1,952.0	1,469.1	1,399.5	69.53	21.128	
10,200.0	6,975.0	6,967.0	6,967.0	61.0	12.2	-89.49	-2,101.8	1,952.0	1,538.8	1,467.5	71.24	21.598	
10,300.0	6,974.2	6,966.2	6,966.2	62.7	12.2	-89.44	-2,101.8	1,952.0	1,611.7	1,538.7	72.96	22.089	
10,400.0	6,973.3	6,965.3	6,965.3	64.4	12.2	-89.40	-2,101.8	1,952.0	1,687.3	1,612.7	74.68	22.595	
10,500.0	6,972.4	6,964.4	6,964.4	66.0	12.2	-89.35	-2,101.8	1,952.0	1,765.4	1,689.0	76.40	23.108	
10,600.0	6,971.5	6,963.5	6,963.5	67.7	12.2	-89.30	-2,101.8	1,952.0	1,845.6	1,767.5	78.12	23.626	
10,700.0	6,970.7	6,962.7	6,962.7	69.4	12.2	-89.26	-2,101.8	1,952.0	1,927.7	1,847.9	79.84	24.144	
10,800.0	6,969.8	6,961.8	6,961.8	71.1	12.2	-89.21	-2,101.8	1,952.0	2,011.4	1,929.8	81.57	24.659	
10,900.0	6,968.9	6,960.9	6,960.9	72.8	12.1	-89.17	-2,101.8	1,952.0	2,096.5	2,013.2	83.29	25.170	
11,000.0	6,968.1	6,960.1	6,960.1	74.5	12.1	-89.12	-2,101.8	1,952.0	2,182.9	2,097.9	85.02	25.675	
11,100.0	6,967.2	6,959.2	6,959.2	76.1	12.1	-89.07	-2,101.8	1,952.0	2,270.4	2,183.6	86.75	26.172	
11,200.0	6,966.3	6,958.3	6,958.3	77.8	12.1	-89.03	-2,101.8	1,952.0	2,358.9	2,270.4	88.48	26.661	
11,300.0	6,965.4	6,957.4	6,957.4	79.5	12.1	-88.98	-2,101.8	1,952.0	2,448.2	2,358.0	90.21	27.140	
11,400.0	6,964.6	6,956.6	6,956.6	81.2	12.1	-88.93	-2,101.8	1,952.0	2,538.4	2,446.5	91.94	27.610	
11,500.0	6,963.7	6,955.7	6,955.7	82.9	12.1	-88.89	-2,101.8	1,952.0	2,629.3	2,535.6	93.67	28.070	
11,600.0	6,962.8	6,954.8	6,954.8	84.7	12.1	-88.84	-2,101.8	1,952.0	2,720.8	2,625.4	95.40	28.520	
11,700.0	6,961.9	6,953.9	6,953.9	86.4	12.1	-88.79	-2,101.8	1,952.0	2,812.9	2,715.8	97.13	28.959	
11,800.0	6,961.1	6,953.1	6,953.1	88.1	12.1	-88.75	-2,101.8	1,952.0	2,905.5	2,806.7	98.87	29.388	
11,900.0	6,960.2	6,952.2	6,952.2	89.8	12.1	-88.70	-2,101.8	1,952.0	2,998.6	2,898.0	100.60	29.807	
12,000.0	6,959.3	6,951.3	6,951.3	91.5	12.1	-88.66	-2,101.8	1,952.0	3,092.1	2,989.8	102.34	30.216	
12,100.0	6,958.5	6,950.5	6,950.5	93.2	12.1	-88.61	-2,101.8	1,952.0	3,186.1	3,082.0	104.07	30.615	
12,200.0	6,957.6	6,949.6	6,949.6	94.9	12.1	-88.56	-2,101.8	1,952.0	3,280.3	3,174.5	105.81	31.003	
12,300.0	6,956.7	6,948.7	6,948.7	96.6	12.1	-88.52	-2,101.8	1,952.0	3,374.9	3,267.4	107.54	31.383	
12,400.0	6,955.8	6,947.8	6,947.8	98.4	12.1	-88.47	-2,101.8	1,952.0	3,469.8	3,360.6	109.28	31.753	
12,500.0	6,955.0	6,947.0	6,947.0	100.1	12.1	-88.42	-2,101.8	1,952.0	3,565.0	3,454.0	111.01	32.113	
12,600.0	6,954.1	6,946.1	6,946.1	101.8	12.1	-88.38	-2,101.8	1,952.0	3,660.5	3,547.7	112.75	32.465	
12,700.0	6,953.2	6,945.2	6,945.2	103.5	12.1	-88.33	-2,101.8	1,952.0	3,756.2	3,641.7	114.49	32.808	
12,800.0	6,952.3	6,944.3	6,944.3	105.3	12.1	-88.28	-2,101.8	1,952.0	3,852.1	3,735.8	116.22	33.143	
12,900.0	6,951.5	6,943.5	6,943.5	107.0	12.1	-88.24	-2,101.8	1,952.0	3,948.2	3,830.2	117.96	33.470	
13,000.0	6,950.6	6,942.6	6,942.6	108.7	12.1	-88.19	-2,101.8	1,952.0	4,044.4	3,924.7	119.70	33.788	
13,100.0	6,949.7	6,941.7	6,941.7	110.4	12.1	-88.15	-2,101.8	1,952.0	4,140.9	4,019.5	121.44	34.099	
13,200.0	6,948.9	6,940.9	6,940.9	112.2	12.1	-88.10	-2,101.8	1,952.0	4,237.5	4,114.4	123.18	34.402	
13,300.0	6,948.0	6,940.0	6,940.0	113.9	12.1	-88.05	-2,101.8	1,952.0	4,334.3	4,209.4	124.91	34.698	
13,400.0	6,947.1	6,939.1	6,939.1	115.6	12.1	-88.01	-2,101.8	1,952.0	4,431.2	4,304.6	126.65	34.987	
13,500.0	6,946.2	6,938.2	6,938.2	117.3	12.1	-87.96	-2,101.8	1,952.0	4,528.3	4,399.9	128.39	35.269	
13,600.0	6,945.4	6,937.4	6,937.4	119.1	12.1	-87.91	-2,101.8	1,952.0	4,625.5	4,495.4	130.13	35.545	
13,700.0	6,944.5	6,936.5	6,936.5	120.8	12.1	-87.87	-2,101.8	1,952.0	4,722.8	4,590.9	131.87	35.814	
13,800.0	6,943.6	6,935.6	6,935.6	122.5	12.1	-87.82	-2,101.8	1,952.0	4,820.2	4,686.6	133.61	36.077	
13,900.0	6,942.7	6,934.7	6,934.7	124.3	12.1	-87.78	-2,101.8	1,952.0	4,917.7	4,782.4	135.35	36.334	
14,000.0	6,941.9	6,933.9	6,933.9	126.0	12.1	-87.73	-2,101.8	1,952.0	5,015.3	4,878.2	137.09	36.585	
14,100.0	6,941.0	6,933.0	6,933.0	127.7	12.1	-87.68	-2,101.8	1,952.0	5,113.0	4,974.2	138.82	36.831	
14,200.0	6,940.1	6,932.1	6,932.1	129.5	12.1	-87.64	-2,101.8	1,952.0	5,210.8	5,070.3	140.56	37.071	
14,272.4	6,939.5	6,931.5	6,931.5	130.7	12.1	-87.60	-2,101.8	1,952.0	5,281.7	5,139.9	141.82	37.241	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Medsker-Overton #1 (Existing) - Existing - Existing

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
0.0	0.0	19.0	19.0	0.0	0.0	173.14	-6,036.5	726.2	6,080.0				
100.0	100.0	119.0	119.0	0.2	0.2	173.14	-6,036.5	726.2	6,080.0	6,079.6	0.36	N/A	
200.0	200.0	219.0	219.0	0.3	0.4	173.14	-6,036.5	726.2	6,080.0	6,079.3	0.71	8,580.243	
300.0	300.0	319.0	319.0	0.5	0.6	94.15	-6,036.5	726.2	6,080.1	6,079.1	1.06	5,728.897	
400.0	399.8	418.8	418.8	0.7	0.7	94.20	-6,036.5	726.2	6,080.5	6,079.1	1.43	4,250.154	
500.0	499.5	518.5	518.5	0.9	0.9	94.26	-6,036.5	726.2	6,081.1	6,079.3	1.83	3,323.083	
600.0	598.7	617.7	617.7	1.2	1.1	94.36	-6,036.5	726.2	6,082.1	6,079.8	2.27	2,679.210	
700.0	697.5	716.5	716.5	1.5	1.3	94.48	-6,036.5	726.2	6,083.3	6,080.5	2.76	2,204.987	
800.0	795.9	814.9	814.9	1.8	1.4	94.64	-6,036.5	726.2	6,084.7	6,081.4	3.26	1,866.299	
900.0	894.4	913.4	913.4	2.2	1.6	94.80	-6,036.5	726.2	6,086.1	6,082.4	3.77	1,614.870	
1,000.0	992.9	1,011.9	1,011.9	2.5	1.8	94.96	-6,036.5	726.2	6,087.6	6,083.4	4.28	1,421.842	
1,100.0	1,091.4	1,110.4	1,110.4	2.9	1.9	95.12	-6,036.5	726.2	6,089.2	6,084.4	4.80	1,269.414	
1,200.0	1,189.9	1,208.9	1,208.9	3.2	2.1	95.28	-6,036.5	726.2	6,090.8	6,085.5	5.31	1,146.194	
1,300.0	1,288.4	1,307.4	1,307.4	3.6	2.3	95.44	-6,036.5	726.2	6,092.4	6,086.6	5.83	1,044.625	
1,400.0	1,386.8	1,405.8	1,405.8	3.9	2.5	95.60	-6,036.5	726.2	6,094.1	6,087.8	6.35	959.518	
1,500.0	1,485.3	1,504.3	1,504.3	4.3	2.6	95.76	-6,036.5	726.2	6,095.9	6,089.0	6.87	887.204	
1,600.0	1,583.8	1,602.8	1,602.8	4.6	2.8	95.92	-6,036.5	726.2	6,097.7	6,090.3	7.39	825.022	
1,700.0	1,682.3	1,701.3	1,701.3	5.0	3.0	96.08	-6,036.5	726.2	6,099.5	6,091.6	7.91	770.995	
1,800.0	1,780.8	1,799.8	1,799.8	5.3	3.1	96.24	-6,036.5	726.2	6,101.4	6,093.0	8.43	723.626	
1,900.0	1,879.2	1,898.2	1,898.2	5.7	3.3	96.40	-6,036.5	726.2	6,103.4	6,094.4	8.95	681.764	
2,000.0	1,977.7	1,996.7	1,996.7	6.0	3.5	96.56	-6,036.5	726.2	6,105.3	6,095.9	9.47	644.504	
2,100.0	2,076.2	2,095.2	2,095.2	6.4	3.7	96.72	-6,036.5	726.2	6,107.4	6,097.4	9.99	611.132	
2,200.0	2,174.7	2,193.7	2,193.7	6.7	3.8	96.88	-6,036.5	726.2	6,109.5	6,099.0	10.51	581.071	
2,300.0	2,273.2	2,292.2	2,292.2	7.1	4.0	97.04	-6,036.5	726.2	6,111.6	6,100.6	11.03	553.854	
2,400.0	2,371.6	2,390.6	2,390.6	7.4	4.2	97.20	-6,036.5	726.2	6,113.8	6,102.2	11.56	529.099	
2,500.0	2,470.1	2,489.1	2,489.1	7.8	4.3	97.36	-6,036.5	726.2	6,116.0	6,103.9	12.08	506.485	
2,600.0	2,568.6	2,587.6	2,587.6	8.1	4.5	97.52	-6,036.5	726.2	6,118.3	6,105.7	12.60	485.750	
2,700.0	2,667.1	2,686.1	2,686.1	8.5	4.7	97.67	-6,036.5	726.2	6,120.6	6,107.5	13.12	466.668	
2,800.0	2,765.6	2,784.6	2,784.6	8.8	4.9	97.83	-6,036.5	726.2	6,123.0	6,109.4	13.64	449.051	
2,900.0	2,864.0	2,883.0	2,883.0	9.2	5.0	97.99	-6,036.5	726.2	6,125.4	6,111.3	14.16	432.737	
3,000.0	2,962.5	2,981.5	2,981.5	9.5	5.2	98.15	-6,036.5	726.2	6,127.9	6,113.2	14.67	417.587	
3,100.0	3,061.0	3,080.0	3,080.0	9.9	5.4	98.31	-6,036.5	726.2	6,130.4	6,115.2	15.19	403.482	
3,200.0	3,159.5	3,178.5	3,178.5	10.2	5.5	98.47	-6,036.5	726.2	6,133.0	6,117.3	15.71	390.318	
3,300.0	3,258.0	3,277.0	3,277.0	10.6	5.7	98.62	-6,036.5	726.2	6,135.6	6,119.4	16.23	378.004	
3,400.0	3,356.4	3,375.4	3,375.4	11.0	5.9	98.78	-6,036.5	726.2	6,138.3	6,121.5	16.75	366.461	
3,500.0	3,454.9	3,473.9	3,473.9	11.3	6.1	98.94	-6,036.5	726.2	6,141.0	6,123.7	17.27	355.619	
3,600.0	3,553.4	3,572.4	3,572.4	11.7	6.2	99.10	-6,036.5	726.2	6,143.8	6,126.0	17.79	345.416	
3,700.0	3,651.9	3,670.9	3,670.9	12.0	6.4	99.26	-6,036.5	726.2	6,146.6	6,128.3	18.30	335.799	
3,800.0	3,750.4	3,769.4	3,769.4	12.4	6.6	99.41	-6,036.5	726.2	6,149.4	6,130.6	18.82	326.718	
3,900.0	3,848.9	3,867.9	3,867.9	12.7	6.8	99.57	-6,036.5	726.2	6,152.3	6,133.0	19.34	318.130	
4,000.0	3,947.3	3,966.3	3,966.3	13.1	6.9	99.73	-6,036.5	726.2	6,155.3	6,135.4	19.86	309.996	
4,100.0	4,045.8	4,064.8	4,064.8	13.4	7.1	99.88	-6,036.5	726.2	6,158.3	6,137.9	20.37	302.282	
4,200.0	4,144.3	4,163.3	4,163.3	13.8	7.3	100.04	-6,036.5	726.2	6,161.4	6,140.5	20.89	294.956	
4,300.0	4,242.8	4,261.8	4,261.8	14.1	7.4	100.20	-6,036.5	726.2	6,164.4	6,143.0	21.41	287.989	
4,400.0	4,341.3	4,360.3	4,360.3	14.5	7.6	100.35	-6,036.5	726.2	6,167.6	6,145.7	21.92	281.357	
4,500.0	4,439.7	4,458.7	4,458.7	14.8	7.8	100.51	-6,036.5	726.2	6,170.8	6,148.3	22.44	275.036	
4,600.0	4,538.2	4,557.2	4,557.2	15.2	8.0	100.67	-6,036.5	726.2	6,174.0	6,151.1	22.95	269.005	
4,700.0	4,636.7	4,655.7	4,655.7	15.5	8.1	100.82	-6,036.5	726.2	6,177.3	6,153.8	23.47	263.244	
4,800.0	4,735.2	4,754.2	4,754.2	15.9	8.3	100.98	-6,036.5	726.2	6,180.6	6,156.7	23.98	257.736	
4,900.0	4,833.7	4,852.7	4,852.7	16.2	8.5	101.13	-6,036.5	726.2	6,184.0	6,159.5	24.49	252.465	
5,000.0	4,932.1	4,951.1	4,951.1	16.6	8.6	101.29	-6,036.5	726.2	6,187.4	6,162.4	25.01	247.416	
5,100.0	5,030.6	5,049.6	5,049.6	17.0	8.8	101.44	-6,036.5	726.2	6,190.9	6,165.4	25.52	242.575	

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 Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Medsker-Overton #1 (Existing) - Existing - Existing

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
5,200.0	5,129.1	5,148.1	5,148.1	17.3	9.0	101.60	-6,036.5	726.2	6,194.4	6,168.4	26.03	237.930	
5,300.0	5,227.6	5,246.6	5,246.6	17.7	9.2	101.75	-6,036.5	726.2	6,198.0	6,171.5	26.55	233.470	
5,400.0	5,326.3	5,345.3	5,345.3	18.0	9.3	101.96	-6,036.5	726.2	6,201.3	6,174.2	27.01	229.613	
5,500.0	5,425.6	5,444.6	5,444.6	18.2	9.5	102.12	-6,036.5	726.2	6,203.8	6,176.4	27.42	226.264	
5,600.0	5,525.2	5,544.2	5,544.2	18.4	9.7	102.23	-6,036.5	726.2	6,205.7	6,177.9	27.78	223.377	
5,700.0	5,625.1	5,644.1	5,644.1	18.5	9.9	102.30	-6,036.5	726.2	6,206.8	6,178.7	28.10	220.912	
5,800.0	5,725.0	5,744.0	5,744.0	18.6	10.0	-178.68	-6,036.5	726.2	6,207.1	6,178.8	28.36	218.881	
5,900.0	5,825.0	5,844.0	5,844.0	18.7	10.2	-178.68	-6,036.5	726.2	6,207.1	6,178.5	28.63	216.807	
6,000.0	5,925.0	5,944.0	5,944.0	18.8	10.4	-178.68	-6,036.5	726.2	6,207.1	6,178.2	28.90	214.764	
6,100.0	6,025.0	6,044.0	6,044.0	18.9	10.5	-178.68	-6,036.5	726.2	6,207.1	6,178.0	29.18	212.750	
6,200.0	6,125.0	6,144.0	6,144.0	19.0	10.7	-178.68	-6,036.5	726.2	6,207.1	6,177.7	29.45	210.766	
6,300.0	6,225.0	6,244.0	6,244.0	19.1	10.9	-178.68	-6,036.5	726.2	6,207.1	6,177.4	29.73	208.812	
6,400.0	6,325.0	6,344.0	6,344.0	19.2	11.1	-178.68	-6,036.5	726.2	6,207.1	6,177.1	30.00	206.885	
6,501.4	6,426.5	6,445.5	6,445.5	19.3	11.2	-178.68	-6,036.5	726.2	6,207.1	6,176.9	30.28	204.960	
6,550.0	6,475.0	6,494.0	6,494.0	19.4	11.3	1.45	-6,036.5	726.2	6,205.1	6,174.8	30.33	204.600	
6,600.0	6,524.6	6,543.6	6,543.6	19.4	11.4	1.47	-6,036.5	726.2	6,198.7	6,168.5	30.18	205.359	
6,650.0	6,573.4	6,592.4	6,592.4	19.4	11.5	1.50	-6,036.5	726.2	6,188.0	6,158.1	29.86	207.244	
6,700.0	6,621.1	6,640.1	6,640.1	19.4	11.6	1.54	-6,036.5	726.2	6,173.1	6,143.7	29.35	210.299	
6,750.0	6,667.3	6,686.3	6,686.3	19.5	11.7	1.60	-6,036.5	726.2	6,154.1	6,125.4	28.68	214.596	
6,800.0	6,711.7	6,730.7	6,730.7	19.5	11.7	1.68	-6,036.5	726.2	6,131.1	6,103.3	27.84	220.231	
6,850.0	6,753.9	6,772.9	6,772.9	19.5	11.8	1.79	-6,036.5	726.2	6,104.4	6,077.5	26.85	227.324	
6,900.0	6,793.7	6,812.7	6,812.7	19.5	11.9	1.92	-6,036.5	726.2	6,074.1	6,048.3	25.74	236.019	
6,950.0	6,830.6	6,849.6	6,849.6	19.6	12.0	2.09	-6,036.5	726.2	6,040.4	6,015.9	24.51	246.470	
7,000.0	6,864.5	6,883.5	6,883.5	19.7	12.0	2.31	-6,036.5	726.2	6,003.6	5,980.4	23.20	258.818	
7,050.0	6,895.0	6,914.0	6,914.0	19.8	12.1	2.61	-6,036.5	726.2	5,964.1	5,942.2	21.83	273.149	
7,100.0	6,922.0	6,941.0	6,941.0	19.9	12.1	3.01	-6,036.5	726.2	5,922.0	5,901.5	20.46	289.399	
7,150.0	6,945.1	6,964.1	6,964.1	20.0	12.2	3.58	-6,036.5	726.2	5,877.7	5,858.6	19.13	307.198	
7,200.0	6,964.4	6,983.4	6,983.4	20.2	12.2	4.45	-6,036.5	726.2	5,831.6	5,813.7	17.91	325.601	
7,250.0	6,979.5	6,998.5	6,998.5	20.5	12.2	5.91	-6,036.5	726.2	5,784.0	5,767.1	16.88	342.641	
7,300.0	6,990.5	7,009.5	7,009.5	20.7	12.2	8.80	-6,036.5	726.2	5,735.3	5,719.1	16.19	354.219	
7,350.0	6,997.1	7,016.1	7,016.1	21.0	12.2	17.05	-6,036.5	726.2	5,685.7	5,669.3	16.46	345.403	
7,400.0	6,999.4	7,018.4	7,018.4	21.4	12.2	84.85	-6,036.5	726.2	5,635.8	5,608.8	26.98	208.886	
7,406.4	6,999.4	7,018.4	7,018.4	21.4	12.2	107.44	-6,036.5	726.2	5,629.4	5,602.8	26.62	211.511	
7,500.0	6,998.6	7,017.6	7,017.6	22.1	12.2	107.17	-6,036.5	726.2	5,535.9	5,508.3	27.60	200.548	
7,600.0	6,997.7	7,016.7	7,016.7	23.0	12.2	106.88	-6,036.5	726.2	5,435.9	5,407.1	28.76	188.983	
7,700.0	6,996.9	7,015.9	7,015.9	24.0	12.2	106.58	-6,036.5	726.2	5,336.0	5,305.9	30.01	177.790	
7,800.0	6,996.0	7,015.0	7,015.0	25.0	12.2	106.29	-6,036.5	726.2	5,236.0	5,204.7	31.33	167.103	
7,900.0	6,995.1	7,014.1	7,014.1	26.2	12.2	105.99	-6,036.5	726.2	5,136.1	5,103.3	32.72	156.992	
8,000.0	6,994.2	7,013.2	7,013.2	27.4	12.2	105.70	-6,036.5	726.2	5,036.1	5,002.0	34.15	147.485	
8,100.0	6,993.4	7,012.4	7,012.4	28.6	12.2	105.40	-6,036.5	726.2	4,936.2	4,900.5	35.62	138.580	
8,200.0	6,992.5	7,011.5	7,011.5	29.9	12.2	105.10	-6,036.5	726.2	4,836.2	4,799.1	37.13	130.259	
8,300.0	6,991.6	7,010.6	7,010.6	31.3	12.2	104.80	-6,036.5	726.2	4,736.3	4,697.6	38.67	122.492	
8,400.0	6,990.7	7,009.7	7,009.7	32.7	12.2	104.51	-6,036.5	726.2	4,636.3	4,596.1	40.23	115.246	
8,500.0	6,989.9	7,008.9	7,008.9	34.1	12.2	104.21	-6,036.5	726.2	4,536.4	4,494.6	41.82	108.484	
8,600.0	6,989.0	7,008.0	7,008.0	35.6	12.2	103.90	-6,036.5	726.2	4,436.5	4,393.0	43.42	102.171	
8,700.0	6,988.1	7,007.1	7,007.1	37.0	12.2	103.60	-6,036.5	726.2	4,336.5	4,291.5	45.04	96.271	
8,800.0	6,987.3	7,006.3	7,006.3	38.5	12.2	103.30	-6,036.5	726.2	4,236.6	4,189.9	46.68	90.753	
8,900.0	6,986.4	7,005.4	7,005.4	40.1	12.2	103.00	-6,036.5	726.2	4,136.7	4,088.3	48.33	85.585	
9,000.0	6,985.5	7,004.5	7,004.5	41.6	12.2	102.69	-6,036.5	726.2	4,036.7	3,986.7	50.00	80.739	
9,100.0	6,984.6	7,003.6	7,003.6	43.2	12.2	102.39	-6,036.5	726.2	3,936.8	3,885.1	51.67	76.189	
9,200.0	6,983.8	7,002.8	7,002.8	44.7	12.2	102.08	-6,036.5	726.2	3,836.9	3,783.6	53.36	71.912	
9,300.0	6,982.9	7,001.9	7,001.9	46.3	12.2	101.78	-6,036.5	726.2	3,737.0	3,681.9	55.05	67.886	

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 Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Medsker-Overton #1 (Existing) - Existing - Existing

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
9,400.0	6,982.0	7,001.0	7,001.0	47.9	12.2	101.47	-6,036.5	726.2	3,637.1	3,580.3	56.75	64.091	
9,500.0	6,981.1	7,000.1	7,000.1	49.5	12.2	101.16	-6,036.5	726.2	3,537.2	3,478.7	58.46	60.509	
9,600.0	6,980.3	6,999.3	6,999.3	51.1	12.2	100.85	-6,036.5	726.2	3,437.3	3,377.1	60.17	57.124	
9,700.0	6,979.4	6,998.4	6,998.4	52.8	12.2	100.54	-6,036.5	726.2	3,337.4	3,275.5	61.89	53.922	
9,800.0	6,978.5	6,997.5	6,997.5	54.4	12.2	100.23	-6,036.5	726.2	3,237.5	3,173.9	63.62	50.889	
9,900.0	6,977.7	6,996.7	6,996.7	56.1	12.2	99.92	-6,036.5	726.2	3,137.6	3,072.3	65.35	48.013	
10,000.0	6,976.8	6,995.8	6,995.8	57.7	12.2	99.61	-6,036.5	726.2	3,037.8	2,970.7	67.09	45.282	
10,100.0	6,975.9	6,994.9	6,994.9	59.4	12.2	99.30	-6,036.5	726.2	2,937.9	2,869.1	68.83	42.686	
10,200.0	6,975.0	6,994.0	6,994.0	61.0	12.2	98.99	-6,036.5	726.2	2,838.1	2,767.5	70.57	40.216	
10,300.0	6,974.2	6,993.2	6,993.2	62.7	12.2	98.68	-6,036.5	726.2	2,738.2	2,665.9	72.32	37.864	
10,400.0	6,973.3	6,992.3	6,992.3	64.4	12.2	98.37	-6,036.5	726.2	2,638.4	2,564.3	74.07	35.622	
10,500.0	6,972.4	6,991.4	6,991.4	66.0	12.2	98.05	-6,036.5	726.2	2,538.6	2,462.8	75.82	33.482	
10,600.0	6,971.5	6,990.5	6,990.5	67.7	12.2	97.74	-6,036.5	726.2	2,438.8	2,361.2	77.58	31.437	
10,700.0	6,970.7	6,989.7	6,989.7	69.4	12.2	97.42	-6,036.5	726.2	2,339.0	2,259.7	79.33	29.483	
10,800.0	6,969.8	6,988.8	6,988.8	71.1	12.2	97.11	-6,036.5	726.2	2,239.2	2,158.2	81.09	27.613	
10,900.0	6,968.9	6,987.9	6,987.9	72.8	12.2	96.79	-6,036.5	726.2	2,139.5	2,056.6	82.85	25.822	
11,000.0	6,968.1	6,987.1	6,987.1	74.5	12.2	96.48	-6,036.5	726.2	2,039.8	1,955.2	84.62	24.106	
11,100.0	6,967.2	6,986.2	6,986.2	76.1	12.2	96.16	-6,036.5	726.2	1,940.1	1,853.7	86.38	22.460	
11,200.0	6,966.3	6,985.3	6,985.3	77.8	12.2	95.85	-6,036.5	726.2	1,840.4	1,752.3	88.14	20.880	
11,300.0	6,965.4	6,984.4	6,984.4	79.5	12.2	95.53	-6,036.5	726.2	1,740.8	1,650.9	89.91	19.362	
11,400.0	6,964.6	6,983.6	6,983.6	81.2	12.2	95.21	-6,036.5	726.2	1,641.3	1,549.6	91.67	17.903	
11,500.0	6,963.7	6,982.7	6,982.7	82.9	12.2	94.89	-6,036.5	726.2	1,541.8	1,448.3	93.44	16.500	
11,600.0	6,962.8	6,981.8	6,981.8	84.7	12.2	94.58	-6,036.5	726.2	1,442.3	1,347.1	95.21	15.149	
11,700.0	6,961.9	6,980.9	6,980.9	86.4	12.2	94.26	-6,036.5	726.2	1,342.9	1,246.0	96.97	13.849	
11,800.0	6,961.1	6,980.1	6,980.1	88.1	12.2	93.94	-6,036.5	726.2	1,243.7	1,144.9	98.74	12.596	
11,900.0	6,960.2	6,979.2	6,979.2	89.8	12.2	93.62	-6,036.5	726.2	1,144.5	1,044.0	100.50	11.389	
12,000.0	6,959.3	6,978.3	6,978.3	91.5	12.2	93.30	-6,036.5	726.2	1,045.6	943.3	102.26	10.224	
12,100.0	6,958.5	6,977.5	6,977.5	93.2	12.2	92.98	-6,036.5	726.2	946.8	842.8	104.02	9.102	
12,200.0	6,957.6	6,976.6	6,976.6	94.9	12.2	92.67	-6,036.5	726.2	848.4	742.6	105.78	8.020	
12,300.0	6,956.7	6,975.7	6,975.7	96.6	12.2	92.35	-6,036.5	726.2	750.3	642.8	107.54	6.977	
12,400.0	6,955.8	6,974.8	6,974.8	98.4	12.2	92.03	-6,036.5	726.2	652.8	543.5	109.30	5.973	
12,500.0	6,955.0	6,974.0	6,974.0	100.1	12.2	91.71	-6,036.5	726.2	556.3	445.2	111.05	5.009	
12,600.0	6,954.1	6,973.1	6,973.1	101.8	12.2	91.39	-6,036.5	726.2	461.1	348.3	112.81	4.088	
12,700.0	6,953.2	6,972.2	6,972.2	103.5	12.2	91.07	-6,036.5	726.2	368.6	254.1	114.56	3.218	
12,800.0	6,952.3	6,971.3	6,971.3	105.3	12.2	90.75	-6,036.5	726.2	281.3	165.0	116.31	2.418	
12,900.0	6,951.5	6,970.5	6,970.5	107.0	12.2	90.43	-6,036.5	726.2	205.8	87.7	118.05	1.743	
13,000.0	6,950.6	6,969.6	6,969.6	108.7	12.2	90.11	-6,036.5	726.2	159.9	40.1	119.79	1.335	Level 3
13,033.9	6,950.3	6,969.3	6,969.3	109.3	12.2	90.00	-6,036.5	726.2	156.3	35.9	120.38	1.298	Level 3, CC, ES, SF
13,100.0	6,949.7	6,968.7	6,968.7	110.4	12.2	89.79	-6,036.5	726.2	169.7	48.2	121.53	1.396	Level 3
13,200.0	6,948.9	6,967.9	6,967.9	112.2	12.2	89.47	-6,036.5	726.2	228.1	104.8	123.27	1.850	
13,300.0	6,948.0	6,967.0	6,967.0	113.9	12.2	89.15	-6,036.5	726.2	308.6	183.6	125.00	2.469	
13,400.0	6,947.1	6,966.1	6,966.1	115.6	12.2	88.83	-6,036.5	726.2	398.1	271.4	126.73	3.141	
13,500.0	6,946.2	6,965.2	6,965.2	117.3	12.2	88.51	-6,036.5	726.2	491.6	363.2	128.46	3.827	
13,600.0	6,945.4	6,964.4	6,964.4	119.1	12.2	88.19	-6,036.5	726.2	587.3	457.1	130.18	4.511	
13,700.0	6,944.5	6,963.5	6,963.5	120.8	12.2	87.87	-6,036.5	726.2	684.2	552.3	131.90	5.187	
13,800.0	6,943.6	6,962.6	6,962.6	122.5	12.2	87.55	-6,036.5	726.2	781.9	648.3	133.61	5.852	
13,900.0	6,942.7	6,961.7	6,961.7	124.3	12.2	87.23	-6,036.5	726.2	880.1	744.8	135.32	6.504	
14,000.0	6,941.9	6,960.9	6,960.9	126.0	12.1	86.91	-6,036.5	726.2	978.7	841.6	137.02	7.142	
14,100.0	6,941.0	6,960.0	6,960.0	127.7	12.1	86.59	-6,036.5	726.2	1,077.5	938.8	138.72	7.767	
14,200.0	6,940.1	6,959.1	6,959.1	129.5	12.1	86.27	-6,036.5	726.2	1,176.5	1,036.1	140.42	8.379	
14,272.4	6,939.5	6,958.5	6,958.5	130.7	12.1	86.04	-6,036.5	726.2	1,248.3	1,106.7	141.64	8.813	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Starks #1 (Existing) - Existing - Existing

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
0.0	0.0	0.0	0.0	0.0	0.0	176.53	-3,756.8	227.7	3,763.8				
100.0	100.0	79.0	79.0	0.2	0.1	176.53	-3,756.8	227.7	3,763.7	3,763.4	0.29	N/A	
200.0	200.0	179.0	179.0	0.3	0.3	176.53	-3,756.8	227.7	3,763.7	3,763.1	0.64	5,891.934	
300.0	300.0	279.0	279.0	0.5	0.5	97.55	-3,756.8	227.7	3,763.9	3,763.0	0.99	3,796.418	
400.0	399.8	378.8	378.8	0.7	0.7	97.62	-3,756.8	227.7	3,764.6	3,763.3	1.36	2,767.037	
500.0	499.5	478.5	478.5	0.9	0.8	97.73	-3,756.8	227.7	3,765.8	3,764.0	1.76	2,140.641	
600.0	598.7	577.7	577.7	1.2	1.0	97.88	-3,756.8	227.7	3,767.5	3,765.3	2.20	1,713.940	
700.0	697.5	676.5	676.5	1.5	1.2	98.06	-3,756.8	227.7	3,769.7	3,767.0	2.69	1,403.942	
800.0	795.9	774.9	774.9	1.8	1.4	98.32	-3,756.8	227.7	3,772.2	3,769.0	3.18	1,184.594	
900.0	894.4	873.4	873.4	2.2	1.5	98.58	-3,756.8	227.7	3,774.8	3,771.1	3.69	1,022.835	
1,000.0	992.9	971.9	971.9	2.5	1.7	98.84	-3,756.8	227.7	3,777.4	3,773.2	4.20	899.272	
1,100.0	1,091.4	1,070.4	1,070.4	2.9	1.9	99.09	-3,756.8	227.7	3,780.2	3,775.5	4.71	802.079	
1,200.0	1,189.9	1,168.9	1,168.9	3.2	2.0	99.35	-3,756.8	227.7	3,783.0	3,777.8	5.23	723.761	
1,300.0	1,288.4	1,267.4	1,267.4	3.6	2.2	99.60	-3,756.8	227.7	3,785.9	3,780.2	5.74	659.374	
1,400.0	1,386.8	1,365.8	1,365.8	3.9	2.4	99.86	-3,756.8	227.7	3,788.9	3,782.6	6.26	605.543	
1,500.0	1,485.3	1,464.3	1,464.3	4.3	2.6	100.11	-3,756.8	227.7	3,791.9	3,785.2	6.77	559.893	
1,600.0	1,583.8	1,562.8	1,562.8	4.6	2.7	100.37	-3,756.8	227.7	3,795.1	3,787.8	7.29	520.706	
1,700.0	1,682.3	1,661.3	1,661.3	5.0	2.9	100.62	-3,756.8	227.7	3,798.3	3,790.5	7.80	486.709	
1,800.0	1,780.8	1,759.8	1,759.8	5.3	3.1	100.87	-3,756.8	227.7	3,801.6	3,793.3	8.32	456.944	
1,900.0	1,879.2	1,858.2	1,858.2	5.7	3.2	101.13	-3,756.8	227.7	3,804.9	3,796.1	8.83	430.672	
2,000.0	1,977.7	1,956.7	1,956.7	6.0	3.4	101.38	-3,756.8	227.7	3,808.4	3,799.0	9.35	407.316	
2,100.0	2,076.2	2,055.2	2,055.2	6.4	3.6	101.63	-3,756.8	227.7	3,811.9	3,802.0	9.86	386.420	
2,200.0	2,174.7	2,153.7	2,153.7	6.7	3.8	101.88	-3,756.8	227.7	3,815.5	3,805.1	10.38	367.617	
2,300.0	2,273.2	2,252.2	2,252.2	7.1	3.9	102.14	-3,756.8	227.7	3,819.1	3,808.3	10.89	350.610	
2,400.0	2,371.6	2,350.6	2,350.6	7.4	4.1	102.39	-3,756.8	227.7	3,822.9	3,811.5	11.41	335.155	
2,500.0	2,470.1	2,449.1	2,449.1	7.8	4.3	102.64	-3,756.8	227.7	3,826.7	3,814.8	11.92	321.051	
2,600.0	2,568.6	2,547.6	2,547.6	8.1	4.4	102.89	-3,756.8	227.7	3,830.6	3,818.2	12.43	308.130	
2,700.0	2,667.1	2,646.1	2,646.1	8.5	4.6	103.14	-3,756.8	227.7	3,834.6	3,821.6	12.94	296.250	
2,800.0	2,765.6	2,744.6	2,744.6	8.8	4.8	103.38	-3,756.8	227.7	3,838.6	3,825.1	13.46	285.291	
2,900.0	2,864.0	2,843.0	2,843.0	9.2	5.0	103.63	-3,756.8	227.7	3,842.7	3,828.8	13.97	275.151	
3,000.0	2,962.5	2,941.5	2,941.5	9.5	5.1	103.88	-3,756.8	227.7	3,846.9	3,832.4	14.48	265.742	
3,100.0	3,061.0	3,040.0	3,040.0	9.9	5.3	104.13	-3,756.8	227.7	3,851.2	3,836.2	14.99	256.990	
3,200.0	3,159.5	3,138.5	3,138.5	10.2	5.5	104.37	-3,756.8	227.7	3,855.5	3,840.0	15.49	248.828	
3,300.0	3,258.0	3,237.0	3,237.0	10.6	5.6	104.62	-3,756.8	227.7	3,859.9	3,843.9	16.00	241.200	
3,400.0	3,356.4	3,335.4	3,335.4	11.0	5.8	104.87	-3,756.8	227.7	3,864.4	3,847.9	16.51	234.054	
3,500.0	3,454.9	3,433.9	3,433.9	11.3	6.0	105.11	-3,756.8	227.7	3,869.0	3,851.9	17.02	227.349	
3,600.0	3,553.4	3,532.4	3,532.4	11.7	6.2	105.36	-3,756.8	227.7	3,873.6	3,856.1	17.52	221.044	
3,700.0	3,651.9	3,630.9	3,630.9	12.0	6.3	105.60	-3,756.8	227.7	3,878.3	3,860.3	18.03	215.106	
3,800.0	3,750.4	3,729.4	3,729.4	12.4	6.5	105.84	-3,756.8	227.7	3,883.1	3,864.5	18.53	209.503	
3,900.0	3,848.9	3,827.9	3,827.9	12.7	6.7	106.09	-3,756.8	227.7	3,887.9	3,868.9	19.04	204.210	
4,000.0	3,947.3	3,926.3	3,926.3	13.1	6.9	106.33	-3,756.8	227.7	3,892.8	3,873.3	19.54	199.200	
4,100.0	4,045.8	4,024.8	4,024.8	13.4	7.0	106.57	-3,756.8	227.7	3,897.8	3,877.8	20.04	194.453	
4,200.0	4,144.3	4,123.3	4,123.3	13.8	7.2	106.81	-3,756.8	227.7	3,902.9	3,882.3	20.55	189.948	
4,300.0	4,242.8	4,221.8	4,221.8	14.1	7.4	107.05	-3,756.8	227.7	3,908.0	3,886.9	21.05	185.669	
4,400.0	4,341.3	4,320.3	4,320.3	14.5	7.5	107.29	-3,756.8	227.7	3,913.2	3,891.6	21.55	181.598	
4,500.0	4,439.7	4,418.7	4,418.7	14.8	7.7	107.53	-3,756.8	227.7	3,918.5	3,896.4	22.05	177.722	
4,600.0	4,538.2	4,517.2	4,517.2	15.2	7.9	107.77	-3,756.8	227.7	3,923.8	3,901.2	22.55	174.027	
4,700.0	4,636.7	4,615.7	4,615.7	15.5	8.1	108.01	-3,756.8	227.7	3,929.2	3,906.2	23.05	170.500	
4,800.0	4,735.2	4,714.2	4,714.2	15.9	8.2	108.24	-3,756.8	227.7	3,934.7	3,911.1	23.54	167.132	
4,900.0	4,833.7	4,812.7	4,812.7	16.2	8.4	108.48	-3,756.8	227.7	3,940.2	3,916.2	24.04	163.911	
5,000.0	4,932.1	4,911.1	4,911.1	16.6	8.6	108.71	-3,756.8	227.7	3,945.8	3,921.3	24.53	160.829	
5,100.0	5,030.6	5,009.6	5,009.6	17.0	8.7	108.95	-3,756.8	227.7	3,951.5	3,926.5	25.03	157.876	

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 Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Starks #1 (Existing) - Existing - Existing

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
5,200.0	5,129.1	5,108.1	5,108.1	17.3	8.9	109.18	-3,756.8	227.7	3,957.3	3,931.7	25.52	155.047	
5,300.0	5,227.6	5,206.6	5,206.6	17.7	9.1	109.42	-3,756.8	227.7	3,963.1	3,937.1	26.02	152.332	
5,400.0	5,326.3	5,305.3	5,305.3	18.0	9.3	109.73	-3,756.8	227.7	3,968.4	3,941.9	26.46	149.991	
5,500.0	5,425.6	5,404.6	5,404.6	18.2	9.4	109.97	-3,756.8	227.7	3,972.6	3,945.7	26.85	147.930	
5,600.0	5,525.2	5,504.2	5,504.2	18.4	9.6	110.15	-3,756.8	227.7	3,975.6	3,948.3	27.21	146.121	
5,700.0	5,625.1	5,604.1	5,604.1	18.5	9.8	110.25	-3,756.8	227.7	3,977.4	3,949.8	27.52	144.540	
5,800.0	5,725.0	5,704.0	5,704.0	18.6	10.0	-170.71	-3,756.8	227.7	3,978.0	3,950.2	27.78	143.214	
5,900.0	5,825.0	5,804.0	5,804.0	18.7	10.1	-170.71	-3,756.8	227.7	3,978.0	3,949.9	28.05	141.815	
6,000.0	5,925.0	5,904.0	5,904.0	18.8	10.3	-170.71	-3,756.8	227.7	3,978.0	3,949.6	28.33	140.438	
6,100.0	6,025.0	6,004.0	6,004.0	18.9	10.5	-170.71	-3,756.8	227.7	3,978.0	3,949.4	28.60	139.081	
6,200.0	6,125.0	6,104.0	6,104.0	19.0	10.7	-170.71	-3,756.8	227.7	3,978.0	3,949.1	28.88	137.745	
6,300.0	6,225.0	6,204.0	6,204.0	19.1	10.8	-170.71	-3,756.8	227.7	3,978.0	3,948.8	29.16	136.430	
6,400.0	6,325.0	6,304.0	6,304.0	19.2	11.0	-170.71	-3,756.8	227.7	3,978.0	3,948.5	29.44	135.134	
6,501.4	6,426.5	6,405.5	6,405.5	19.3	11.2	-170.71	-3,756.8	227.7	3,978.0	3,948.2	29.72	133.840	
6,550.0	6,475.0	6,454.0	6,454.0	19.4	11.3	9.44	-3,756.8	227.7	3,975.9	3,946.2	29.77	133.556	
6,600.0	6,524.6	6,503.6	6,503.6	19.4	11.4	9.56	-3,756.8	227.7	3,969.6	3,940.0	29.64	133.950	
6,650.0	6,573.4	6,552.4	6,552.4	19.4	11.4	9.77	-3,756.8	227.7	3,959.1	3,929.7	29.33	135.005	
6,700.0	6,621.1	6,600.1	6,600.1	19.4	11.5	10.07	-3,756.8	227.7	3,944.4	3,915.5	28.85	136.740	
6,750.0	6,667.3	6,646.3	6,646.3	19.5	11.6	10.48	-3,756.8	227.7	3,925.6	3,897.4	28.20	139.182	
6,800.0	6,711.7	6,690.7	6,690.7	19.5	11.7	11.02	-3,756.8	227.7	3,903.0	3,875.5	27.42	142.361	
6,850.0	6,753.9	6,732.9	6,732.9	19.5	11.8	11.71	-3,756.8	227.7	3,876.6	3,850.1	26.50	146.309	
6,900.0	6,793.7	6,772.7	6,772.7	19.5	11.8	12.59	-3,756.8	227.7	3,846.7	3,821.2	25.47	151.038	
6,950.0	6,830.6	6,809.6	6,809.6	19.6	11.9	13.71	-3,756.8	227.7	3,813.5	3,789.1	24.36	156.521	
7,000.0	6,864.5	6,843.5	6,843.5	19.7	11.9	15.16	-3,756.8	227.7	3,777.3	3,754.1	23.23	162.633	
7,050.0	6,895.0	6,874.0	6,874.0	19.8	12.0	17.05	-3,756.8	227.7	3,738.3	3,716.2	22.11	169.064	
7,100.0	6,922.0	6,901.0	6,901.0	19.9	12.0	19.58	-3,756.8	227.7	3,696.9	3,675.8	21.11	175.151	
7,150.0	6,945.1	6,924.1	6,924.1	20.0	12.1	23.05	-3,756.8	227.7	3,653.3	3,632.9	20.34	179.627	
7,200.0	6,964.4	6,943.4	6,943.4	20.2	12.1	28.01	-3,756.8	227.7	3,607.9	3,587.9	20.01	180.338	
7,250.0	6,979.5	6,958.5	6,958.5	20.5	12.1	35.40	-3,756.8	227.7	3,561.0	3,540.6	20.43	174.343	
7,300.0	6,990.5	6,969.5	6,969.5	20.7	12.2	46.91	-3,756.8	227.7	3,513.1	3,491.1	22.01	159.628	
7,350.0	6,997.1	6,976.1	6,976.1	21.0	12.2	64.86	-3,756.8	227.7	3,464.4	3,439.6	24.79	139.729	
7,400.0	6,999.4	6,978.4	6,978.4	21.4	12.2	89.26	-3,756.8	227.7	3,415.4	3,388.4	27.05	126.265	
7,406.4	6,999.4	6,978.4	6,978.4	21.4	12.2	92.57	-3,756.8	227.7	3,409.1	3,381.9	27.15	125.559	
7,500.0	6,998.6	6,977.6	6,977.6	22.1	12.2	92.50	-3,756.8	227.7	3,317.3	3,289.1	28.17	117.749	
7,600.0	6,997.7	6,976.7	6,976.7	23.0	12.2	92.42	-3,756.8	227.7	3,219.3	3,189.9	29.37	109.611	
7,700.0	6,996.9	6,975.9	6,975.9	24.0	12.2	92.35	-3,756.8	227.7	3,121.4	3,090.8	30.66	101.819	
7,800.0	6,996.0	6,975.0	6,975.0	25.0	12.2	92.27	-3,756.8	227.7	3,023.7	2,991.7	32.01	94.447	
7,900.0	6,995.1	6,974.1	6,974.1	26.2	12.2	92.19	-3,756.8	227.7	2,926.1	2,892.7	33.43	87.528	
8,000.0	6,994.2	6,973.2	6,973.2	27.4	12.2	92.12	-3,756.8	227.7	2,828.7	2,793.8	34.89	81.067	
8,100.0	6,993.4	6,972.4	6,972.4	28.6	12.2	92.04	-3,756.8	227.7	2,731.5	2,695.1	36.39	75.052	
8,200.0	6,992.5	6,971.5	6,971.5	29.9	12.2	91.96	-3,756.8	227.7	2,634.5	2,596.5	37.93	69.460	
8,300.0	6,991.6	6,970.6	6,970.6	31.3	12.2	91.89	-3,756.8	227.7	2,537.7	2,498.2	39.49	64.265	
8,400.0	6,990.7	6,969.7	6,969.7	32.7	12.2	91.81	-3,756.8	227.7	2,441.2	2,400.1	41.07	59.440	
8,500.0	6,989.9	6,968.9	6,968.9	34.1	12.2	91.73	-3,756.8	227.7	2,344.9	2,302.2	42.67	54.955	
8,600.0	6,989.0	6,968.0	6,968.0	35.6	12.2	91.66	-3,756.8	227.7	2,249.0	2,204.7	44.29	50.783	
8,700.0	6,988.1	6,967.1	6,967.1	37.0	12.2	91.58	-3,756.8	227.7	2,153.5	2,107.6	45.92	46.899	
8,800.0	6,987.3	6,966.3	6,966.3	38.5	12.2	91.50	-3,756.8	227.7	2,058.4	2,010.8	47.56	43.280	
8,900.0	6,986.4	6,965.4	6,965.4	40.1	12.2	91.42	-3,756.8	227.7	1,963.7	1,914.5	49.21	39.904	
9,000.0	6,985.5	6,964.5	6,964.5	41.6	12.2	91.35	-3,756.8	227.7	1,869.7	1,818.8	50.87	36.752	
9,100.0	6,984.6	6,963.6	6,963.6	43.2	12.2	91.27	-3,756.8	227.7	1,776.3	1,723.7	52.54	33.807	
9,200.0	6,983.8	6,962.8	6,962.8	44.7	12.2	91.19	-3,756.8	227.7	1,683.6	1,629.4	54.22	31.053	
9,300.0	6,982.9	6,961.9	6,961.9	46.3	12.2	91.12	-3,756.8	227.7	1,591.8	1,535.9	55.90	28.477	

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 Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Starks #1 (Existing) - Existing - Existing

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
9,400.0	6,982.0	6,961.0	6,961.0	47.9	12.1	91.04	-3,756.8	227.7	1,501.1	1,443.5	57.59	26.067	
9,500.0	6,981.1	6,960.1	6,960.1	49.5	12.1	90.96	-3,756.8	227.7	1,411.6	1,352.4	59.28	23.814	
9,600.0	6,980.3	6,959.3	6,959.3	51.1	12.1	90.89	-3,756.8	227.7	1,323.7	1,262.7	60.97	21.708	
9,700.0	6,979.4	6,958.4	6,958.4	52.8	12.1	90.81	-3,756.8	227.7	1,237.5	1,174.9	62.68	19.745	
9,800.0	6,978.5	6,957.5	6,957.5	54.4	12.1	90.73	-3,756.8	227.7	1,153.6	1,089.3	64.38	17.920	
9,900.0	6,977.7	6,956.7	6,956.7	56.1	12.1	90.66	-3,756.8	227.7	1,072.5	1,006.4	66.09	16.229	
10,000.0	6,976.8	6,955.8	6,955.8	57.7	12.1	90.58	-3,756.8	227.7	994.8	927.0	67.80	14.674	
10,100.0	6,975.9	6,954.9	6,954.9	59.4	12.1	90.50	-3,756.8	227.7	921.5	851.9	69.51	13.257	
10,200.0	6,975.0	6,954.0	6,954.0	61.0	12.1	90.43	-3,756.8	227.7	853.5	782.3	71.22	11.984	
10,300.0	6,974.2	6,953.2	6,953.2	62.7	12.1	90.35	-3,756.8	227.7	792.4	719.4	72.94	10.864	
10,400.0	6,973.3	6,952.3	6,952.3	64.4	12.1	90.27	-3,756.8	227.7	739.8	665.1	74.66	9.909	
10,500.0	6,972.4	6,951.4	6,951.4	66.0	12.1	90.19	-3,756.8	227.7	697.6	621.2	76.38	9.133	
10,600.0	6,971.5	6,950.5	6,950.5	67.7	12.1	90.12	-3,756.8	227.7	667.8	589.7	78.10	8.551	
10,700.0	6,970.7	6,949.7	6,949.7	69.4	12.1	90.04	-3,756.8	227.7	652.2	572.4	79.82	8.171	
10,753.1	6,970.2	6,949.2	6,949.2	70.3	12.1	90.00	-3,756.8	227.7	650.1	569.3	80.74	8.051	CC, ES
10,800.0	6,969.8	6,948.8	6,948.8	71.1	12.1	89.96	-3,756.8	227.7	651.7	570.2	81.55	7.992	SF
10,900.0	6,968.9	6,947.9	6,947.9	72.8	12.1	89.89	-3,756.8	227.7	666.4	583.2	83.27	8.003	
11,000.0	6,968.1	6,947.1	6,947.1	74.5	12.1	89.81	-3,756.8	227.7	695.4	610.4	85.00	8.181	
11,100.0	6,967.2	6,946.2	6,946.2	76.1	12.1	89.73	-3,756.8	227.7	736.8	650.1	86.73	8.496	
11,200.0	6,966.3	6,945.3	6,945.3	77.8	12.1	89.66	-3,756.8	227.7	788.8	700.4	88.46	8.918	
11,300.0	6,965.4	6,944.4	6,944.4	79.5	12.1	89.58	-3,756.8	227.7	849.5	759.3	90.19	9.419	
11,400.0	6,964.6	6,943.6	6,943.6	81.2	12.1	89.50	-3,756.8	227.7	917.1	825.2	91.92	9.977	
11,500.0	6,963.7	6,942.7	6,942.7	82.9	12.1	89.43	-3,756.8	227.7	990.2	896.5	93.65	10.573	
11,600.0	6,962.8	6,941.8	6,941.8	84.7	12.1	89.35	-3,756.8	227.7	1,067.6	972.2	95.38	11.193	
11,700.0	6,961.9	6,940.9	6,940.9	86.4	12.1	89.27	-3,756.8	227.7	1,148.5	1,051.4	97.11	11.827	
11,800.0	6,961.1	6,940.1	6,940.1	88.1	12.1	89.19	-3,756.8	227.7	1,232.3	1,133.4	98.85	12.467	
11,900.0	6,960.2	6,939.2	6,939.2	89.8	12.1	89.12	-3,756.8	227.7	1,318.3	1,217.7	100.58	13.107	
12,000.0	6,959.3	6,938.3	6,938.3	91.5	12.1	89.04	-3,756.8	227.7	1,406.1	1,303.8	102.31	13.743	
12,100.0	6,958.5	6,937.5	6,937.5	93.2	12.1	88.96	-3,756.8	227.7	1,495.5	1,391.5	104.05	14.373	
12,200.0	6,957.6	6,936.6	6,936.6	94.9	12.1	88.89	-3,756.8	227.7	1,586.2	1,480.4	105.78	14.995	
12,300.0	6,956.7	6,935.7	6,935.7	96.6	12.1	88.81	-3,756.8	227.7	1,677.9	1,570.4	107.52	15.606	
12,400.0	6,955.8	6,934.8	6,934.8	98.4	12.1	88.73	-3,756.8	227.7	1,770.5	1,661.2	109.25	16.206	
12,500.0	6,955.0	6,934.0	6,934.0	100.1	12.1	88.66	-3,756.8	227.7	1,863.9	1,752.9	110.99	16.794	
12,600.0	6,954.1	6,933.1	6,933.1	101.8	12.1	88.58	-3,756.8	227.7	1,957.9	1,845.2	112.72	17.369	
12,700.0	6,953.2	6,932.2	6,932.2	103.5	12.1	88.50	-3,756.8	227.7	2,052.5	1,938.0	114.46	17.932	
12,800.0	6,952.3	6,931.3	6,931.3	105.3	12.1	88.43	-3,756.8	227.7	2,147.6	2,031.4	116.19	18.483	
12,900.0	6,951.5	6,930.5	6,930.5	107.0	12.1	88.35	-3,756.8	227.7	2,243.1	2,125.2	117.93	19.021	
13,000.0	6,950.6	6,929.6	6,929.6	108.7	12.1	88.27	-3,756.8	227.7	2,339.0	2,219.3	119.66	19.546	
13,100.0	6,949.7	6,928.7	6,928.7	110.4	12.1	88.20	-3,756.8	227.7	2,435.2	2,313.8	121.40	20.059	
13,200.0	6,948.9	6,927.9	6,927.9	112.2	12.1	88.12	-3,756.8	227.7	2,531.7	2,408.6	123.14	20.560	
13,300.0	6,948.0	6,927.0	6,927.0	113.9	12.1	88.04	-3,756.8	227.7	2,628.5	2,503.6	124.87	21.049	
13,400.0	6,947.1	6,926.1	6,926.1	115.6	12.1	87.97	-3,756.8	227.7	2,725.5	2,598.9	126.61	21.527	
13,500.0	6,946.2	6,925.2	6,925.2	117.3	12.1	87.89	-3,756.8	227.7	2,822.7	2,694.3	128.34	21.993	
13,600.0	6,945.4	6,924.4	6,924.4	119.1	12.1	87.81	-3,756.8	227.7	2,920.1	2,790.0	130.08	22.448	
13,700.0	6,944.5	6,923.5	6,923.5	120.8	12.1	87.73	-3,756.8	227.7	3,017.6	2,885.8	131.81	22.893	
13,800.0	6,943.6	6,922.6	6,922.6	122.5	12.1	87.66	-3,756.8	227.7	3,115.4	2,981.8	133.55	23.327	
13,900.0	6,942.7	6,921.7	6,921.7	124.3	12.1	87.58	-3,756.8	227.7	3,213.2	3,077.9	135.29	23.752	
14,000.0	6,941.9	6,920.9	6,920.9	126.0	12.1	87.50	-3,756.8	227.7	3,311.2	3,174.2	137.02	24.166	
14,100.0	6,941.0	6,920.0	6,920.0	127.7	12.1	87.43	-3,756.8	227.7	3,409.3	3,270.6	138.75	24.571	
14,200.0	6,940.1	6,919.1	6,919.1	129.5	12.1	87.35	-3,756.8	227.7	3,507.5	3,367.0	140.49	24.967	
14,272.4	6,939.5	6,918.5	6,918.5	130.7	12.1	87.30	-3,756.8	227.7	3,578.7	3,437.0	141.74	25.248	

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 Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Starks 23-30 (Existing) - Existing - Existing

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
0.0	0.0	0.0	0.0	0.0	0.0	158.55	-2,922.2	1,147.9	3,139.7				
100.0	100.0	80.0	80.0	0.2	0.1	158.55	-2,922.2	1,147.9	3,139.6	3,139.3	0.29	N/A	
200.0	200.0	180.0	180.0	0.3	0.3	158.55	-2,922.2	1,147.9	3,139.6	3,139.0	0.64	4,901.541	
300.0	300.0	280.0	280.0	0.5	0.5	79.59	-2,922.2	1,147.9	3,139.3	3,138.3	0.99	3,161.017	
400.0	399.8	379.8	379.8	0.7	0.7	79.70	-2,922.2	1,147.9	3,138.4	3,137.0	1.36	2,304.386	
500.0	499.5	479.5	479.5	0.9	0.8	79.89	-2,922.2	1,147.9	3,136.8	3,135.0	1.76	1,782.320	
600.0	598.7	578.7	578.7	1.2	1.0	80.15	-2,922.2	1,147.9	3,134.7	3,132.5	2.20	1,426.062	
700.0	697.5	677.5	677.5	1.5	1.2	80.48	-2,922.2	1,147.9	3,132.0	3,129.3	2.68	1,166.689	
800.0	795.9	775.9	775.9	1.8	1.4	80.79	-2,922.2	1,147.9	3,129.1	3,126.0	3.18	982.736	
900.0	894.4	874.4	874.4	2.2	1.5	81.10	-2,922.2	1,147.9	3,126.4	3,122.7	3.69	846.958	
1,000.0	992.9	972.9	972.9	2.5	1.7	81.41	-2,922.2	1,147.9	3,123.7	3,119.5	4.20	743.173	
1,100.0	1,091.4	1,071.4	1,071.4	2.9	1.9	81.72	-2,922.2	1,147.9	3,121.1	3,116.4	4.72	661.500	
1,200.0	1,189.9	1,169.9	1,169.9	3.2	2.0	82.03	-2,922.2	1,147.9	3,118.6	3,113.4	5.24	595.664	
1,300.0	1,288.4	1,268.4	1,268.4	3.6	2.2	82.34	-2,922.2	1,147.9	3,116.2	3,110.5	5.75	541.527	
1,400.0	1,386.8	1,366.8	1,366.8	3.9	2.4	82.65	-2,922.2	1,147.9	3,113.9	3,107.6	6.27	496.259	
1,500.0	1,485.3	1,465.3	1,465.3	4.3	2.6	82.97	-2,922.2	1,147.9	3,111.7	3,104.9	6.80	457.867	
1,600.0	1,583.8	1,563.8	1,563.8	4.6	2.7	83.28	-2,922.2	1,147.9	3,109.6	3,102.3	7.32	424.909	
1,700.0	1,682.3	1,662.3	1,662.3	5.0	2.9	83.59	-2,922.2	1,147.9	3,107.6	3,099.7	7.84	396.317	
1,800.0	1,780.8	1,760.8	1,760.8	5.3	3.1	83.91	-2,922.2	1,147.9	3,105.7	3,097.3	8.36	371.285	
1,900.0	1,879.2	1,859.2	1,859.2	5.7	3.2	84.22	-2,922.2	1,147.9	3,103.8	3,095.0	8.89	349.193	
2,000.0	1,977.7	1,957.7	1,957.7	6.0	3.4	84.53	-2,922.2	1,147.9	3,102.1	3,092.7	9.41	329.556	
2,100.0	2,076.2	2,056.2	2,056.2	6.4	3.6	84.85	-2,922.2	1,147.9	3,100.5	3,090.5	9.94	311.989	
2,200.0	2,174.7	2,154.7	2,154.7	6.7	3.8	85.16	-2,922.2	1,147.9	3,098.9	3,088.5	10.46	296.185	
2,300.0	2,273.2	2,253.2	2,253.2	7.1	3.9	85.48	-2,922.2	1,147.9	3,097.5	3,086.5	10.99	281.894	
2,400.0	2,371.6	2,351.6	2,351.6	7.4	4.1	85.79	-2,922.2	1,147.9	3,096.2	3,084.7	11.51	268.910	
2,500.0	2,470.1	2,450.1	2,450.1	7.8	4.3	86.11	-2,922.2	1,147.9	3,094.9	3,082.9	12.04	257.065	
2,600.0	2,568.6	2,548.6	2,548.6	8.1	4.4	86.43	-2,922.2	1,147.9	3,093.8	3,081.2	12.57	246.215	
2,700.0	2,667.1	2,647.1	2,647.1	8.5	4.6	86.74	-2,922.2	1,147.9	3,092.7	3,079.6	13.09	236.243	
2,800.0	2,765.6	2,745.6	2,745.6	8.8	4.8	87.06	-2,922.2	1,147.9	3,091.8	3,078.2	13.62	227.048	
2,900.0	2,864.0	2,844.0	2,844.0	9.2	5.0	87.38	-2,922.2	1,147.9	3,090.9	3,076.8	14.14	218.542	
3,000.0	2,962.5	2,942.5	2,942.5	9.5	5.1	87.69	-2,922.2	1,147.9	3,090.2	3,075.5	14.67	210.654	
3,100.0	3,061.0	3,041.0	3,041.0	9.9	5.3	88.01	-2,922.2	1,147.9	3,089.5	3,074.3	15.20	203.318	
3,200.0	3,159.5	3,139.5	3,139.5	10.2	5.5	88.33	-2,922.2	1,147.9	3,088.9	3,073.2	15.72	196.481	
3,300.0	3,258.0	3,238.0	3,238.0	10.6	5.7	88.64	-2,922.2	1,147.9	3,088.5	3,072.2	16.25	190.093	
3,400.0	3,356.4	3,336.4	3,336.4	11.0	5.8	88.96	-2,922.2	1,147.9	3,088.1	3,071.3	16.77	184.113	
3,500.0	3,454.9	3,434.9	3,434.9	11.3	6.0	89.28	-2,922.2	1,147.9	3,087.8	3,070.5	17.30	178.504	
3,600.0	3,553.4	3,533.4	3,533.4	11.7	6.2	89.60	-2,922.2	1,147.9	3,087.7	3,069.8	17.82	173.232	
3,700.0	3,651.9	3,631.9	3,631.9	12.0	6.3	89.91	-2,922.2	1,147.9	3,087.6	3,069.2	18.35	168.270	
3,727.6	3,679.0	3,659.0	3,659.0	12.1	6.4	90.00	-2,922.2	1,147.9	3,087.6	3,069.1	18.49	166.953	
3,800.0	3,750.4	3,730.4	3,730.4	12.4	6.5	90.23	-2,922.2	1,147.9	3,087.6	3,068.7	18.87	163.591	
3,900.0	3,848.9	3,828.9	3,828.9	12.7	6.7	90.55	-2,922.2	1,147.9	3,087.7	3,068.3	19.40	159.173	
4,000.0	3,947.3	3,927.3	3,927.3	13.1	6.9	90.86	-2,922.2	1,147.9	3,087.9	3,068.0	19.92	154.994	
4,100.0	4,045.8	4,025.8	4,025.8	13.4	7.0	91.18	-2,922.2	1,147.9	3,088.3	3,067.8	20.45	151.037	
4,200.0	4,144.3	4,124.3	4,124.3	13.8	7.2	91.50	-2,922.2	1,147.9	3,088.7	3,067.7	20.97	147.285	
4,300.0	4,242.8	4,222.8	4,222.8	14.1	7.4	91.82	-2,922.2	1,147.9	3,089.2	3,067.7	21.49	143.722	
4,400.0	4,341.3	4,321.3	4,321.3	14.5	7.5	92.13	-2,922.2	1,147.9	3,089.8	3,067.8	22.02	140.336	
4,500.0	4,439.7	4,419.7	4,419.7	14.8	7.7	92.45	-2,922.2	1,147.9	3,090.5	3,067.9	22.54	137.114	
4,600.0	4,538.2	4,518.2	4,518.2	15.2	7.9	92.77	-2,922.2	1,147.9	3,091.3	3,068.2	23.06	134.044	
4,700.0	4,636.7	4,616.7	4,616.7	15.5	8.1	93.08	-2,922.2	1,147.9	3,092.2	3,068.6	23.58	131.118	
4,800.0	4,735.2	4,715.2	4,715.2	15.9	8.2	93.40	-2,922.2	1,147.9	3,093.2	3,069.1	24.10	128.324	
4,900.0	4,833.7	4,813.7	4,813.7	16.2	8.4	93.72	-2,922.2	1,147.9	3,094.3	3,069.7	24.63	125.656	
5,000.0	4,932.1	4,912.1	4,912.1	16.6	8.6	94.03	-2,922.2	1,147.9	3,095.5	3,070.3	25.15	123.104	

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 Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Starks 23-30 (Existing) - Existing - Existing

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
5,100.0	5,030.6	5,010.6	5,010.6	17.0	8.7	94.35	-2,922.2	1,147.9	3,096.8	3,071.1	25.66	120.662	
5,200.0	5,129.1	5,109.1	5,109.1	17.3	8.9	94.66	-2,922.2	1,147.9	3,098.1	3,072.0	26.18	118.324	
5,300.0	5,227.6	5,207.6	5,207.6	17.7	9.1	94.98	-2,922.2	1,147.9	3,099.6	3,072.9	26.70	116.082	
5,400.0	5,326.3	5,306.3	5,306.3	18.0	9.3	95.29	-2,922.2	1,147.9	3,101.0	3,073.9	27.17	114.145	
5,500.0	5,425.6	5,405.6	5,405.6	18.2	9.4	95.54	-2,922.2	1,147.9	3,102.2	3,074.6	27.58	112.470	
5,600.0	5,525.2	5,505.2	5,505.2	18.4	9.6	95.71	-2,922.2	1,147.9	3,103.1	3,075.1	27.95	111.032	
5,700.0	5,625.1	5,605.1	5,605.1	18.5	9.8	95.82	-2,922.2	1,147.9	3,103.6	3,075.3	28.26	109.810	
5,800.0	5,725.0	5,705.0	5,705.0	18.6	10.0	174.85	-2,922.2	1,147.9	3,103.8	3,075.2	28.53	108.796	
5,900.0	5,825.0	5,805.0	5,805.0	18.7	10.1	174.85	-2,922.2	1,147.9	3,103.8	3,075.0	28.80	107.776	
6,000.0	5,925.0	5,905.0	5,905.0	18.8	10.3	174.85	-2,922.2	1,147.9	3,103.8	3,074.7	29.07	106.771	
6,100.0	6,025.0	6,005.0	6,005.0	18.9	10.5	174.85	-2,922.2	1,147.9	3,103.8	3,074.4	29.34	105.780	
6,200.0	6,125.0	6,105.0	6,105.0	19.0	10.7	174.85	-2,922.2	1,147.9	3,103.8	3,074.1	29.62	104.803	
6,300.0	6,225.0	6,205.0	6,205.0	19.1	10.8	174.85	-2,922.2	1,147.9	3,103.8	3,073.9	29.89	103.841	
6,400.0	6,325.0	6,305.0	6,305.0	19.2	11.0	174.85	-2,922.2	1,147.9	3,103.8	3,073.6	30.17	102.892	
6,501.4	6,426.5	6,406.5	6,406.5	19.3	11.2	174.85	-2,922.2	1,147.9	3,103.8	3,073.3	30.45	101.944	
6,550.0	6,475.0	6,455.0	6,455.0	19.4	11.3	-5.05	-2,922.2	1,147.9	3,101.7	3,071.2	30.49	101.741	
6,600.0	6,524.6	6,504.6	6,504.6	19.4	11.4	-5.11	-2,922.2	1,147.9	3,095.3	3,065.0	30.34	102.024	
6,650.0	6,573.4	6,553.4	6,553.4	19.4	11.4	-5.23	-2,922.2	1,147.9	3,084.7	3,054.7	30.01	102.804	
6,700.0	6,621.1	6,601.1	6,601.1	19.4	11.5	-5.40	-2,922.2	1,147.9	3,069.8	3,040.3	29.49	104.101	
6,750.0	6,667.3	6,647.3	6,647.3	19.5	11.6	-5.63	-2,922.2	1,147.9	3,050.9	3,022.1	28.80	105.946	
6,800.0	6,711.7	6,691.7	6,691.7	19.5	11.7	-5.94	-2,922.2	1,147.9	3,028.0	3,000.1	27.94	108.382	
6,850.0	6,753.9	6,733.9	6,733.9	19.5	11.8	-6.33	-2,922.2	1,147.9	3,001.4	2,974.4	26.93	111.461	
6,900.0	6,793.7	6,773.7	6,773.7	19.5	11.8	-6.83	-2,922.2	1,147.9	2,971.2	2,945.4	25.78	115.245	
6,950.0	6,830.6	6,810.6	6,810.6	19.6	11.9	-7.47	-2,922.2	1,147.9	2,937.6	2,913.1	24.52	119.792	
7,000.0	6,864.5	6,844.5	6,844.5	19.7	11.9	-8.31	-2,922.2	1,147.9	2,901.0	2,877.8	23.18	125.144	
7,050.0	6,895.0	6,875.0	6,875.0	19.8	12.0	-9.42	-2,922.2	1,147.9	2,861.6	2,839.8	21.80	131.273	
7,100.0	6,922.0	6,902.0	6,902.0	19.9	12.0	-10.92	-2,922.2	1,147.9	2,819.7	2,799.3	20.44	137.985	
7,150.0	6,945.1	6,925.1	6,925.1	20.0	12.1	-13.04	-2,922.2	1,147.9	2,775.7	2,756.5	19.18	144.687	
7,200.0	6,964.4	6,944.4	6,944.4	20.2	12.1	-16.21	-2,922.2	1,147.9	2,729.8	2,711.5	18.21	149.882	
7,250.0	6,979.5	6,959.5	6,959.5	20.5	12.1	-21.31	-2,922.2	1,147.9	2,682.4	2,664.5	17.86	150.198	
7,300.0	6,990.5	6,970.5	6,970.5	20.7	12.2	-30.51	-2,922.2	1,147.9	2,633.8	2,615.0	18.87	139.543	
7,350.0	6,997.1	6,977.1	6,977.1	21.0	12.2	-49.72	-2,922.2	1,147.9	2,584.6	2,561.9	22.69	113.890	
7,400.0	6,999.4	6,979.4	6,979.4	21.4	12.2	-88.67	-2,922.2	1,147.9	2,534.9	2,507.9	27.08	93.615	
7,406.4	6,999.4	6,979.4	6,979.4	21.4	12.2	-94.61	-2,922.2	1,147.9	2,528.5	2,501.5	27.00	93.667	
7,500.0	6,998.6	6,978.6	6,978.6	22.1	12.2	-94.44	-2,922.2	1,147.9	2,435.5	2,407.5	28.03	86.901	
7,600.0	6,997.7	6,977.7	6,977.7	23.0	12.2	-94.26	-2,922.2	1,147.9	2,336.2	2,307.0	29.23	79.911	
7,700.0	6,996.9	6,976.9	6,976.9	24.0	12.2	-94.08	-2,922.2	1,147.9	2,236.9	2,206.4	30.53	73.266	
7,800.0	6,996.0	6,976.0	6,976.0	25.0	12.2	-93.89	-2,922.2	1,147.9	2,137.7	2,105.8	31.90	67.015	
7,900.0	6,995.1	6,975.1	6,975.1	26.2	12.2	-93.71	-2,922.2	1,147.9	2,038.5	2,005.2	33.32	61.174	
8,000.0	6,994.2	6,974.2	6,974.2	27.4	12.2	-93.53	-2,922.2	1,147.9	1,939.5	1,904.7	34.79	55.741	
8,100.0	6,993.4	6,973.4	6,973.4	28.6	12.2	-93.34	-2,922.2	1,147.9	1,840.5	1,804.2	36.30	50.697	
8,200.0	6,992.5	6,972.5	6,972.5	29.9	12.2	-93.16	-2,922.2	1,147.9	1,741.7	1,703.8	37.85	46.021	
8,300.0	6,991.6	6,971.6	6,971.6	31.3	12.2	-92.98	-2,922.2	1,147.9	1,643.0	1,603.6	39.41	41.687	
8,400.0	6,990.7	6,970.7	6,970.7	32.7	12.2	-92.79	-2,922.2	1,147.9	1,544.5	1,503.5	41.00	37.668	
8,500.0	6,989.9	6,969.9	6,969.9	34.1	12.2	-92.61	-2,922.2	1,147.9	1,446.1	1,403.5	42.61	33.940	
8,600.0	6,989.0	6,969.0	6,969.0	35.6	12.2	-92.43	-2,922.2	1,147.9	1,348.1	1,303.8	44.23	30.477	
8,700.0	6,988.1	6,968.1	6,968.1	37.0	12.2	-92.24	-2,922.2	1,147.9	1,250.3	1,204.4	45.87	27.258	
8,800.0	6,987.3	6,967.3	6,967.3	38.5	12.2	-92.06	-2,922.2	1,147.9	1,152.9	1,105.4	47.52	24.262	
8,900.0	6,986.4	6,966.4	6,966.4	40.1	12.2	-91.88	-2,922.2	1,147.9	1,056.0	1,006.8	49.18	21.474	
9,000.0	6,985.5	6,965.5	6,965.5	41.6	12.2	-91.69	-2,922.2	1,147.9	959.7	908.9	50.84	18.876	
9,100.0	6,984.6	6,964.6	6,964.6	43.2	12.2	-91.51	-2,922.2	1,147.9	864.3	811.7	52.52	16.457	
9,200.0	6,983.8	6,963.8	6,963.8	44.7	12.2	-91.32	-2,922.2	1,147.9	770.0	715.8	54.20	14.207	

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 Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Starks 23-30 (Existing) - Existing - Existing — **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
9,300.0	6,982.9	6,962.9	6,962.9	46.3	12.2	-91.14	-2,922.2	1,147.9	677.4	621.5	55.88	12.121	
9,400.0	6,982.0	6,962.0	6,962.0	47.9	12.2	-90.96	-2,922.2	1,147.9	587.1	529.6	57.57	10.198	
9,500.0	6,981.1	6,961.1	6,961.1	49.5	12.1	-90.77	-2,922.2	1,147.9	500.7	441.4	59.27	8.447	
9,600.0	6,980.3	6,960.3	6,960.3	51.1	12.1	-90.59	-2,922.2	1,147.9	420.2	359.3	60.97	6.892	
9,700.0	6,979.4	6,959.4	6,959.4	52.8	12.1	-90.41	-2,922.2	1,147.9	350.0	287.3	62.67	5.585	
9,800.0	6,978.5	6,958.5	6,958.5	54.4	12.1	-90.22	-2,922.2	1,147.9	297.4	233.0	64.38	4.619	
9,900.0	6,977.7	6,957.7	6,957.7	56.1	12.1	-90.04	-2,922.2	1,147.9	272.7	206.6	66.09	4.126	
9,920.4	6,977.5	6,957.5	6,957.5	56.4	12.1	-90.00	-2,922.2	1,147.9	271.9	205.5	66.44	4.093	CC, ES, SF
10,000.0	6,976.8	6,956.8	6,956.8	57.7	12.1	-89.85	-2,922.2	1,147.9	283.3	215.5	67.80	4.179	
10,100.0	6,975.9	6,955.9	6,955.9	59.4	12.1	-89.67	-2,922.2	1,147.9	325.9	256.4	69.51	4.688	
10,200.0	6,975.0	6,955.0	6,955.0	61.0	12.1	-89.49	-2,922.2	1,147.9	390.0	318.8	71.22	5.476	
10,300.0	6,974.2	6,954.2	6,954.2	62.7	12.1	-89.30	-2,922.2	1,147.9	466.9	394.0	72.94	6.402	
10,400.0	6,973.3	6,953.3	6,953.3	64.4	12.1	-89.12	-2,922.2	1,147.9	551.3	476.7	74.66	7.385	
10,500.0	6,972.4	6,952.4	6,952.4	66.0	12.1	-88.93	-2,922.2	1,147.9	640.2	563.8	76.37	8.382	
10,600.0	6,971.5	6,951.5	6,951.5	67.7	12.1	-88.75	-2,922.2	1,147.9	732.0	653.9	78.09	9.373	
10,700.0	6,970.7	6,950.7	6,950.7	69.4	12.1	-88.57	-2,922.2	1,147.9	825.6	745.8	79.81	10.345	
10,800.0	6,969.8	6,949.8	6,949.8	71.1	12.1	-88.38	-2,922.2	1,147.9	920.6	839.1	81.53	11.292	
10,900.0	6,968.9	6,948.9	6,948.9	72.8	12.1	-88.20	-2,922.2	1,147.9	1,016.6	933.4	83.25	12.212	
11,000.0	6,968.1	6,948.1	6,948.1	74.5	12.1	-88.02	-2,922.2	1,147.9	1,113.3	1,028.3	84.97	13.102	
11,100.0	6,967.2	6,947.2	6,947.2	76.1	12.1	-87.83	-2,922.2	1,147.9	1,210.5	1,123.8	86.69	13.964	
11,200.0	6,966.3	6,946.3	6,946.3	77.8	12.1	-87.65	-2,922.2	1,147.9	1,308.1	1,219.7	88.41	14.796	
11,300.0	6,965.4	6,945.4	6,945.4	79.5	12.1	-87.47	-2,922.2	1,147.9	1,406.1	1,316.0	90.13	15.601	
11,400.0	6,964.6	6,944.6	6,944.6	81.2	12.1	-87.28	-2,922.2	1,147.9	1,504.3	1,412.5	91.85	16.379	
11,500.0	6,963.7	6,943.7	6,943.7	82.9	12.1	-87.10	-2,922.2	1,147.9	1,602.8	1,509.2	93.56	17.130	
11,600.0	6,962.8	6,942.8	6,942.8	84.7	12.1	-86.91	-2,922.2	1,147.9	1,701.4	1,606.1	95.28	17.857	
11,700.0	6,961.9	6,941.9	6,941.9	86.4	12.1	-86.73	-2,922.2	1,147.9	1,800.2	1,703.2	97.00	18.559	
11,800.0	6,961.1	6,941.1	6,941.1	88.1	12.1	-86.55	-2,922.2	1,147.9	1,899.1	1,800.4	98.71	19.238	
11,900.0	6,960.2	6,940.2	6,940.2	89.8	12.1	-86.37	-2,922.2	1,147.9	1,998.1	1,897.7	100.43	19.896	
12,000.0	6,959.3	6,939.3	6,939.3	91.5	12.1	-86.18	-2,922.2	1,147.9	2,097.2	1,995.1	102.14	20.532	
12,100.0	6,958.5	6,938.5	6,938.5	93.2	12.1	-86.00	-2,922.2	1,147.9	2,196.4	2,092.6	103.86	21.148	
12,200.0	6,957.6	6,937.6	6,937.6	94.9	12.1	-85.82	-2,922.2	1,147.9	2,295.7	2,190.1	105.57	21.746	
12,300.0	6,956.7	6,936.7	6,936.7	96.6	12.1	-85.63	-2,922.2	1,147.9	2,395.0	2,287.7	107.28	22.325	
12,400.0	6,955.8	6,935.8	6,935.8	98.4	12.1	-85.45	-2,922.2	1,147.9	2,494.4	2,385.4	108.99	22.886	
12,500.0	6,955.0	6,935.0	6,935.0	100.1	12.1	-85.27	-2,922.2	1,147.9	2,593.8	2,483.1	110.70	23.432	
12,600.0	6,954.1	6,934.1	6,934.1	101.8	12.1	-85.09	-2,922.2	1,147.9	2,693.3	2,580.9	112.40	23.961	
12,700.0	6,953.2	6,933.2	6,933.2	103.5	12.1	-84.90	-2,922.2	1,147.9	2,792.8	2,678.7	114.11	24.475	
12,800.0	6,952.3	6,932.3	6,932.3	105.3	12.1	-84.72	-2,922.2	1,147.9	2,892.3	2,776.5	115.81	24.974	
12,900.0	6,951.5	6,931.5	6,931.5	107.0	12.1	-84.54	-2,922.2	1,147.9	2,991.9	2,874.4	117.51	25.460	
13,000.0	6,950.6	6,930.6	6,930.6	108.7	12.1	-84.36	-2,922.2	1,147.9	3,091.5	2,972.3	119.21	25.932	
13,100.0	6,949.7	6,929.7	6,929.7	110.4	12.1	-84.17	-2,922.2	1,147.9	3,191.1	3,070.2	120.91	26.392	
13,200.0	6,948.9	6,928.9	6,928.9	112.2	12.1	-83.99	-2,922.2	1,147.9	3,290.7	3,168.1	122.61	26.840	
13,300.0	6,948.0	6,928.0	6,928.0	113.9	12.1	-83.81	-2,922.2	1,147.9	3,390.4	3,266.1	124.30	27.276	
13,400.0	6,947.1	6,927.1	6,927.1	115.6	12.1	-83.63	-2,922.2	1,147.9	3,490.1	3,364.1	125.99	27.701	
13,500.0	6,946.2	6,926.2	6,926.2	117.3	12.1	-83.45	-2,922.2	1,147.9	3,589.8	3,462.1	127.68	28.115	
13,600.0	6,945.4	6,925.4	6,925.4	119.1	12.1	-83.27	-2,922.2	1,147.9	3,689.5	3,560.1	129.37	28.519	
13,700.0	6,944.5	6,924.5	6,924.5	120.8	12.1	-83.08	-2,922.2	1,147.9	3,789.2	3,658.2	131.06	28.913	
13,800.0	6,943.6	6,923.6	6,923.6	122.5	12.1	-82.90	-2,922.2	1,147.9	3,889.0	3,756.2	132.74	29.298	
13,900.0	6,942.7	6,922.7	6,922.7	124.3	12.1	-82.72	-2,922.2	1,147.9	3,988.7	3,854.3	134.42	29.673	
14,000.0	6,941.9	6,921.9	6,921.9	126.0	12.1	-82.54	-2,922.2	1,147.9	4,088.5	3,952.4	136.10	30.040	
14,100.0	6,941.0	6,921.0	6,921.0	127.7	12.1	-82.36	-2,922.2	1,147.9	4,188.3	4,050.5	137.78	30.399	
14,200.0	6,940.1	6,920.1	6,920.1	129.5	12.1	-82.18	-2,922.2	1,147.9	4,288.1	4,148.6	139.45	30.750	
14,272.4	6,939.5	6,919.5	6,919.5	130.7	12.1	-82.05	-2,922.2	1,147.9	4,360.3	4,219.7	140.66	30.999	

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 Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Starks 24-30 (Existing) - Existing - Existing

Offset Site Error: 0.0 ft

Survey Program: 61-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	158.79	-2,937.2	1,140.1	3,150.7				
100.0	100.0	45.9	45.9	0.2	0.1	158.79	-2,937.4	1,140.1	3,151.1	3,150.9	0.23	N/A	
200.0	200.0	117.0	117.0	0.3	0.2	158.79	-2,938.5	1,140.2	3,152.6	3,152.1	0.53	5,908.216	
300.0	300.0	175.0	175.0	0.5	0.3	79.78	-2,940.2	1,140.0	3,155.0	3,154.2	0.81	3,888.907	
400.0	399.8	220.7	220.6	0.7	0.4	79.77	-2,942.3	1,139.9	3,158.2	3,157.1	1.09	2,905.862	
500.0	499.5	274.7	274.5	0.9	0.5	79.80	-2,945.7	1,139.7	3,162.5	3,161.1	1.41	2,245.899	
600.0	598.7	322.0	321.6	1.2	0.6	79.83	-2,949.6	1,139.4	3,167.7	3,165.9	1.76	1,800.048	
700.0	697.5	363.5	363.0	1.5	0.7	79.86	-2,953.7	1,138.9	3,174.0	3,171.8	2.15	1,475.177	
800.0	795.9	413.0	412.1	1.8	0.8	80.06	-2,959.8	1,138.1	3,181.9	3,179.3	2.58	1,235.646	
900.0	894.4	456.8	455.5	2.2	1.0	80.24	-2,965.8	1,137.5	3,191.4	3,188.4	3.00	1,065.511	
1,000.0	992.9	503.0	501.1	2.5	1.1	80.43	-2,972.7	1,137.0	3,202.6	3,199.2	3.43	934.758	
1,100.0	1,091.4	550.8	548.3	2.9	1.3	80.64	-2,980.7	1,136.6	3,215.4	3,211.6	3.86	832.115	
1,200.0	1,189.9	594.0	590.7	3.2	1.4	80.82	-2,988.5	1,136.5	3,230.0	3,225.7	4.29	752.053	
1,300.0	1,288.4	625.0	621.1	3.6	1.5	80.95	-2,994.6	1,136.6	3,246.4	3,241.7	4.70	690.352	
1,400.0	1,386.8	669.7	664.8	3.9	1.7	81.13	-3,004.1	1,137.0	3,264.7	3,259.6	5.14	635.319	
1,500.0	1,485.3	718.0	711.8	4.3	1.9	81.33	-3,015.2	1,137.6	3,284.7	3,279.1	5.58	588.219	
1,600.0	1,583.8	750.0	742.8	4.6	2.0	81.47	-3,023.1	1,138.0	3,306.4	3,300.4	6.00	551.238	
1,700.0	1,682.3	801.4	792.4	5.0	2.3	81.68	-3,036.6	1,138.8	3,329.9	3,323.4	6.45	515.960	
1,800.0	1,780.8	867.5	856.0	5.3	2.6	81.97	-3,054.7	1,139.6	3,354.4	3,347.5	6.94	483.189	
1,900.0	1,879.2	942.5	927.9	5.7	3.0	82.29	-3,075.7	1,140.4	3,379.8	3,372.3	7.45	453.537	
2,000.0	1,977.7	1,038.9	1,020.6	6.0	3.5	82.71	-3,102.6	1,140.7	3,405.0	3,397.0	8.01	424.944	
2,100.0	2,076.2	1,091.0	1,070.4	6.4	3.8	82.94	-3,117.8	1,140.7	3,431.5	3,423.0	8.48	404.739	
2,200.0	2,174.7	1,148.7	1,125.3	6.7	4.1	83.19	-3,135.2	1,141.1	3,459.2	3,450.2	8.95	386.598	
2,300.0	2,273.2	1,241.3	1,213.6	7.1	4.6	83.57	-3,163.4	1,143.0	3,487.7	3,478.2	9.48	367.761	
2,400.0	2,371.6	1,392.0	1,357.6	7.4	5.4	84.16	-3,207.4	1,146.3	3,515.2	3,505.1	10.13	347.158	
2,500.0	2,470.1	1,471.0	1,433.2	7.8	5.8	84.46	-3,230.4	1,147.9	3,542.7	3,532.1	10.63	333.183	
2,600.0	2,568.6	1,550.9	1,509.5	8.1	6.2	84.77	-3,254.0	1,149.3	3,570.7	3,559.6	11.14	320.647	
2,700.0	2,667.1	1,614.2	1,569.9	8.5	6.6	85.01	-3,272.8	1,150.7	3,599.1	3,587.5	11.61	310.064	
2,800.0	2,765.6	1,729.7	1,679.9	8.8	7.2	85.45	-3,308.0	1,152.7	3,628.4	3,616.2	12.18	297.857	
2,900.0	2,864.0	1,910.4	1,852.8	9.2	8.2	86.14	-3,360.4	1,154.3	3,656.5	3,643.6	12.87	283.998	
3,000.0	2,962.5	1,991.5	1,930.8	9.5	8.6	86.45	-3,383.0	1,154.0	3,683.0	3,669.7	13.39	275.155	
3,100.0	3,061.0	2,074.0	2,009.8	9.9	9.0	86.78	-3,406.5	1,153.2	3,710.2	3,696.3	13.90	266.919	
3,200.0	3,159.5	2,225.9	2,155.9	10.2	9.8	87.37	-3,448.1	1,151.4	3,736.2	3,721.7	14.54	256.905	
3,300.0	3,258.0	2,303.5	2,230.5	10.6	10.2	87.67	-3,469.3	1,150.0	3,762.5	3,747.4	15.04	250.116	
3,400.0	3,356.4	2,431.4	2,353.7	11.0	10.8	88.15	-3,503.7	1,148.6	3,788.6	3,772.9	15.63	242.410	
3,500.0	3,454.9	2,519.4	2,438.6	11.3	11.3	88.47	-3,526.9	1,147.8	3,814.3	3,798.2	16.14	236.361	
3,600.0	3,553.4	2,583.2	2,500.0	11.7	11.6	88.70	-3,544.1	1,147.8	3,840.8	3,824.2	16.60	231.399	
3,700.0	3,651.9	2,650.9	2,565.2	12.0	11.9	88.92	-3,562.7	1,148.3	3,868.2	3,851.1	17.06	226.700	
3,800.0	3,750.4	2,732.9	2,643.9	12.4	12.4	89.19	-3,585.5	1,149.3	3,896.1	3,878.5	17.55	221.996	
3,900.0	3,848.9	2,829.8	2,736.9	12.7	12.9	89.49	-3,612.6	1,150.9	3,924.2	3,906.1	18.06	217.336	
4,000.0	3,947.3	2,922.4	2,825.8	13.1	13.3	89.77	-3,638.4	1,153.0	3,952.3	3,933.8	18.55	213.069	
4,100.0	4,045.8	2,994.3	2,894.8	13.4	13.7	89.98	-3,658.5	1,154.8	3,980.8	3,961.8	19.02	209.344	
4,200.0	4,144.3	3,137.2	3,032.1	13.8	14.5	90.42	-3,698.1	1,157.3	4,008.9	3,989.3	19.59	204.618	
4,300.0	4,242.8	3,222.2	3,113.9	14.1	14.9	90.67	-3,721.5	1,158.7	4,037.0	4,016.9	20.08	201.075	
4,400.0	4,341.3	3,404.8	3,289.9	14.5	15.8	91.21	-3,769.7	1,160.5	4,063.9	4,043.2	20.72	196.135	
4,500.0	4,439.7	3,469.0	3,351.9	14.8	16.1	91.41	-3,786.4	1,160.1	4,090.5	4,069.3	21.18	193.134	
4,600.0	4,538.2	3,533.0	3,413.6	15.2	16.4	91.62	-3,803.4	1,159.5	4,117.7	4,096.1	21.64	190.315	
4,700.0	4,636.7	3,597.0	3,475.2	15.5	16.7	91.82	-3,820.9	1,159.3	4,145.8	4,123.7	22.09	187.671	
4,800.0	4,735.2	3,686.6	3,561.2	15.9	17.2	92.08	-3,845.6	1,159.7	4,174.3	4,151.7	22.58	184.861	
4,900.0	4,833.7	3,770.6	3,641.9	16.2	17.6	92.31	-3,869.0	1,161.2	4,203.2	4,180.1	23.06	182.275	
5,000.0	4,932.1	3,897.6	3,764.0	16.6	18.3	92.67	-3,903.9	1,162.3	4,231.8	4,208.1	23.61	179.244	
5,100.0	5,030.6	4,003.3	3,865.9	17.0	18.8	92.97	-3,932.3	1,162.4	4,259.8	4,235.7	24.13	176.569	

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 Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Starks 24-30 (Existing) - Existing - Existing

Offset Site Error: 0.0 ft

Survey Program: 61-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	5,129.1	4,075.5	3,935.3	17.3	19.2	93.18	-3,952.1	1,162.4	4,288.4	4,263.8	24.59	174.394	
5,300.0	5,227.6	4,149.7	4,006.6	17.7	19.6	93.38	-3,972.5	1,162.4	4,317.3	4,292.2	25.06	172.304	
5,400.0	5,326.3	4,203.1	4,057.8	18.0	19.8	94.13	-3,987.6	1,162.9	4,346.8	4,321.5	25.38	171.299	
5,500.0	5,425.6	4,436.6	4,282.0	18.2	21.0	95.16	-4,052.8	1,165.3	4,376.9	4,351.0	25.94	168.753	
5,600.0	5,525.2	4,514.6	4,357.4	18.4	21.4	95.82	-4,072.9	1,165.7	4,403.6	4,377.4	26.21	167.986	
5,700.0	5,625.1	4,582.0	4,422.4	18.5	21.8	96.44	-4,090.7	1,165.8	4,430.6	4,404.2	26.43	167.636	
5,800.0	5,725.0	4,704.5	4,540.4	18.6	22.4	176.04	-4,123.4	1,166.7	4,457.5	4,430.8	26.69	167.022	
5,900.0	5,825.0	4,772.1	4,605.6	18.7	22.7	176.05	-4,141.1	1,167.4	4,483.8	4,456.9	26.90	166.686	
6,000.0	5,925.0	4,867.5	4,697.5	18.8	23.2	176.06	-4,166.9	1,168.3	4,510.9	4,483.7	27.16	166.078	
6,100.0	6,025.0	5,069.0	4,892.2	18.9	24.1	176.10	-4,219.0	1,168.6	4,536.8	4,509.2	27.60	164.349	
6,200.0	6,125.0	5,157.9	4,978.4	19.0	24.6	176.10	-4,240.5	1,170.3	4,561.1	4,533.3	27.86	163.745	
6,300.0	6,225.0	5,215.0	5,033.7	19.1	24.8	176.09	-4,254.9	1,171.6	4,586.3	4,558.3	28.05	163.488	
6,400.0	6,325.0	5,278.0	5,094.6	19.2	25.1	176.09	-4,271.0	1,172.7	4,612.0	4,583.8	28.26	163.186	
6,501.4	6,426.5	5,334.3	5,148.9	19.3	25.4	176.10	-4,285.8	1,173.2	4,638.9	4,610.4	28.46	162.975	
6,550.0	6,475.0	5,373.0	5,186.1	19.4	25.6	-3.70	-4,296.5	1,173.3	4,650.3	4,621.6	28.63	162.446	
6,600.0	6,524.6	5,539.1	5,346.3	19.4	26.4	-3.64	-4,340.1	1,173.5	4,657.3	4,628.5	28.84	161.503	
6,650.0	6,573.4	5,600.5	5,405.8	19.4	26.7	-3.63	-4,355.4	1,174.3	4,659.1	4,630.4	28.69	162.383	
6,700.0	6,621.1	6,742.6	6,534.1	19.4	29.8	-3.99	-4,508.6	1,185.6	4,654.7	4,624.5	30.25	153.859	
6,750.0	6,667.3	6,799.7	6,591.2	19.5	29.8	-4.15	-4,509.3	1,185.6	4,636.4	4,606.6	29.74	155.912	
6,800.0	6,711.7	6,901.2	6,692.7	19.5	29.9	-4.39	-4,509.9	1,185.7	4,613.7	4,584.6	29.12	158.412	
6,850.0	6,753.9	6,952.7	6,744.1	19.5	29.9	-4.67	-4,509.8	1,185.8	4,587.0	4,558.7	28.27	162.250	
6,900.0	6,793.7	7,004.6	6,796.0	19.5	30.0	-5.04	-4,509.6	1,186.0	4,556.6	4,529.3	27.28	167.039	
6,950.0	6,830.6	7,065.4	6,856.8	19.6	30.0	-5.54	-4,509.2	1,186.2	4,522.7	4,496.5	26.18	172.726	
7,000.0	6,864.5	7,128.0	6,919.5	19.7	30.0	-6.20	-4,508.3	1,186.3	4,485.6	4,460.6	25.01	179.345	
7,050.0	6,895.0	7,187.1	6,978.5	19.8	30.0	-7.09	-4,507.1	1,186.2	4,445.5	4,421.7	23.80	186.768	
7,100.0	6,922.0	7,236.0	7,027.4	19.9	30.0	-8.32	-4,505.9	1,186.0	4,402.8	4,380.2	22.63	194.544	
7,150.0	6,945.1	7,276.9	7,068.4	20.0	30.1	-10.12	-4,504.7	1,185.7	4,358.0	4,336.3	21.65	201.284	
7,200.0	6,964.4	7,298.7	7,090.1	20.2	30.1	-12.84	-4,503.9	1,185.6	4,311.3	4,290.2	21.12	204.094	
7,250.0	6,979.5	7,315.3	7,106.7	20.5	30.1	-17.55	-4,503.4	1,185.4	4,263.3	4,241.6	21.75	196.001	
7,300.0	6,990.5	7,326.6	7,118.0	20.7	30.1	-27.23	-4,503.0	1,185.3	4,214.3	4,188.9	25.44	165.688	
7,350.0	6,997.1	7,332.6	7,124.0	21.0	30.1	-53.56	-4,502.8	1,185.3	4,164.7	4,127.4	37.33	111.553	
7,400.0	6,999.4	7,333.3	7,124.7	21.4	30.1	-113.81	-4,502.8	1,185.2	4,114.9	4,073.5	41.34	99.540	
7,406.4	6,999.4	7,333.0	7,124.4	21.4	30.1	-120.57	-4,502.8	1,185.2	4,108.5	4,069.2	39.23	104.734	
7,500.0	6,998.6	7,328.1	7,119.5	22.1	30.1	-119.88	-4,502.9	1,185.3	4,015.2	3,974.9	40.37	99.457	
7,600.0	6,997.7	7,322.9	7,114.3	23.0	30.1	-119.14	-4,503.1	1,185.4	3,915.6	3,874.0	41.69	93.916	
7,700.0	6,996.9	7,317.8	7,109.2	24.0	30.1	-118.40	-4,503.3	1,185.4	3,816.1	3,773.0	43.10	88.538	
7,800.0	6,996.0	7,312.7	7,104.1	25.0	30.1	-117.65	-4,503.5	1,185.4	3,716.5	3,671.9	44.58	83.366	
7,900.0	6,995.1	7,307.6	7,099.0	26.2	30.1	-116.90	-4,503.6	1,185.5	3,616.9	3,570.8	46.12	78.422	
8,000.0	6,994.2	7,302.6	7,094.0	27.4	30.1	-116.15	-4,503.8	1,185.5	3,517.4	3,469.7	47.71	73.717	
8,100.0	6,993.4	7,297.7	7,089.1	28.6	30.1	-115.39	-4,504.0	1,185.6	3,417.9	3,368.5	49.35	69.255	
8,200.0	6,992.5	7,292.7	7,084.2	29.9	30.1	-114.64	-4,504.1	1,185.6	3,318.4	3,267.3	51.03	65.030	
8,300.0	6,991.6	7,287.9	7,079.3	31.3	30.1	-113.88	-4,504.3	1,185.7	3,218.9	3,166.2	52.74	61.035	
8,400.0	6,990.7	7,283.0	7,074.5	32.7	30.1	-113.12	-4,504.5	1,185.7	3,119.5	3,065.0	54.48	57.262	
8,500.0	6,989.9	7,278.3	7,069.7	34.1	30.1	-112.35	-4,504.6	1,185.7	3,020.0	2,963.8	56.24	53.698	
8,600.0	6,989.0	7,272.6	7,064.0	35.6	30.1	-111.44	-4,504.8	1,185.8	2,920.7	2,862.6	58.08	50.284	
8,700.0	6,988.1	7,266.7	7,058.1	37.0	30.1	-110.48	-4,505.0	1,185.8	2,821.3	2,761.4	59.96	47.055	
8,800.0	6,987.3	7,261.0	7,052.5	38.5	30.1	-109.54	-4,505.2	1,185.8	2,722.0	2,660.2	61.84	44.017	
8,900.0	6,986.4	7,255.5	7,047.0	40.1	30.0	-108.62	-4,505.3	1,185.9	2,622.8	2,559.0	63.73	41.154	
9,000.0	6,985.5	7,250.2	7,041.6	41.6	30.0	-107.72	-4,505.5	1,185.9	2,523.5	2,457.9	65.62	38.455	
9,100.0	6,984.6	7,245.0	7,036.4	43.2	30.0	-106.83	-4,505.6	1,185.9	2,424.4	2,356.9	67.52	35.906	
9,200.0	6,983.8	7,239.9	7,031.3	44.7	30.0	-105.96	-4,505.8	1,186.0	2,325.3	2,255.9	69.42	33.497	
9,300.0	6,982.9	7,235.0	7,026.4	46.3	30.0	-105.10	-4,505.9	1,186.0	2,226.3	2,155.0	71.32	31.217	

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 Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Offset Design NWNW S30-T2N-R64W (Gurtler) - Starks 24-30 (Existing) - Existing - Existing

Offset Site Error: 0.0 ft

Survey Program: 61-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
9,400.0	6,982.0	7,230.2	7,021.6	47.9	30.0	-104.27	-4,506.1	1,186.0	2,127.3	2,054.1	73.21	29.058	
9,500.0	6,981.1	7,225.5	7,017.0	49.5	30.0	-103.44	-4,506.2	1,186.0	2,028.5	1,953.4	75.10	27.009	
9,600.0	6,980.3	7,221.0	7,012.4	51.1	30.0	-102.64	-4,506.3	1,186.0	1,929.8	1,852.8	76.99	25.064	
9,700.0	6,979.4	7,216.6	7,008.0	52.8	30.0	-101.85	-4,506.4	1,186.1	1,831.2	1,752.3	78.88	23.215	
9,800.0	6,978.5	7,212.3	7,003.7	54.4	30.0	-101.08	-4,506.5	1,186.1	1,732.7	1,652.0	80.76	21.456	
9,900.0	6,977.7	7,208.1	6,999.5	56.1	30.0	-100.32	-4,506.6	1,186.1	1,634.5	1,551.8	82.63	19.780	
10,000.0	6,976.8	7,204.0	6,995.4	57.7	30.0	-99.58	-4,506.7	1,186.1	1,536.4	1,451.9	84.50	18.183	
10,100.0	6,975.9	7,200.0	6,991.4	59.4	30.0	-98.85	-4,506.8	1,186.1	1,438.6	1,352.3	86.36	16.659	
10,200.0	6,975.0	7,196.1	6,987.5	61.0	30.0	-98.14	-4,506.9	1,186.2	1,341.2	1,253.0	88.21	15.204	
10,300.0	6,974.2	7,192.3	6,983.7	62.7	30.0	-97.44	-4,507.0	1,186.2	1,244.1	1,154.0	90.06	13.814	
10,400.0	6,973.3	7,188.6	6,980.0	64.4	30.0	-96.76	-4,507.1	1,186.2	1,147.5	1,055.6	91.90	12.487	
10,500.0	6,972.4	7,185.0	6,976.4	66.0	30.0	-96.09	-4,507.2	1,186.2	1,051.5	957.8	93.73	11.219	
10,600.0	6,971.5	7,181.4	6,972.9	67.7	30.0	-95.44	-4,507.3	1,186.2	956.4	860.8	95.55	10.009	
10,700.0	6,970.7	7,177.9	6,969.4	69.4	30.0	-94.80	-4,507.4	1,186.2	862.3	764.9	97.36	8.857	
10,800.0	6,969.8	7,174.5	6,966.0	71.1	30.0	-94.17	-4,507.4	1,186.2	769.7	670.6	99.17	7.762	
10,900.0	6,968.9	7,171.2	6,962.7	72.8	30.0	-93.55	-4,507.5	1,186.2	679.2	578.3	100.96	6.728	
11,000.0	6,968.1	7,168.0	6,959.4	74.5	30.0	-92.95	-4,507.6	1,186.2	591.8	489.0	102.75	5.760	
11,100.0	6,967.2	7,164.8	6,956.3	76.1	30.0	-92.36	-4,507.6	1,186.2	509.0	404.5	104.53	4.869	
11,200.0	6,966.3	7,161.7	6,953.2	77.8	30.0	-91.78	-4,507.7	1,186.2	433.5	327.2	106.30	4.078	
11,300.0	6,965.4	7,158.7	6,950.2	79.5	30.0	-91.22	-4,507.8	1,186.3	369.7	261.7	108.06	3.422	
11,400.0	6,964.6	7,155.8	6,947.2	81.2	30.0	-90.67	-4,507.8	1,186.3	324.8	215.0	109.81	2.958	
11,500.0	6,963.7	7,152.9	6,944.3	82.9	30.0	-90.13	-4,507.9	1,186.3	307.0	195.5	111.55	2.752	
11,506.2	6,963.6	7,152.7	6,944.2	83.1	30.0	-90.10	-4,507.9	1,186.3	306.9	195.3	111.66	2.749	CC, ES, SF
11,600.0	6,962.8	7,150.0	6,941.5	84.7	30.0	-89.60	-4,507.9	1,186.3	321.0	207.7	113.29	2.833	
11,700.0	6,961.9	7,147.3	6,938.7	86.4	30.0	-89.09	-4,508.0	1,186.3	363.0	248.0	115.01	3.156	
11,800.0	6,961.1	7,144.6	6,936.0	88.1	30.0	-88.58	-4,508.0	1,186.3	424.8	308.1	116.73	3.639	
11,900.0	6,960.2	7,141.9	6,933.4	89.8	30.0	-88.09	-4,508.1	1,186.3	499.2	380.7	118.44	4.215	
12,000.0	6,959.3	7,139.3	6,930.8	91.5	30.0	-87.60	-4,508.1	1,186.3	581.3	461.1	120.14	4.838	
12,100.0	6,958.5	7,136.8	6,928.3	93.2	30.0	-87.13	-4,508.2	1,186.3	668.3	546.4	121.84	5.485	
12,200.0	6,957.6	7,134.3	6,925.8	94.9	30.0	-86.67	-4,508.2	1,186.3	758.4	634.9	123.53	6.140	
12,300.0	6,956.7	7,131.9	6,923.3	96.6	30.0	-86.22	-4,508.3	1,186.3	850.8	725.6	125.21	6.795	
12,400.0	6,955.8	7,129.5	6,920.9	98.4	30.0	-85.77	-4,508.3	1,186.3	944.7	817.9	126.88	7.446	
12,500.0	6,955.0	7,127.1	6,918.6	100.1	30.0	-85.34	-4,508.3	1,186.3	1,039.8	911.3	128.54	8.089	
12,600.0	6,954.1	7,124.9	6,916.3	101.8	30.0	-84.91	-4,508.4	1,186.3	1,135.7	1,005.5	130.20	8.723	
12,700.0	6,953.2	7,122.6	6,914.1	103.5	30.0	-84.50	-4,508.4	1,186.3	1,232.2	1,100.4	131.85	9.346	
12,800.0	6,952.3	7,120.4	6,911.9	105.3	30.0	-84.09	-4,508.4	1,186.3	1,329.3	1,195.8	133.50	9.957	
12,900.0	6,951.5	7,118.2	6,909.7	107.0	30.0	-83.69	-4,508.5	1,186.3	1,426.7	1,291.6	135.14	10.558	
13,000.0	6,950.6	7,116.1	6,907.6	108.7	30.0	-83.30	-4,508.5	1,186.3	1,524.5	1,387.8	136.77	11.147	
13,100.0	6,949.7	7,114.0	6,905.5	110.4	30.0	-82.92	-4,508.5	1,186.3	1,622.6	1,484.2	138.39	11.724	
13,200.0	6,948.9	7,112.0	6,903.5	112.2	30.0	-82.54	-4,508.6	1,186.3	1,720.8	1,580.8	140.01	12.291	
13,300.0	6,948.0	7,110.0	6,901.4	113.9	30.0	-82.18	-4,508.6	1,186.3	1,819.3	1,677.7	141.63	12.846	
13,400.0	6,947.1	7,108.0	6,899.5	115.6	30.0	-81.81	-4,508.6	1,186.3	1,917.9	1,774.7	143.23	13.390	
13,500.0	6,946.2	7,106.1	6,897.5	117.3	30.0	-81.46	-4,508.7	1,186.3	2,016.7	1,871.8	144.84	13.924	
13,600.0	6,945.4	7,104.2	6,895.6	119.1	30.0	-81.12	-4,508.7	1,186.3	2,115.5	1,969.1	146.43	14.447	
13,700.0	6,944.5	7,102.3	6,893.8	120.8	30.0	-80.78	-4,508.7	1,186.3	2,214.5	2,066.5	148.02	14.960	
13,800.0	6,943.6	7,100.5	6,891.9	122.5	30.0	-80.44	-4,508.7	1,186.3	2,313.5	2,163.9	149.61	15.464	
13,900.0	6,942.7	7,098.7	6,890.1	124.3	30.0	-80.12	-4,508.8	1,186.3	2,412.7	2,261.5	151.19	15.958	
14,000.0	6,941.9	7,096.9	6,888.4	126.0	30.0	-79.80	-4,508.8	1,186.3	2,511.9	2,359.1	152.77	16.443	
14,100.0	6,941.0	7,086.0	6,877.5	127.7	30.0	-77.84	-4,508.9	1,186.3	2,611.1	2,457.6	153.49	17.012	
14,200.0	6,940.1	7,086.0	6,877.5	129.5	30.0	-77.84	-4,508.9	1,186.3	2,710.4	2,555.2	155.20	17.464	
14,272.4	6,939.5	7,086.0	6,877.5	130.7	30.0	-77.84	-4,508.9	1,186.3	2,782.4	2,625.9	156.43	17.786	

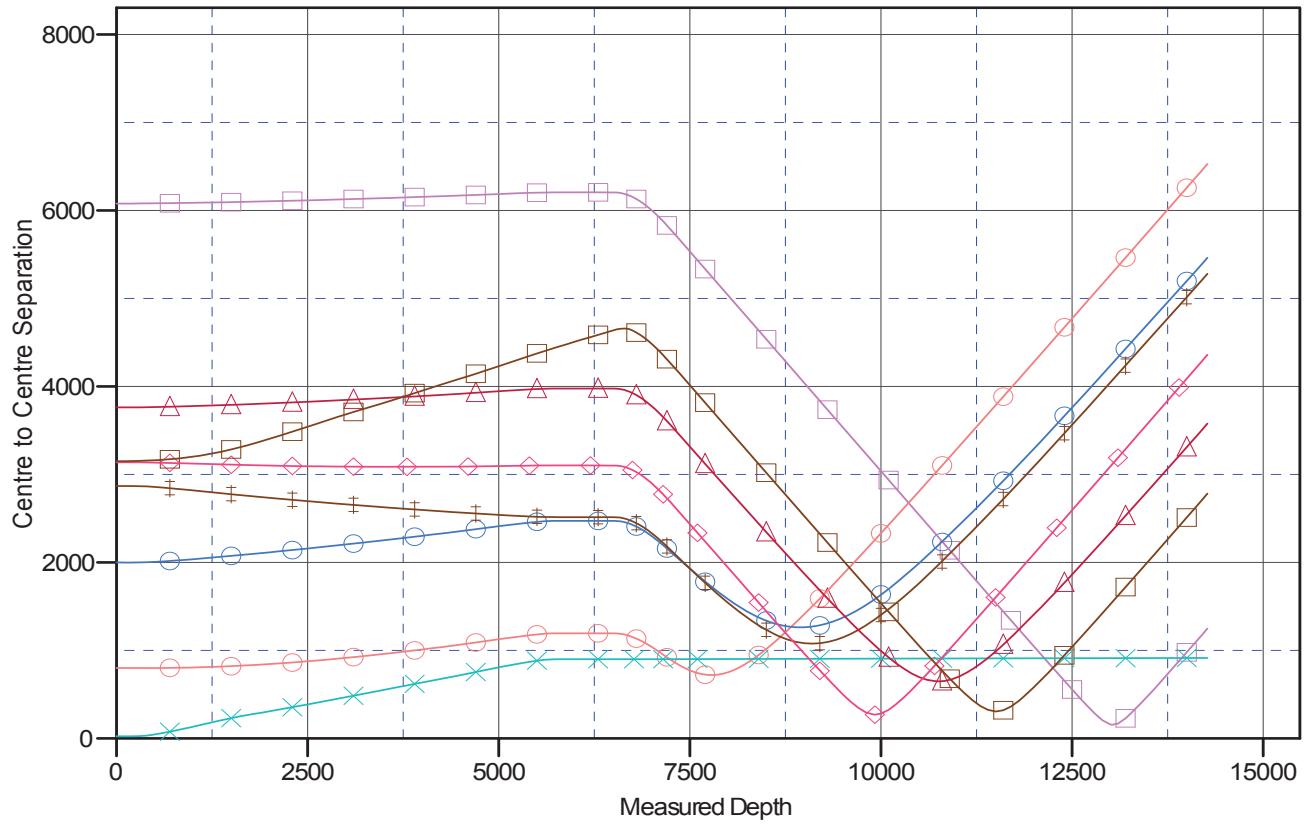
CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Gurtler 2A-30H
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Reference Site:	NWNW S30-T2N-R64W (Gurtler)	**MD Reference:**	WELL @ 4941.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Gurtler 2A-30H	**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 #2	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 4941.0ft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Gurtler 2A-30H
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.58°

Ladder Plot



LEGEND

Medsker-Overton #1 (Existing), Existing, Existing V0
Gurtler #1 (Existing), Existing, Existing V0
Gurtler 12-30 (Existing), Existing, Existing V0
Gurtler 2B-30H, Hz, Plan #1 V0
Kaminsky #1 (Existing), Existing, Existing V0
Starks #1 (Existing), Existing, Existing V0
Starks 23-30 (Existing), Existing, Existing V0
Starks 24-30 (Existing), Existing, Existing V0