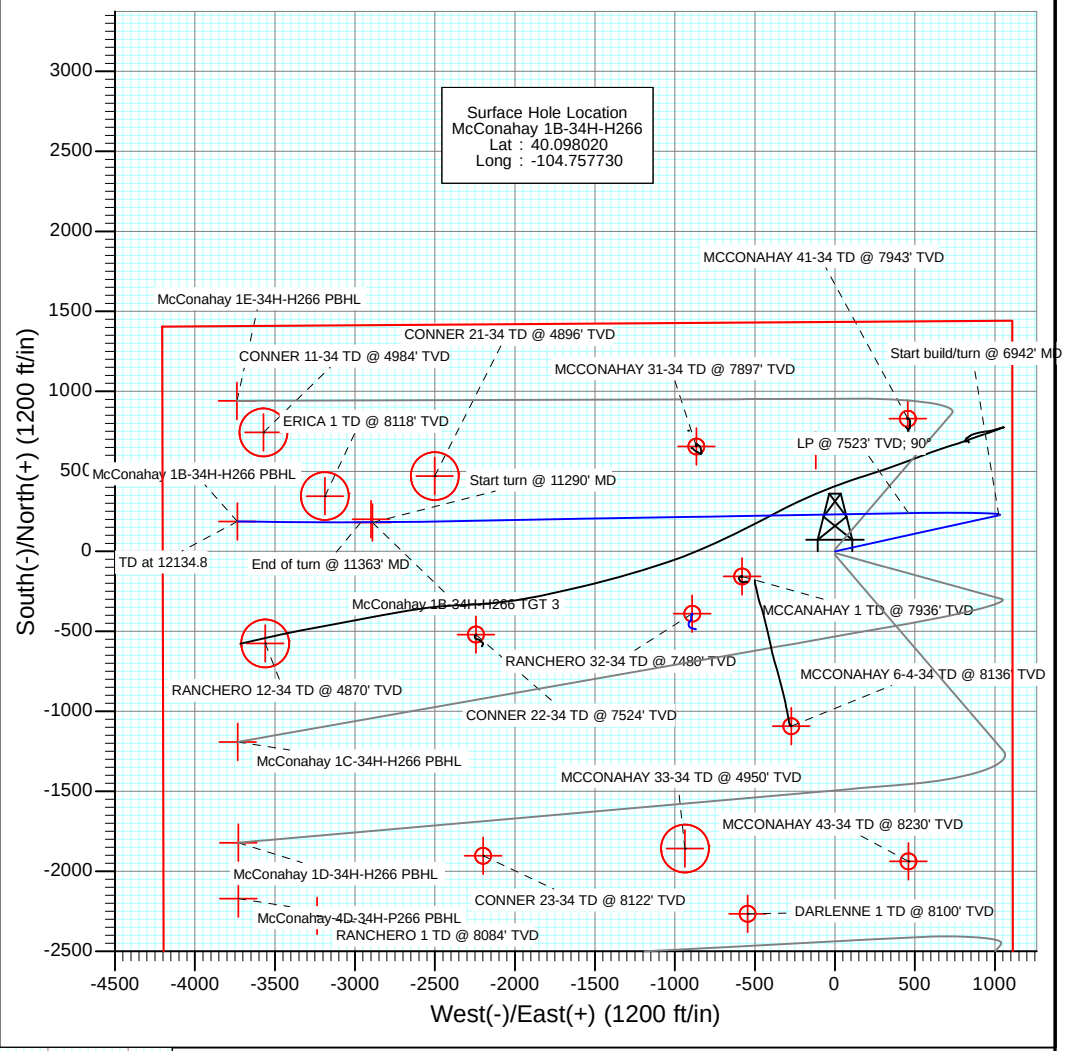
encana natural gas

Project: DJ Wattenberg
Site: S34-T2N-R66W (McConahay)
Well: McConahay 1B-34H-H266
Wellbore: Hz
Design: Plan #4

CATHEDRAL

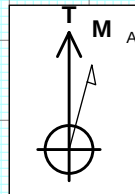
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	1399.4	9.99	77.61	1394.3	18.7	84.9	1.00	77.61	-86.9	
4	6942.1	9.99	77.61	6853.0	225.0	1024.4	0.00	0.00	-1048.4	
5	7940.1	90.00	269.00	7523.0	238.5	459.5	10.00	-168.44	-503.5	
6	11290.1	90.00	269.00	7523.0	180.0	-2890.0	0.00	0.00	2760.6	McConahay 1B-34H-H266 TGT 3
7	11363.9	90.00	270.48	7523.0	179.7	-2963.8	2.00	90.00	2832.3	
8	12134.8	90.00	270.48	7523.0	186.1	-3734.7	0.00	0.00	3578.7	McConahay 1B-34H-H266 PBHL



DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
McConahay 1B-34H-H266 LP	630.0	-120.0	1280053.75	3207529.44	40.099749	-104.758159
McConahay 1B-34H-H266 PBHL	186.1	-3734.7	1279579.58	3203918.63	40.098530	-104.771080
McConahay 1B-34H-H266 TGT 3	180.0	-2890.0	1279580.58	3204763.30	40.098514	-104.768061



Azimuths to True North
Magnetic North: 8.55°

Magnetic Field
Strength: 52751.7snT
Dip Angle: 66.74°
Date: 7/16/2013
Model: IGRF2010

Plan #4
McConahay 1B-34H-H266
13xxx; LR
WELL @ 5087.0ft (Original Well Elev)
Ground Elevation @ 5062.0
North American Datum 1983
Well McConahay 1B-34H-H266, True North

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
994.0	995.1	Fox Hills - BASE
4641.0	4696.1	Sussex
4851.0	4909.3	Sussex Marker
5274.0	5338.8	Shannon
6400.0	6482.2	Teepee Buttes (*if present)
7167.0	7262.4	Sharon Springs
7211.0	7310.8	Niobrara
7287.0	7400.1	B Chalk
7307.0	7425.3	B Marl
7355.0	7489.7	C Chalk
7389.0	7540.0	C Marl
7495.0	7760.2	Ft. Hayes
7518.0	7864.3	Codell

Planning Report

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well McConahay 1B-34H-H266
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site:	S34-T2N-R66W (McConahay)	**North Reference:**	True
Well:	McConahay 1B-34H-H266	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #4		

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 S34-T2N-R66W (McConahay)

Site Position:		**Northing:**	1,280,109.37 ft	**Latitude:**	40.099880
From:	Lat/Long	**Easting:**	3,208,491.04 ft	**Longitude:**	-104.754720
Position Uncertainty:	0.0 ft	**Slot Radius:**	13.200 in	**Grid Convergence:**	0.48 °

Well McConahay 1B-34H-H266

Well Position	**+N/-S**	0.0 ft	**Northing:**	1,279,424.78 ft	**Latitude:**	40.098020
	+E/-W	0.0 ft	**Easting:**	3,207,654.71 ft	**Longitude:**	-104.757730
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,062.0 ft

Wellbore Hz

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/16/2013	8.55	66.74	52,752

Design Plan #4

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	256.00

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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,399.4	9.99	77.61	1,394.3	18.7	84.9	1.00	1.00	0.00	77.61	
6,942.1	9.99	77.61	6,853.0	225.0	1,024.4	0.00	0.00	0.00	0.00	
7,940.1	90.00	269.00	7,523.0	238.5	459.5	10.00	8.02	-16.90	-168.44	
11,290.1	90.00	269.00	7,523.0	180.0	-2,890.0	0.00	0.00	0.00	0.00	McConahay 1B-34H-H
11,363.9	90.00	270.48	7,523.0	179.7	-2,963.8	2.00	0.00	2.00	90.00	
12,134.8	90.00	270.48	7,523.0	186.1	-3,734.7	0.00	0.00	0.00	0.00	McConahay 1B-34H-H

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well McConahay 1B-34H-H266
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site:	S34-T2N-R66W (McConahay)	**North Reference:**	True
Well:	McConahay 1B-34H-H266	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #4		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	KOP @ 400'
500.0	1.00	77.61	500.0	0.2	0.9	-0.9	1.00	1.00	
600.0	2.00	77.61	600.0	0.7	3.4	-3.5	1.00	1.00	
700.0	3.00	77.61	699.9	1.7	7.7	-7.8	1.00	1.00	
800.0	4.00	77.61	799.7	3.0	13.6	-14.0	1.00	1.00	
900.0	5.00	77.61	899.4	4.7	21.3	-21.8	1.00	1.00	
995.1	5.95	77.61	994.0	6.6	30.2	-30.9	1.00	1.00	Fox Hills - BASE
1,000.0	6.00	77.61	998.9	6.7	30.7	-31.4	1.00	1.00	
1,100.0	7.00	77.61	1,098.3	9.2	41.7	-42.7	1.00	1.00	
1,200.0	8.00	77.61	1,197.4	12.0	54.5	-55.7	1.00	1.00	
1,300.0	9.00	77.61	1,296.3	15.1	68.9	-70.5	1.00	1.00	
1,399.4	9.99	77.61	1,394.3	18.7	84.9	-86.9	1.00	1.00	EOB; Inc=10°
1,400.0	9.99	77.61	1,394.9	18.7	85.0	-87.0	0.00	0.00	
1,500.0	9.99	77.61	1,493.4	22.4	102.0	-104.4	0.00	0.00	
1,600.0	9.99	77.61	1,591.9	26.1	118.9	-121.7	0.00	0.00	
1,700.0	9.99	77.61	1,690.4	29.8	135.9	-139.1	0.00	0.00	
1,800.0	9.99	77.61	1,788.9	33.6	152.8	-156.4	0.00	0.00	
1,900.0	9.99	77.61	1,887.3	37.3	169.8	-173.7	0.00	0.00	
2,000.0	9.99	77.61	1,985.8	41.0	186.7	-191.1	0.00	0.00	
2,100.0	9.99	77.61	2,084.3	44.7	203.7	-208.4	0.00	0.00	
2,200.0	9.99	77.61	2,182.8	48.5	220.6	-225.8	0.00	0.00	
2,300.0	9.99	77.61	2,281.3	52.2	237.6	-243.1	0.00	0.00	
2,400.0	9.99	77.61	2,379.8	55.9	254.5	-260.5	0.00	0.00	
2,500.0	9.99	77.61	2,478.2	59.6	271.5	-277.8	0.00	0.00	
2,600.0	9.99	77.61	2,576.7	63.4	288.4	-295.2	0.00	0.00	
2,700.0	9.99	77.61	2,675.2	67.1	305.4	-312.5	0.00	0.00	
2,800.0	9.99	77.61	2,773.7	70.8	322.3	-329.9	0.00	0.00	
2,900.0	9.99	77.61	2,872.2	74.5	339.3	-347.2	0.00	0.00	
3,000.0	9.99	77.61	2,970.7	78.2	356.2	-364.6	0.00	0.00	
3,100.0	9.99	77.61	3,069.1	82.0	373.2	-381.9	0.00	0.00	
3,200.0	9.99	77.61	3,167.6	85.7	390.1	-399.3	0.00	0.00	
3,300.0	9.99	77.61	3,266.1	89.4	407.1	-416.6	0.00	0.00	
3,400.0	9.99	77.61	3,364.6	93.1	424.0	-434.0	0.00	0.00	
3,500.0	9.99	77.61	3,463.1	96.9	441.0	-451.3	0.00	0.00	
3,600.0	9.99	77.61	3,561.5	100.6	457.9	-468.7	0.00	0.00	
3,700.0	9.99	77.61	3,660.0	104.3	474.9	-486.0	0.00	0.00	
3,800.0	9.99	77.61	3,758.5	108.0	491.8	-503.3	0.00	0.00	
3,900.0	9.99	77.61	3,857.0	111.7	508.8	-520.7	0.00	0.00	
4,000.0	9.99	77.61	3,955.5	115.5	525.7	-538.0	0.00	0.00	
4,100.0	9.99	77.61	4,054.0	119.2	542.7	-555.4	0.00	0.00	
4,200.0	9.99	77.61	4,152.4	122.9	559.6	-572.7	0.00	0.00	
4,300.0	9.99	77.61	4,250.9	126.6	576.6	-590.1	0.00	0.00	
4,400.0	9.99	77.61	4,349.4	130.4	593.5	-607.4	0.00	0.00	
4,500.0	9.99	77.61	4,447.9	134.1	610.5	-624.8	0.00	0.00	
4,600.0	9.99	77.61	4,546.4	137.8	627.4	-642.1	0.00	0.00	
4,696.1	9.99	77.61	4,641.0	141.4	643.7	-658.8	0.00	0.00	Sussex
4,700.0	9.99	77.61	4,644.9	141.5	644.4	-659.5	0.00	0.00	
4,800.0	9.99	77.61	4,743.3	145.3	661.3	-676.8	0.00	0.00	

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well McConahay 1B-34H-H266
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site:	S34-T2N-R66W (McConahay)	**North Reference:**	True
Well:	McConahay 1B-34H-H266	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #4		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,900.0	9.99	77.61	4,841.8	149.0	678.3	-694.2	0.00	0.00	
4,909.3	9.99	77.61	4,851.0	149.3	679.9	-695.8	0.00	0.00	Sussex Marker
5,000.0	9.99	77.61	4,940.3	152.7	695.2	-711.5	0.00	0.00	
5,100.0	9.99	77.61	5,038.8	156.4	712.2	-728.9	0.00	0.00	
5,200.0	9.99	77.61	5,137.3	160.1	729.1	-746.2	0.00	0.00	
5,300.0	9.99	77.61	5,235.8	163.9	746.1	-763.6	0.00	0.00	
5,338.8	9.99	77.61	5,274.0	165.3	752.7	-770.3	0.00	0.00	Shannon
5,400.0	9.99	77.61	5,334.2	167.6	763.0	-780.9	0.00	0.00	
5,500.0	9.99	77.61	5,432.7	171.3	780.0	-798.2	0.00	0.00	
5,600.0	9.99	77.61	5,531.2	175.0	796.9	-815.6	0.00	0.00	
5,700.0	9.99	77.61	5,629.7	178.8	813.9	-832.9	0.00	0.00	
5,800.0	9.99	77.61	5,728.2	182.5	830.8	-850.3	0.00	0.00	
5,900.0	9.99	77.61	5,826.7	186.2	847.8	-867.6	0.00	0.00	
6,000.0	9.99	77.61	5,925.1	189.9	864.7	-885.0	0.00	0.00	
6,100.0	9.99	77.61	6,023.6	193.7	881.7	-902.3	0.00	0.00	
6,200.0	9.99	77.61	6,122.1	197.4	898.6	-919.7	0.00	0.00	
6,300.0	9.99	77.61	6,220.6	201.1	915.6	-937.0	0.00	0.00	
6,400.0	9.99	77.61	6,319.1	204.8	932.5	-954.4	0.00	0.00	
6,482.2	9.99	77.61	6,400.0	207.9	946.5	-968.6	0.00	0.00	Teepee Buttes (*if present)
6,500.0	9.99	77.61	6,417.5	208.5	949.5	-971.7	0.00	0.00	
6,600.0	9.99	77.61	6,516.0	212.3	966.4	-989.1	0.00	0.00	
6,700.0	9.99	77.61	6,614.5	216.0	983.4	-1,006.4	0.00	0.00	
6,800.0	9.99	77.61	6,713.0	219.7	1,000.3	-1,023.8	0.00	0.00	
6,900.0	9.99	77.61	6,811.5	223.4	1,017.3	-1,041.1	0.00	0.00	
6,942.1	9.99	77.61	6,853.0	225.0	1,024.4	-1,048.4	0.00	0.00	Start build/turn @ 6942' MD
7,000.0	4.48	62.61	6,910.4	227.1	1,031.3	-1,055.6	10.00	-9.54	
7,100.0	6.31	287.33	7,010.2	230.6	1,029.5	-1,054.7	10.00	1.84	
7,200.0	16.11	275.92	7,108.1	233.6	1,010.4	-1,037.0	10.00	9.80	
7,262.4	22.31	273.86	7,167.0	235.3	990.0	-1,017.5	10.00	9.94	Sharon Springs
7,300.0	26.06	273.08	7,201.3	236.3	974.6	-1,002.8	10.00	9.96	
7,310.8	27.14	272.89	7,211.0	236.5	969.8	-998.2	10.00	9.97	Niobrara
7,400.0	36.04	271.74	7,286.9	238.3	923.1	-953.4	10.00	9.98	
7,400.1	36.04	271.74	7,287.0	238.3	923.1	-953.3	0.00	0.00	B Chalk
7,425.3	38.56	271.50	7,307.0	238.8	907.8	-938.6	10.05	10.04	B Marl
7,489.7	44.99	270.99	7,355.0	239.7	865.0	-897.3	10.00	9.99	C Chalk
7,500.0	46.02	270.92	7,362.2	239.8	857.6	-890.1	10.00	9.99	
7,540.0	50.02	270.67	7,389.0	240.2	827.8	-861.4	10.00	9.99	C Marl
7,600.0	56.01	270.34	7,425.1	240.7	780.0	-815.0	10.00	9.99	
7,700.0	66.01	269.89	7,473.5	240.8	692.6	-730.3	10.00	9.99	
7,760.2	72.02	269.65	7,495.0	240.6	636.5	-675.8	10.00	9.99	Ft. Hayes
7,800.0	76.00	269.50	7,506.0	240.3	598.2	-638.5	10.00	9.99	
7,864.3	82.43	269.27	7,518.0	239.6	535.0	-577.1	10.00	9.99	Codell
7,900.0	85.99	269.14	7,521.6	239.1	499.5	-542.5	10.00	9.99	
7,940.1	90.00	269.00	7,523.0	238.5	459.5	-503.5	10.00	9.99	LP @ 7523' TVD; 90°
8,000.0	90.00	269.00	7,523.0	237.4	399.6	-445.2	0.00	0.00	
8,100.0	90.00	269.00	7,523.0	235.7	299.6	-347.7	0.00	0.00	
8,200.0	90.00	269.00	7,523.0	233.9	199.6	-250.3	0.00	0.00	
8,300.0	90.00	269.00	7,523.0	232.2	99.6	-152.8	0.00	0.00	
8,400.0	90.00	269.00	7,523.0	230.4	-0.4	-55.4	0.00	0.00	
8,500.0	90.00	269.00	7,523.0	228.7	-100.3	42.0	0.00	0.00	
8,512.7	90.00	269.00	7,523.0	228.5	-113.0	54.4	0.00	0.00	McConahay 1B-34H-H266 LP
8,600.0	90.00	269.00	7,523.0	226.9	-200.3	139.5	0.00	0.00	

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well McConahay 1B-34H-H266
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site:	S34-T2N-R66W (McConahay)	**North Reference:**	True
Well:	McConahay 1B-34H-H266	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #4		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
8,700.0	90.00	269.00	7,523.0	225.2	-300.3	236.9	0.00	0.00	
8,800.0	90.00	269.00	7,523.0	223.5	-400.3	334.3	0.00	0.00	
8,900.0	90.00	269.00	7,523.0	221.7	-500.3	431.8	0.00	0.00	
9,000.0	90.00	269.00	7,523.0	220.0	-600.3	529.2	0.00	0.00	
9,100.0	90.00	269.00	7,523.0	218.2	-700.2	626.7	0.00	0.00	
9,200.0	90.00	269.00	7,523.0	216.5	-800.2	724.1	0.00	0.00	
9,300.0	90.00	269.00	7,523.0	214.7	-900.2	821.5	0.00	0.00	
9,400.0	90.00	269.00	7,523.0	213.0	-1,000.2	919.0	0.00	0.00	
9,500.0	90.00	269.00	7,523.0	211.2	-1,100.2	1,016.4	0.00	0.00	
9,600.0	90.00	269.00	7,523.0	209.5	-1,200.2	1,113.8	0.00	0.00	
9,700.0	90.00	269.00	7,523.0	207.8	-1,300.2	1,211.3	0.00	0.00	
9,800.0	90.00	269.00	7,523.0	206.0	-1,400.1	1,308.7	0.00	0.00	
9,900.0	90.00	269.00	7,523.0	204.3	-1,500.1	1,406.1	0.00	0.00	
10,000.0	90.00	269.00	7,523.0	202.5	-1,600.1	1,503.6	0.00	0.00	
10,100.0	90.00	269.00	7,523.0	200.8	-1,700.1	1,601.0	0.00	0.00	
10,200.0	90.00	269.00	7,523.0	199.0	-1,800.1	1,698.5	0.00	0.00	
10,300.0	90.00	269.00	7,523.0	197.3	-1,900.1	1,795.9	0.00	0.00	
10,400.0	90.00	269.00	7,523.0	195.5	-2,000.0	1,893.3	0.00	0.00	
10,500.0	90.00	269.00	7,523.0	193.8	-2,100.0	1,990.8	0.00	0.00	
10,600.0	90.00	269.00	7,523.0	192.0	-2,200.0	2,088.2	0.00	0.00	
10,700.0	90.00	269.00	7,523.0	190.3	-2,300.0	2,185.6	0.00	0.00	
10,800.0	90.00	269.00	7,523.0	188.6	-2,400.0	2,283.1	0.00	0.00	
10,900.0	90.00	269.00	7,523.0	186.8	-2,500.0	2,380.5	0.00	0.00	
11,000.0	90.00	269.00	7,523.0	185.1	-2,600.0	2,478.0	0.00	0.00	
11,100.0	90.00	269.00	7,523.0	183.3	-2,699.9	2,575.4	0.00	0.00	
11,200.0	90.00	269.00	7,523.0	181.6	-2,799.9	2,672.8	0.00	0.00	
11,290.1	90.00	269.00	7,523.0	180.0	-2,890.0	2,760.6	0.00	0.00	Start turn @ 11290' MD - McConahay 1B-34H-H
11,299.8	90.00	269.19	7,523.0	179.8	-2,899.7	2,770.0	2.00	0.00	McConahay 1B-34H-H266 TGT 2
11,300.0	90.00	269.20	7,523.0	179.8	-2,899.9	2,770.3	2.00	0.00	
11,363.9	90.00	270.48	7,523.0	179.7	-2,963.8	2,832.3	2.00	0.00	End of turn @ 11363' MD
11,400.0	90.00	270.48	7,523.0	180.0	-2,999.9	2,867.3	0.00	0.00	
11,500.0	90.00	270.48	7,523.0	180.8	-3,099.9	2,964.1	0.00	0.00	
11,600.0	90.00	270.48	7,523.0	181.6	-3,199.9	3,060.9	0.00	0.00	
11,700.0	90.00	270.48	7,523.0	182.5	-3,299.9	3,157.7	0.00	0.00	
11,800.0	90.00	270.48	7,523.0	183.3	-3,399.9	3,254.6	0.00	0.00	
11,900.0	90.00	270.48	7,523.0	184.1	-3,499.9	3,351.4	0.00	0.00	
12,000.0	90.00	270.48	7,523.0	185.0	-3,599.9	3,448.2	0.00	0.00	
12,100.0	90.00	270.48	7,523.0	185.8	-3,699.9	3,545.0	0.00	0.00	
12,134.8	90.00	270.48	7,523.0	186.1	-3,734.7	3,578.7	0.00	0.00	TD at 12134.8 - McConahay 1B-34H-H266 PBH

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well McConahay 1B-34H-H266
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site:	S34-T2N-R66W (McConahay)	**North Reference:**	True
Well:	McConahay 1B-34H-H266	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #4		

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
McConahay 1B-34H-H2(	0.00	0.00	7,523.0	200.0	-2,900.0	1,279,600.50	3,204,753.14	40.098569	-104.768096
- plan misses target center by 20.2ft at 11299.8ft MD (7523.0 TVD, 179.8 N, -2899.7 E)									
- Point									
McConahay 1B-34H-H2(	0.00	0.00	7,523.0	180.0	-2,890.0	1,279,580.58	3,204,763.30	40.098514	-104.768061
- plan hits target center									
- Point									
McConahay 1B-34H-H2(	0.00	0.00	7,523.0	186.1	-3,734.7	1,279,579.58	3,203,918.63	40.098530	-104.771080
- plan hits target center									
- Point									
McConahay 1B-34H-H2(	0.00	0.00	7,523.0	630.0	-120.0	1,280,053.75	3,207,529.44	40.099749	-104.758159
- plan misses target center by 401.6ft at 8512.7ft MD (7523.0 TVD, 228.5 N, -113.0 E)									
- Point									

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
995.1	994.0	Fox Hills - BASE			
4,696.1	4,641.0	Sussex			
4,909.3	4,851.0	Sussex Marker			
5,338.8	5,274.0	Shannon			
6,482.2	6,400.0	Teepee Buttes (*if present)			
7,262.4	7,167.0	Sharon Springs			
7,310.8	7,211.0	Niobrara			
7,400.1	7,287.0	B Chalk			
7,425.3	7,307.0	B Marl			
7,489.7	7,355.0	C Chalk			
7,540.0	7,389.0	C Marl			
7,760.2	7,495.0	Ft. Hayes			
7,864.3	7,518.0	Codell			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
400.0	400.0	0.0	0.0	KOP @ 400'
1,399.4	1,394.3	18.7	84.9	EOB; Inc=10°
6,942.1	6,853.0	225.0	1,024.4	Start build/turn @ 6942' MD
7,940.1	7,523.0	238.5	459.5	LP @ 7523' TVD; 90°
11,290.1	7,523.0	180.0	-2,890.0	Start turn @ 11290' MD
11,363.9	7,523.0	179.7	-2,963.8	End of turn @ 11363' MD
12,134.8	7,523.0	186.1	-3,734.7	TD at 12134.8

EnCana Oil & Gas (USA) Inc

DJ Wattenberg
S34-T2N-R66W (McConahay)
McConahay 1B-34H-H266
Hz
Plan #4

Anticollision Report

17 December, 2013

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Reference	Plan #4

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	**Error Model:**	Systematic Ellipse
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,179.7ft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**		

Survey Tool Program **Date** 12/17/2013

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	12,134.8	Plan #4 (Hz)	Geolink MWD	Geolink MWD

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
S34-T2N-R66W (McConahay)						
CONNER 11-34 (EXISTING) - MACEY & MERSHON WE						Out of range
CONNER 21-34 (EXISTING) - FOUNDATION WELL - NO						Out of range
CONNER 22-34 (EXISTING) - ENCANA WELL - GYRO	10,655.8	7,465.3	711.5	636.4	9.482	CC, ES
CONNER 22-34 (EXISTING) - ENCANA WELL - GYRO	10,800.0	7,465.7	725.9	647.4	9.248	SF
CONNER 23-34 (EXISTING) - ENCANA WELL - NO SUR						Out of range
CONNER 24-34 (EXISTING) - FOUNDATION WELL - NO						Out of range
CONNER D&H 2 (EXISTING) - MARINER WELL - NO S						Out of range
DARLENNE 1 (EXISTING) - ENCANA WELL - NO SURV						Out of range
ERICA 1 (EXISTING) - GREAT WESTERN WELL - NO S	11,589.7	7,440.0	163.6	59.5	1.571	CC, ES
ERICA 1 (EXISTING) - GREAT WESTERN WELL - NO S	11,600.0	7,440.0	164.0	59.6	1.571	SF
MCCONAHAY 1 (EXISTING) - ENCANA WELL - GYRO	8,987.3	7,509.3	378.2	341.5	10.315	CC
MCCONAHAY 1 (EXISTING) - ENCANA WELL - GYRO	9,000.0	7,509.3	378.4	341.5	10.249	ES
MCCONAHAY 1 (EXISTING) - ENCANA WELL - GYRO	9,100.0	7,509.2	394.6	355.6	10.113	SF
McConahay 1A-34H - Hz - Hz	8,801.2	8,556.6	198.6	176.9	9.157	CC, ES
McConahay 1A-34H - Hz - Hz	12,135.6	11,861.6	781.2	576.5	3.816	SF
McConahay 1C-34H-H266 - Hz - Plan #1	300.0	300.0	10.9	10.0	11.385	CC
McConahay 1C-34H-H266 - Hz - Plan #1	400.0	399.9	11.2	9.9	8.550	ES
McConahay 1C-34H-H266 - Hz - Plan #1	600.0	599.7	14.4	12.4	7.107	SF
McConahay 1D-34H-H266 - Hz - Plan #1	166.3	167.3	21.9	21.4	44.148	CC
McConahay 1D-34H-H266 - Hz - Plan #1	200.0	201.0	21.9	21.2	35.678	ES
McConahay 1D-34H-H266 - Hz - Plan #1	600.0	599.3	33.7	31.7	16.665	SF
McConahay 1E-34H-H266 - Hz - Plan #1	300.0	287.0	10.9	10.0	11.405	CC, ES
McConahay 1E-34H-H266 - Hz - Plan #1	12,135.6	11,628.2	785.5	587.3	3.964	SF
MCCONAHAY 31-34 (EXISTING) - ENCANA WELL - GY	9,258.0	7,525.4	441.9	399.4	10.393	CC, ES
MCCONAHAY 31-34 (EXISTING) - ENCANA WELL - GY	9,400.0	7,524.6	464.1	418.5	10.165	SF
MCCONAHAY 31-34 (EXISTING) MRP - MACHII-ROSS						Out of range
MCCONAHAY 33-34 (EXISTING) - FOUNDATION WELL						Out of range
MCCONAHAY 41-34 (EXISTING) - ENCANA WELL - GY	7,938.5	7,509.1	589.8	566.6	25.417	CC, ES, SF
MCCONAHAY 43-34 (EXISTING) - ENCANA WELL - NO						Out of range
MCCONAHAY 44-34 (EXISTING) - ENCANA WELL - NO						Out of range
McConahay 4A-34H-P266 - Hz - Plan #2						Out of range
McConahay 4B-34H-P266 - Hz - Plan #3						Out of range
McConahay 4C-34H-P266 - Hz - Plan #2						Out of range
MCCONAHAY 6-4-34 (EXISTING) - ENCANA WELL - SU	100.0	75.0	532.4	532.2	2,045.312	CC
MCCONAHAY 6-4-34 (EXISTING) - ENCANA WELL - SU	400.0	373.9	532.9	531.6	410.076	ES
MCCONAHAY 6-4-34 (EXISTING) - ENCANA WELL - SU	3,700.0	3,567.7	1,161.8	1,143.9	65.097	SF
RANCHERO 1 (EXISTING) - ENCANA WELL - NO SUR						Out of range
RANCHERO 12-34 (EXISTING) - MACHII-ROSS WELL						Out of range
RANCHERO 32-34 (EXISTING) - ENCANA WELL - GYR	9,302.0	7,482.0	605.7	562.4	13.976	CC, ES
RANCHERO 32-34 (EXISTING) - ENCANA WELL - GYR	9,500.0	7,482.0	637.2	589.5	13.342	SF
SEYMOUR 34-34 (EXISTING) - ENCANA WELL - NO SU						Out of range

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - CONNER 22-34 (EXISTING) - ENCANA WELL - GYRO

Offset Site Error: 0.0 ft

Survey Program: 100-Gyro

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
9,800.0	7,523.0	7,463.2	7,462.1	48.3	6.6	-90.01	-520.3	-2,243.4	1,112.9	1,058.1	54.77	20.320	
9,900.0	7,523.0	7,463.4	7,462.3	50.7	6.6	-90.03	-520.3	-2,243.4	1,038.0	980.9	57.10	18.179	
10,000.0	7,523.0	7,463.6	7,462.6	53.0	6.6	-90.05	-520.3	-2,243.4	967.6	908.1	59.44	16.279	
10,100.0	7,523.0	7,463.9	7,462.8	55.4	6.6	-90.07	-520.3	-2,243.4	902.8	841.0	61.79	14.610	
10,200.0	7,523.0	7,464.1	7,463.1	57.7	6.6	-90.09	-520.3	-2,243.4	844.9	780.8	64.16	13.170	
10,300.0	7,523.0	7,464.4	7,463.3	60.1	6.6	-90.11	-520.3	-2,243.4	795.5	728.9	66.53	11.956	
10,400.0	7,523.0	7,464.6	7,463.6	62.5	6.6	-90.13	-520.3	-2,243.4	756.0	687.1	68.91	10.971	
10,500.0	7,523.0	7,464.9	7,463.8	64.8	6.6	-90.15	-520.3	-2,243.4	728.3	657.0	71.30	10.215	
10,600.0	7,523.0	7,465.1	7,464.1	67.2	6.6	-90.17	-520.3	-2,243.4	713.6	640.0	73.69	9.684	
10,655.8	7,523.0	7,465.3	7,464.2	68.6	6.6	-90.18	-520.3	-2,243.4	711.5	636.4	75.03	9.482	CC, ES
10,700.0	7,523.0	7,465.4	7,464.3	69.6	6.6	-90.19	-520.3	-2,243.4	712.8	636.7	76.09	9.368	
10,800.0	7,523.0	7,465.7	7,464.6	72.0	6.6	-90.21	-520.3	-2,243.4	725.9	647.4	78.50	9.248	SF
10,900.0	7,523.0	7,465.9	7,464.9	74.4	6.6	-90.23	-520.3	-2,243.4	752.2	671.3	80.91	9.297	
11,000.0	7,523.0	7,466.2	7,465.1	76.9	6.6	-90.25	-520.3	-2,243.4	790.4	707.0	83.32	9.486	
11,100.0	7,523.0	7,466.5	7,465.4	79.3	6.6	-90.27	-520.3	-2,243.4	838.8	753.0	85.74	9.783	
11,200.0	7,523.0	7,466.8	7,465.7	81.7	6.6	-90.30	-520.3	-2,243.4	895.7	807.6	88.16	10.161	
11,300.0	7,523.0	7,467.0	7,466.0	84.1	6.6	-90.32	-520.3	-2,243.4	959.8	869.2	90.59	10.595	
11,400.0	7,523.0	7,467.3	7,466.3	86.5	6.6	-90.35	-520.3	-2,243.4	1,030.9	937.8	93.06	11.078	
11,500.0	7,523.0	7,467.6	7,466.6	89.0	6.6	-90.38	-520.3	-2,243.4	1,106.9	1,011.4	95.49	11.592	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - ERICA 1 (EXISTING) - GREAT WESTERN WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 8118-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,500.0	7,523.0	7,440.0	7,440.0	64.8	13.0	90.00	345.2	-3,188.3	1,098.7	1,021.0	77.76	14.130	
10,600.0	7,523.0	7,440.0	7,440.0	67.2	13.0	90.00	345.2	-3,188.3	1,000.1	919.9	80.15	12.477	
10,700.0	7,523.0	7,440.0	7,440.0	69.6	13.0	90.00	345.2	-3,188.3	901.7	819.1	82.55	10.922	
10,800.0	7,523.0	7,440.0	7,440.0	72.0	13.0	90.00	345.2	-3,188.3	803.7	718.7	84.96	9.460	
10,900.0	7,523.0	7,440.0	7,440.0	74.4	13.0	90.00	345.2	-3,188.3	706.3	618.9	87.37	8.084	
11,000.0	7,523.0	7,440.0	7,440.0	76.9	13.0	90.00	345.2	-3,188.3	609.7	519.9	89.78	6.791	
11,100.0	7,523.0	7,440.0	7,440.0	79.3	13.0	90.00	345.2	-3,188.3	514.5	422.3	92.20	5.580	
11,200.0	7,523.0	7,440.0	7,440.0	81.7	13.0	90.00	345.2	-3,188.3	421.4	326.8	94.62	4.454	
11,300.0	7,523.0	7,440.0	7,440.0	84.1	13.0	90.00	345.2	-3,188.3	332.4	235.4	97.05	3.425	
11,400.0	7,523.0	7,440.0	7,440.0	86.5	13.0	90.00	345.2	-3,188.3	250.6	151.0	99.52	2.518	
11,500.0	7,523.0	7,440.0	7,440.0	89.0	13.0	90.00	345.2	-3,188.3	186.6	84.7	101.95	1.831	
11,589.7	7,523.0	7,440.0	7,440.0	91.2	13.0	90.00	345.2	-3,188.3	163.6	59.5	104.13	1.571	CC, ES
11,600.0	7,523.0	7,440.0	7,440.0	91.4	13.0	90.00	345.2	-3,188.3	164.0	59.6	104.38	1.571	SF
11,700.0	7,523.0	7,440.0	7,440.0	93.8	13.0	90.00	345.2	-3,188.3	197.3	90.5	106.82	1.847	
11,800.0	7,523.0	7,440.0	7,440.0	96.3	13.0	90.00	345.2	-3,188.3	266.4	157.2	109.25	2.439	
11,900.0	7,523.0	7,440.0	7,440.0	98.7	13.0	90.00	345.2	-3,188.3	350.8	239.1	111.69	3.141	
12,000.0	7,523.0	7,440.0	7,440.0	101.2	13.0	90.00	345.2	-3,188.3	441.7	327.6	114.13	3.870	
12,100.0	7,523.0	7,440.0	7,440.0	103.6	13.0	90.00	345.2	-3,188.3	535.9	419.3	116.57	4.597	
12,135.6	7,523.0	7,440.0	7,440.0	104.5	13.0	90.00	345.2	-3,188.3	569.9	452.4	117.44	4.852	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - MCCONAHAY 1 (EXISTING) - ENCANA WELL - GYRO

Offset Site Error: 0.0 ft

Survey Program: 200-Gyro

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	-109.06	-189.4	-548.3	580.3				
100.0	100.0	86.0	86.0	0.1	0.0	-109.06	-189.4	-548.3	580.1	580.0	0.13	4,425.968	
200.0	200.0	183.1	183.1	0.3	0.1	-109.07	-189.7	-548.5	580.3	580.0	0.38	1,535.075	
300.0	300.0	280.3	280.3	0.5	0.2	-109.10	-190.1	-549.1	581.1	580.5	0.64	911.192	
400.0	400.0	380.3	380.3	0.7	0.2	-109.08	-190.3	-550.1	582.1	581.2	0.90	646.824	
500.0	500.0	483.2	483.2	0.8	0.3	173.36	-190.1	-551.0	583.8	582.6	1.16	501.737	
600.0	600.0	580.0	580.0	1.0	0.4	173.41	-190.1	-551.7	587.0	585.6	1.42	412.686	
700.0	699.9	683.6	683.6	1.2	0.5	173.45	-190.4	-552.5	592.2	590.5	1.69	350.986	
800.0	799.7	779.1	779.0	1.4	0.6	173.53	-190.4	-553.1	598.9	596.9	1.95	307.882	
900.0	899.4	877.7	877.6	1.6	0.7	173.65	-190.2	-554.5	607.9	605.7	2.21	275.604	
1,000.0	998.9	979.3	979.3	1.8	0.8	173.80	-190.0	-555.8	618.6	616.1	2.47	250.498	
1,100.0	1,098.3	1,078.6	1,078.5	2.1	0.9	173.96	-189.6	-556.8	630.7	628.0	2.73	230.940	
1,200.0	1,197.4	1,174.8	1,174.8	2.3	0.9	174.12	-189.4	-558.0	644.8	641.8	2.99	215.631	
1,300.0	1,296.3	1,272.6	1,272.6	2.6	1.0	174.25	-189.7	-559.4	660.9	657.7	3.25	203.310	
1,400.0	1,394.9	1,372.3	1,372.2	2.9	1.1	174.39	-189.9	-560.8	678.7	675.2	3.51	193.193	
1,500.0	1,493.4	1,471.7	1,471.6	3.3	1.2	174.56	-189.9	-562.0	697.2	693.4	3.78	184.565	
1,600.0	1,591.9	1,568.5	1,568.4	3.6	1.3	174.72	-190.0	-563.2	715.6	711.6	4.04	177.169	
1,700.0	1,690.4	1,665.7	1,665.6	3.9	1.4	174.83	-190.5	-564.5	734.3	730.0	4.30	170.719	
1,800.0	1,788.9	1,765.8	1,765.7	4.3	1.5	174.94	-191.1	-565.8	753.0	748.4	4.57	164.917	
1,900.0	1,887.3	1,865.1	1,865.0	4.6	1.5	175.05	-191.5	-566.8	771.3	766.5	4.83	159.717	
2,000.0	1,985.8	1,961.2	1,961.1	4.9	1.6	175.15	-192.0	-567.8	789.8	784.7	5.09	155.153	
2,100.0	2,084.3	2,059.4	2,059.2	5.3	1.7	175.25	-192.4	-569.2	808.5	803.2	5.35	151.042	
2,200.0	2,182.8	2,158.7	2,158.5	5.6	1.8	175.34	-192.9	-570.4	827.1	821.4	5.62	147.261	
2,300.0	2,281.3	2,255.7	2,255.6	6.0	1.9	175.39	-193.8	-571.4	845.6	839.7	5.88	143.862	
2,400.0	2,379.8	2,355.0	2,354.8	6.3	2.0	175.47	-194.4	-572.7	864.3	858.2	6.14	140.736	
2,500.0	2,478.2	2,458.0	2,457.8	6.7	2.1	175.57	-194.6	-573.7	882.6	876.2	6.41	137.743	
2,600.0	2,576.7	2,554.4	2,554.2	7.0	2.2	175.67	-194.6	-574.4	900.6	893.9	6.67	135.054	
2,700.0	2,675.2	2,650.1	2,649.9	7.3	2.2	175.80	-194.2	-575.7	919.1	912.1	6.93	132.663	
2,800.0	2,773.7	2,748.6	2,748.4	7.7	2.3	175.93	-193.7	-577.1	937.5	930.3	7.19	130.398	
2,900.0	2,872.2	2,845.8	2,845.6	8.0	2.4	176.05	-193.3	-578.5	956.1	948.6	7.45	128.325	
3,000.0	2,970.7	2,943.8	2,943.6	8.4	2.5	176.16	-193.0	-579.9	974.7	967.0	7.71	126.392	
3,100.0	3,069.1	3,043.4	3,043.1	8.7	2.6	176.25	-193.1	-581.2	993.3	985.4	7.97	124.558	
3,200.0	3,167.6	3,141.9	3,141.6	9.1	2.7	176.33	-193.0	-582.4	1,011.8	1,003.5	8.24	122.833	
3,300.0	3,266.1	3,238.1	3,237.9	9.4	2.8	176.44	-192.5	-583.9	1,030.4	1,021.9	8.50	121.270	
3,400.0	3,364.6	3,339.2	3,339.0	9.8	2.8	176.54	-192.2	-585.4	1,049.0	1,040.2	8.76	119.742	
3,500.0	3,463.1	3,441.0	3,440.7	10.1	2.9	176.67	-191.3	-586.5	1,067.2	1,058.1	9.02	118.245	
3,600.0	3,561.5	3,538.2	3,537.9	10.5	3.0	176.79	-190.3	-587.6	1,085.3	1,076.0	9.29	116.888	
3,700.0	3,660.0	3,636.7	3,636.4	10.8	3.1	176.88	-189.8	-588.7	1,103.5	1,094.0	9.55	115.592	
3,800.0	3,758.5	3,737.6	3,737.4	11.2	3.2	176.97	-189.3	-589.7	1,121.7	1,111.9	9.81	114.335	
3,900.0	3,857.0	3,839.3	3,839.0	11.5	3.3	177.06	-188.5	-590.3	1,139.4	1,129.3	10.07	113.095	
4,000.0	3,955.5	3,938.6	3,938.3	11.9	3.4	177.15	-187.9	-590.9	1,157.1	1,146.8	10.34	111.945	
4,100.0	4,054.0	4,042.2	4,041.9	12.3	3.5	177.21	-187.6	-591.0	1,174.4	1,163.8	10.60	110.769	
7,900.0	7,521.6	7,508.5	7,507.7	17.1	6.5	-78.74	-158.0	-580.9	1,151.1	1,128.1	22.97	50.110	
8,000.0	7,523.0	7,510.0	7,509.1	16.9	6.5	-90.02	-158.0	-580.9	1,057.2	1,034.1	23.17	45.632	
8,100.0	7,523.0	7,509.9	7,509.0	17.1	6.5	-90.01	-158.0	-580.9	964.5	941.0	23.46	41.116	
8,200.0	7,523.0	7,509.8	7,509.0	17.6	6.5	-90.00	-158.0	-580.9	873.4	849.3	24.09	36.250	
8,300.0	7,523.0	7,509.7	7,508.9	18.6	6.5	-89.98	-158.0	-580.9	784.5	759.4	25.04	31.328	
8,400.0	7,523.0	7,509.7	7,508.8	19.8	6.5	-89.97	-158.0	-580.9	698.5	672.3	26.25	26.607	
8,500.0	7,523.0	7,509.6	7,508.8	21.3	6.5	-89.96	-158.0	-580.9	616.8	589.1	27.69	22.280	
8,600.0	7,523.0	7,509.5	7,508.7	22.9	6.5	-89.95	-158.0	-580.9	541.3	512.0	29.30	18.477	
8,700.0	7,523.0	7,509.5	7,508.6	24.7	6.5	-89.94	-158.0	-580.9	474.9	443.9	31.05	15.294	
8,800.0	7,523.0	7,509.4	7,508.5	26.5	6.5	-89.93	-158.0	-580.9	422.0	389.1	32.92	12.819	

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 McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - MCCONAHAY 1 (EXISTING) - ENCANA WELL - GYRO

Offset Site Error: 0.0 ft

Survey Program: 200-Gyro

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
8,900.0	7,523.0	7,509.3	7,508.5	28.5	6.5	-89.92	-158.0	-580.9	388.1	353.3	34.89	11.126	
8,987.3	7,523.0	7,509.3	7,508.4	30.3	6.5	-89.91	-158.0	-580.9	378.2	341.5	36.66	10.315	CC
9,000.0	7,523.0	7,509.3	7,508.4	30.5	6.5	-89.91	-158.0	-580.9	378.4	341.5	36.92	10.249	ES
9,100.0	7,523.0	7,509.2	7,508.3	32.6	6.5	-89.90	-158.0	-580.9	394.6	355.6	39.02	10.113	SF
9,200.0	7,523.0	7,509.1	7,508.3	34.8	6.5	-89.89	-158.0	-580.9	433.9	392.8	41.17	10.540	
9,300.0	7,523.0	7,509.1	7,508.2	37.0	6.5	-89.88	-158.0	-580.9	490.8	447.4	43.36	11.319	
9,400.0	7,523.0	7,509.0	7,508.1	39.2	6.5	-89.87	-158.0	-580.9	559.8	514.2	45.58	12.282	
9,500.0	7,523.0	7,508.9	7,508.1	41.5	6.5	-89.86	-158.0	-580.9	637.1	589.3	47.83	13.320	
9,600.0	7,523.0	7,508.9	7,508.0	43.7	6.5	-89.85	-158.0	-580.9	720.1	669.9	50.11	14.370	
9,700.0	7,523.0	7,508.8	7,508.0	46.0	6.5	-89.84	-158.0	-580.9	806.9	754.5	52.40	15.397	
9,800.0	7,523.0	7,508.7	7,507.9	48.3	6.5	-89.83	-158.0	-580.9	896.4	841.7	54.72	16.383	
9,900.0	7,523.0	7,508.7	7,507.8	50.7	6.5	-89.82	-158.0	-580.9	988.0	930.9	57.05	17.319	
10,000.0	7,523.0	7,508.6	7,507.8	53.0	6.5	-89.81	-158.0	-580.9	1,081.0	1,021.7	59.39	18.203	
10,100.0	7,523.0	7,508.5	7,507.7	55.4	6.5	-89.80	-158.0	-580.9	1,175.3	1,113.5	61.74	19.035	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - McConahay 1A-34H - Hz - Hz

Survey Program: 785-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	50.91	680.1	837.3	1,078.7				
100.0	100.0	97.0	97.0	0.1	0.2	50.91	680.1	837.3	1,078.7	1,078.4	0.30	3,624.555	
200.0	200.0	197.0	197.0	0.3	0.3	50.91	680.1	837.3	1,078.7	1,078.1	0.64	1,674.982	
300.0	300.0	297.0	297.0	0.5	0.5	50.91	680.1	837.3	1,078.7	1,077.7	0.99	1,089.151	
400.0	400.0	397.0	397.0	0.7	0.7	50.91	680.1	837.3	1,078.7	1,077.4	1.34	806.925	
500.0	500.0	497.0	497.0	0.8	0.9	-26.72	680.1	837.3	1,077.9	1,076.2	1.68	640.408	
600.0	600.0	597.0	597.0	1.0	1.0	-26.80	680.1	837.3	1,075.6	1,073.6	2.03	529.895	
700.0	699.9	696.9	696.9	1.2	1.2	-26.92	680.1	837.3	1,071.7	1,069.3	2.38	450.811	
800.0	799.7	796.1	796.1	1.4	1.4	-27.09	680.1	837.3	1,066.3	1,063.5	2.73	391.218	
900.0	899.4	890.6	890.6	1.6	1.5	-27.33	680.7	837.2	1,059.6	1,056.5	3.07	345.075	
1,000.0	998.9	988.1	988.1	1.8	1.7	-27.68	682.1	836.9	1,051.8	1,048.3	3.42	307.109	
1,100.0	1,098.3	1,091.2	1,091.2	2.1	1.9	-28.09	683.5	836.5	1,042.3	1,038.5	3.79	274.763	
1,200.0	1,197.4	1,191.9	1,191.8	2.3	2.1	-28.56	684.6	836.0	1,031.1	1,027.0	4.16	247.624	
1,300.0	1,296.3	1,293.2	1,293.2	2.6	2.2	-29.09	685.5	835.4	1,018.3	1,013.7	4.54	224.125	
1,400.0	1,394.9	1,394.5	1,394.4	2.9	2.4	-29.69	686.2	834.5	1,003.7	998.8	4.93	203.508	
1,500.0	1,493.4	1,494.6	1,494.5	3.3	2.6	-30.27	687.0	833.4	988.3	983.0	5.33	185.425	
1,600.0	1,591.9	1,595.1	1,595.0	3.6	2.8	-30.87	687.6	832.2	972.8	967.0	5.73	169.651	
1,700.0	1,690.4	1,696.1	1,696.1	3.9	2.9	-31.49	688.0	830.8	957.1	951.0	6.14	155.766	
1,800.0	1,788.9	1,798.7	1,798.6	4.3	3.1	-32.15	688.2	829.0	941.2	934.7	6.56	143.400	
1,900.0	1,887.3	1,897.3	1,897.2	4.6	3.3	-32.79	688.0	827.1	925.1	918.1	6.98	132.528	
2,000.0	1,985.8	1,992.1	1,992.0	4.9	3.5	-33.43	688.0	825.5	909.3	901.9	7.40	122.950	
2,100.0	2,084.3	2,091.5	2,091.3	5.3	3.6	-34.12	688.1	824.0	893.8	886.0	7.82	114.237	
2,200.0	2,182.8	2,194.0	2,193.9	5.6	3.8	-34.82	687.5	822.6	878.1	869.8	8.26	106.264	
2,300.0	2,281.3	2,290.1	2,289.9	6.0	4.0	-35.50	686.9	821.2	862.3	853.6	8.70	99.163	
2,400.0	2,379.8	2,391.8	2,391.6	6.3	4.2	-36.27	686.4	819.4	846.7	837.5	9.15	92.568	
2,500.0	2,478.2	2,486.4	2,486.2	6.7	4.3	-37.04	686.1	817.5	831.1	821.5	9.59	86.657	
2,600.0	2,576.7	2,582.7	2,582.5	7.0	4.5	-37.87	686.4	815.4	816.1	806.0	10.05	81.224	
2,700.0	2,675.2	2,672.5	2,672.3	7.3	4.7	-38.71	687.3	813.6	801.8	791.3	10.50	76.374	
2,800.0	2,773.7	2,764.3	2,764.0	7.7	4.8	-39.57	688.7	812.4	788.7	777.8	10.96	71.976	
2,900.0	2,872.2	2,854.6	2,854.4	8.0	5.0	-40.36	690.1	812.7	776.7	765.3	11.42	68.031	
3,000.0	2,970.7	2,948.7	2,948.4	8.4	5.1	-41.18	692.0	813.6	765.7	753.8	11.89	64.414	
3,100.0	3,069.1	3,048.0	3,047.7	8.7	5.3	-42.05	694.0	815.1	755.2	742.8	12.38	61.023	
3,200.0	3,167.6	3,144.7	3,144.4	9.1	5.5	-42.95	696.2	816.3	744.8	732.0	12.87	57.891	
3,300.0	3,266.1	3,243.1	3,242.7	9.4	5.7	-43.89	698.7	817.6	734.9	721.5	13.37	54.977	
3,400.0	3,364.6	3,342.2	3,341.8	9.8	5.8	-44.87	701.2	818.7	725.2	711.3	13.88	52.249	
3,500.0	3,463.1	3,438.4	3,437.9	10.1	6.0	-45.85	703.8	819.8	715.8	701.4	14.39	49.739	
3,600.0	3,561.5	3,533.3	3,532.8	10.5	6.2	-46.80	706.3	821.7	707.1	692.2	14.90	47.452	
3,700.0	3,660.0	3,644.4	3,643.8	10.8	6.4	-47.80	708.0	825.0	698.0	682.6	15.45	45.191	
3,800.0	3,758.5	3,745.0	3,744.4	11.2	6.5	-48.72	708.6	827.5	688.2	672.2	15.97	43.078	
3,900.0	3,857.0	3,847.7	3,847.0	11.5	6.7	-49.77	709.4	829.1	678.1	661.6	16.52	41.042	
4,000.0	3,955.5	3,949.3	3,948.6	11.9	6.9	-50.90	709.8	829.8	667.6	650.5	17.08	39.090	
4,100.0	4,054.0	4,044.9	4,044.3	12.3	7.1	-52.05	710.6	830.0	657.5	639.9	17.63	37.292	
4,200.0	4,152.4	4,142.4	4,141.8	12.6	7.2	-53.26	711.7	830.2	648.0	629.8	18.20	35.611	
4,300.0	4,250.9	4,239.6	4,238.9	13.0	7.4	-54.37	712.3	831.7	638.9	620.1	18.76	34.062	
4,400.0	4,349.4	4,335.3	4,334.6	13.3	7.6	-55.46	713.2	833.8	630.5	611.2	19.32	32.640	
4,500.0	4,447.9	4,434.3	4,433.6	13.7	7.7	-56.67	714.5	835.6	622.6	602.8	19.90	31.295	
4,600.0	4,546.4	4,533.7	4,532.9	14.0	7.9	-57.96	715.9	836.7	614.8	594.3	20.49	30.010	
4,700.0	4,644.9	4,634.2	4,633.4	14.4	8.1	-59.27	717.2	838.2	607.5	586.4	21.08	28.811	
4,800.0	4,743.3	4,738.6	4,737.8	14.7	8.3	-60.69	717.8	839.2	599.5	577.8	21.70	27.627	
4,900.0	4,841.8	4,837.6	4,836.9	15.1	8.4	-62.10	717.9	839.7	591.4	569.1	22.31	26.510	
5,000.0	4,940.3	4,934.2	4,933.4	15.4	8.6	-63.51	718.2	840.3	583.8	560.9	22.91	25.482	
5,100.0	5,038.8	5,032.5	5,031.8	15.8	8.8	-64.99	718.8	840.9	577.0	553.4	23.53	24.524	

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 McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - McConahay 1A-34H - Hz - Hz

Offset Site Error: 0.0 ft

Survey Program: 785-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	5,137.3	5,129.8	5,129.0	16.1	9.0	-66.48	719.4	841.6	570.5	546.4	24.14	23.634	
5,300.0	5,235.8	5,226.6	5,225.8	16.5	9.1	-67.98	720.3	842.4	564.8	540.0	24.75	22.819	
5,400.0	5,334.2	5,314.0	5,313.2	16.8	9.3	-69.28	721.8	844.1	560.4	535.1	25.33	22.124	
5,500.0	5,432.7	5,400.6	5,399.6	17.2	9.4	-70.25	725.0	849.3	558.8	532.9	25.89	21.587	
5,600.0	5,531.2	5,503.2	5,501.6	17.5	9.6	-71.06	729.3	858.8	558.4	531.9	26.46	21.099	
5,700.0	5,629.7	5,599.2	5,596.8	17.9	9.8	-71.55	732.7	870.2	557.6	530.6	27.01	20.644	
5,707.6	5,637.2	5,605.9	5,603.5	17.9	9.8	-71.58	733.0	871.2	557.6	530.6	27.05	20.613	
5,800.0	5,728.2	5,692.0	5,688.6	18.2	10.0	-71.75	737.1	884.2	558.4	530.8	27.54	20.273	
5,900.0	5,826.7	5,797.9	5,792.7	18.6	10.2	-71.73	741.6	902.3	558.9	530.8	28.09	19.894	
6,000.0	5,925.1	5,890.0	5,882.9	18.9	10.4	-71.48	745.6	920.5	559.8	531.2	28.61	19.565	
6,100.0	6,023.6	6,005.8	5,995.7	19.3	10.7	-70.77	749.1	946.9	559.8	530.6	29.17	19.192	
6,165.6	6,088.2	6,064.3	6,052.7	19.5	10.9	-70.43	750.3	959.9	559.2	529.7	29.50	18.954	
6,200.0	6,122.1	6,091.9	6,079.6	19.6	10.9	-70.27	751.3	966.1	559.4	529.8	29.67	18.852	
6,300.0	6,220.6	6,183.3	6,168.5	20.0	11.2	-69.78	756.3	986.6	561.8	531.6	30.20	18.605	
6,400.0	6,319.1	6,279.3	6,261.8	20.4	11.5	-69.23	761.9	1,008.5	564.9	534.1	30.74	18.378	
6,500.0	6,417.5	6,384.0	6,363.6	20.7	11.8	-68.69	768.5	1,031.9	568.3	537.0	31.30	18.156	
6,600.0	6,516.0	6,523.2	6,500.7	21.1	12.1	-68.82	774.5	1,054.3	569.1	537.2	31.98	17.798	
6,700.0	6,614.5	6,652.9	6,630.2	21.4	12.3	-71.27	774.0	1,051.2	562.4	529.6	32.74	17.176	
6,800.0	6,713.0	6,822.5	6,794.3	21.8	12.3	-77.94	759.1	1,013.4	546.1	512.4	33.69	16.208	
6,900.0	6,811.5	6,905.5	6,870.2	22.1	12.3	-82.79	747.9	981.6	529.3	495.0	34.28	15.439	
7,000.0	6,910.4	7,010.2	6,958.8	22.4	12.3	-74.59	730.9	928.8	516.7	482.0	34.71	14.886	
7,100.0	7,010.2	7,098.5	7,028.8	22.4	12.4	55.63	712.1	878.4	505.2	470.4	34.73	14.547	
7,200.0	7,108.1	7,173.8	7,083.4	22.2	12.6	62.97	694.3	829.8	495.3	460.9	34.42	14.390	
7,300.0	7,201.3	7,245.4	7,129.5	21.7	12.9	62.04	677.1	777.7	487.7	453.9	33.80	14.428	
7,400.0	7,286.9	7,329.0	7,177.1	21.0	13.4	59.36	655.8	712.5	479.7	446.7	32.95	14.559	
7,500.0	7,362.2	7,411.3	7,219.2	20.2	14.0	57.10	633.8	645.2	469.0	437.0	31.98	14.666	
7,600.0	7,425.1	7,502.3	7,260.3	19.2	15.0	55.23	607.0	568.7	452.8	421.7	31.09	14.562	
7,700.0	7,473.5	7,578.5	7,286.5	18.4	16.0	54.29	581.9	501.7	432.0	401.6	30.34	14.236	
7,800.0	7,506.0	7,661.3	7,308.8	17.6	17.3	53.91	553.0	427.4	405.8	375.7	30.04	13.506	
7,900.0	7,521.6	7,730.0	7,321.1	17.1	18.4	54.79	529.3	364.2	376.2	345.9	30.29	12.420	
8,000.0	7,523.0	7,798.0	7,328.1	16.9	19.6	54.78	507.6	300.1	346.0	315.0	31.04	11.149	
8,100.0	7,523.0	7,876.0	7,329.2	17.1	21.1	52.58	483.8	225.9	321.5	289.7	31.83	10.102	
8,200.0	7,523.0	7,971.3	7,325.5	17.6	23.0	48.69	454.1	135.4	300.7	268.2	32.49	9.257	
8,300.0	7,523.0	8,072.2	7,320.9	18.6	25.1	43.73	421.7	40.0	281.2	248.5	32.76	8.585	
8,400.0	7,523.0	8,180.7	7,318.6	19.8	27.4	37.37	383.2	-61.4	260.1	227.9	32.18	8.082	
8,500.0	7,523.0	8,280.6	7,319.2	21.3	29.5	30.09	344.1	-153.4	237.6	207.1	30.46	7.800	
8,600.0	7,523.0	8,375.2	7,320.0	22.9	31.5	21.55	305.3	-239.6	218.4	190.9	27.45	7.954	
8,700.0	7,523.0	8,466.9	7,320.7	24.7	33.5	11.29	264.6	-321.9	204.3	180.7	23.57	8.666	
8,800.0	7,523.0	8,555.5	7,321.4	26.5	35.4	0.19	224.1	-400.6	198.6	177.0	21.69	9.159	
8,801.2	7,523.0	8,556.6	7,321.4	26.6	35.4	0.05	223.6	-401.5	198.6	176.9	21.69	9.157	CC, ES
8,900.0	7,523.0	8,641.4	7,320.7	28.5	37.3	-10.78	184.2	-476.7	204.2	179.3	24.90	8.199	
9,000.0	7,523.0	8,731.0	7,318.7	30.5	39.2	-21.11	143.0	-556.2	220.0	187.6	32.35	6.800	
9,100.0	7,523.0	8,823.8	7,316.2	32.6	41.3	-29.84	102.4	-639.6	242.1	201.1	40.99	5.907	
9,200.0	7,523.0	8,919.3	7,314.6	34.8	43.5	-37.27	61.5	-725.9	267.8	218.2	49.63	5.396	
9,300.0	7,523.0	9,018.1	7,314.1	37.0	45.7	-43.45	21.1	-816.0	294.9	237.1	57.79	5.103	
9,400.0	7,523.0	9,123.1	7,315.6	39.2	48.1	-48.90	-19.9	-912.7	322.0	256.3	65.70	4.900	
9,500.0	7,523.0	9,229.4	7,317.9	41.5	50.6	-53.14	-56.8	-1,012.4	347.0	274.2	72.83	4.765	
9,600.0	7,523.0	9,331.9	7,320.1	43.7	53.0	-56.28	-88.5	-1,109.7	370.1	290.9	79.15	4.676	
9,700.0	7,523.0	9,429.2	7,321.2	46.0	55.3	-58.69	-117.4	-1,202.7	393.4	308.5	84.89	4.634	
9,800.0	7,523.0	9,526.0	7,321.1	48.3	57.5	-60.59	-145.1	-1,295.4	416.9	326.6	90.32	4.616	
9,900.0	7,523.0	9,626.8	7,319.8	50.7	59.9	-62.15	-172.7	-1,392.4	440.2	344.6	95.64	4.603	
10,000.0	7,523.0	9,731.9	7,317.9	53.0	62.4	-63.43	-199.7	-1,494.0	462.5	361.5	100.91	4.583	

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 McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - McConahay 1A-34H - Hz - Hz

Offset Site Error: 0.0 ft

Survey Program: 785-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,100.0	7,523.0	9,839.6	7,315.7	55.4	65.0	-64.44	-224.8	-1,598.6	482.8	376.7	106.11	4.550	
10,200.0	7,523.0	9,942.9	7,314.6	57.7	67.4	-65.39	-247.7	-1,699.3	501.9	390.7	111.22	4.512	
10,300.0	7,523.0	10,047.6	7,314.8	60.1	69.9	-66.37	-270.0	-1,801.6	519.7	403.3	116.45	4.463	
10,400.0	7,523.0	10,159.5	7,314.8	62.5	72.6	-67.24	-292.1	-1,911.3	536.4	414.6	121.80	4.404	
10,500.0	7,523.0	10,281.0	7,316.3	64.8	75.5	-68.09	-311.6	-2,031.3	549.2	421.8	127.42	4.310	
10,600.0	7,523.0	10,403.5	7,315.6	67.2	78.4	-68.46	-325.1	-2,152.9	558.0	425.3	132.71	4.205	
10,700.0	7,523.0	10,510.1	7,310.1	69.6	80.9	-68.11	-331.5	-2,259.2	563.9	426.9	137.02	4.115	
10,800.0	7,523.0	10,599.5	7,302.5	72.0	83.0	-67.52	-336.2	-2,348.2	570.4	429.7	140.70	4.054	
10,900.0	7,523.0	10,680.0	7,293.6	74.4	84.9	-66.85	-341.5	-2,428.0	579.3	435.3	144.04	4.022	
11,000.0	7,523.0	10,761.7	7,282.6	76.9	86.8	-66.10	-348.9	-2,508.7	591.5	444.2	147.25	4.017	
11,100.0	7,523.0	10,841.8	7,270.7	79.3	88.7	-65.37	-358.5	-2,587.2	607.0	456.6	150.38	4.037	
11,200.0	7,523.0	10,947.5	7,259.0	81.7	91.2	-64.94	-374.8	-2,691.0	624.1	469.7	154.37	4.043	
11,300.0	7,523.0	11,057.2	7,256.6	84.1	93.9	-65.39	-393.9	-2,799.0	639.3	479.9	159.43	4.010	
11,400.0	7,523.0	11,161.7	7,260.0	86.5	96.4	-66.28	-412.7	-2,901.7	654.6	490.0	164.54	3.978	
11,500.0	7,523.0	11,258.8	7,263.9	89.0	98.8	-67.25	-430.7	-2,997.0	670.9	500.9	170.05	3.946	
11,600.0	7,523.0	11,355.8	7,268.7	91.4	101.1	-68.23	-448.5	-3,092.3	686.9	511.3	175.60	3.912	
11,700.0	7,523.0	11,455.8	7,272.3	93.8	103.5	-69.10	-467.3	-3,190.5	703.9	522.8	181.11	3.887	
11,800.0	7,523.0	11,552.3	7,276.5	96.3	105.9	-69.94	-484.6	-3,285.2	720.1	533.6	186.50	3.861	
11,900.0	7,523.0	11,643.5	7,281.7	98.7	108.1	-70.82	-502.1	-3,374.5	737.2	545.3	191.84	3.843	
12,000.0	7,523.0	11,736.1	7,287.1	101.2	110.3	-71.72	-521.1	-3,465.1	755.6	558.4	197.22	3.831	
12,100.0	7,523.0	11,831.5	7,295.2	103.6	112.6	-72.80	-541.4	-3,557.9	774.2	571.4	202.85	3.817	
12,135.6	7,523.0	11,861.6	7,297.6	104.5	113.3	-73.11	-547.9	-3,587.2	781.2	576.5	204.69	3.816	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - McConahay 1C-34H-H266 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	180.00	-10.9	0.0	10.9				
100.0	100.0	100.0	100.0	0.1	0.1	180.00	-10.9	0.0	10.9	10.7	0.26	41.743	
200.0	200.0	200.0	200.0	0.3	0.3	180.00	-10.9	0.0	10.9	10.3	0.61	17.890	
300.0	300.0	300.0	300.0	0.5	0.5	180.00	-10.9	0.0	10.9	10.0	0.96	11.385	CC
400.0	400.0	399.9	399.9	0.7	0.7	175.69	-11.2	0.8	11.2	9.9	1.31	8.550	ES
500.0	500.0	499.8	499.8	0.8	0.8	90.61	-11.9	3.4	12.3	10.6	1.66	7.400	
600.0	600.0	599.7	599.6	1.0	1.0	85.57	-13.0	7.6	14.4	12.4	2.02	7.107	SF
700.0	699.9	699.5	699.2	1.2	1.2	82.85	-14.6	13.4	17.3	14.9	2.40	7.226	
800.0	799.7	799.2	798.6	1.4	1.4	81.81	-16.7	21.0	21.0	18.3	2.79	7.550	
900.0	899.4	898.9	897.8	1.6	1.7	81.80	-19.2	30.1	25.5	22.3	3.20	7.975	
1,000.0	998.9	998.5	996.7	1.8	1.9	82.36	-22.2	41.0	30.8	27.2	3.65	8.440	
1,100.0	1,098.3	1,097.9	1,095.4	2.1	2.2	83.22	-25.7	53.5	36.9	32.7	4.14	8.911	
1,200.0	1,197.4	1,197.3	1,193.7	2.3	2.5	84.19	-29.6	67.6	43.7	39.0	4.67	9.366	
1,300.0	1,296.3	1,296.6	1,291.6	2.6	2.8	85.19	-33.9	83.3	51.3	46.1	5.24	9.791	
1,400.0	1,394.9	1,396.2	1,389.6	2.9	3.1	86.66	-38.5	100.2	59.4	53.6	5.86	10.138	
1,500.0	1,493.4	1,495.8	1,487.7	3.3	3.4	88.55	-43.2	117.1	67.6	61.1	6.51	10.383	
1,600.0	1,591.9	1,595.5	1,585.8	3.6	3.8	90.03	-47.9	134.0	75.7	68.6	7.16	10.578	
1,700.0	1,690.4	1,695.1	1,683.9	3.9	4.1	91.23	-52.5	150.9	84.0	76.1	7.82	10.735	
1,800.0	1,788.9	1,794.8	1,782.0	4.3	4.5	92.21	-57.2	167.8	92.2	83.7	8.49	10.864	
1,900.0	1,887.3	1,894.4	1,880.1	4.6	4.8	93.03	-61.8	184.7	100.5	91.3	9.16	10.972	
2,000.0	1,985.8	1,994.0	1,978.2	4.9	5.2	93.72	-66.5	201.6	108.8	99.0	9.83	11.064	
2,100.0	2,084.3	2,093.7	2,076.2	5.3	5.5	94.32	-71.1	218.5	117.1	106.6	10.51	11.142	
2,200.0	2,182.8	2,193.3	2,174.3	5.6	5.9	94.84	-75.8	235.4	125.4	114.2	11.19	11.210	
2,300.0	2,281.3	2,293.0	2,272.4	6.0	6.2	95.29	-80.4	252.3	133.7	121.9	11.87	11.269	
2,400.0	2,379.8	2,392.6	2,370.5	6.3	6.6	95.69	-85.1	269.2	142.1	129.5	12.55	11.321	
2,500.0	2,478.2	2,492.3	2,468.6	6.7	6.9	96.05	-89.8	286.1	150.4	137.2	13.23	11.367	
2,600.0	2,576.7	2,591.9	2,566.7	7.0	7.3	96.37	-94.4	303.0	158.8	144.8	13.92	11.408	
2,700.0	2,675.2	2,691.6	2,664.8	7.3	7.6	96.65	-99.1	319.9	167.1	152.5	14.60	11.445	
2,800.0	2,773.7	2,791.2	2,762.9	7.7	8.0	96.91	-103.7	336.8	175.5	160.2	15.29	11.478	
2,900.0	2,872.2	2,890.9	2,861.0	8.0	8.3	97.15	-108.4	353.7	183.8	167.8	15.97	11.508	
3,000.0	2,970.7	2,990.5	2,959.1	8.4	8.7	97.36	-113.0	370.6	192.2	175.5	16.66	11.536	
3,100.0	3,069.1	3,090.2	3,057.2	8.7	9.0	97.56	-117.7	387.5	200.5	183.2	17.35	11.561	
3,200.0	3,167.6	3,189.8	3,155.3	9.1	9.4	97.74	-122.4	404.4	208.9	190.9	18.03	11.584	
3,300.0	3,266.1	3,289.5	3,253.4	9.4	9.7	97.91	-127.0	421.3	217.3	198.5	18.72	11.605	
3,400.0	3,364.6	3,389.1	3,351.5	9.8	10.1	98.06	-131.7	438.2	225.6	206.2	19.41	11.625	
3,500.0	3,463.1	3,488.8	3,449.6	10.1	10.4	98.21	-136.3	455.1	234.0	213.9	20.10	11.643	
3,600.0	3,561.5	3,588.4	3,547.6	10.5	10.8	98.34	-141.0	472.0	242.4	221.6	20.79	11.660	
3,700.0	3,660.0	3,688.1	3,645.7	10.8	11.1	98.47	-145.6	488.9	250.7	229.3	21.48	11.676	
3,800.0	3,758.5	3,787.7	3,743.8	11.2	11.5	98.58	-150.3	505.8	259.1	236.9	22.17	11.690	
3,900.0	3,857.0	3,887.4	3,841.9	11.5	11.8	98.69	-154.9	522.8	267.5	244.6	22.85	11.704	
4,000.0	3,955.5	3,987.0	3,940.0	11.9	12.2	98.80	-159.6	539.7	275.9	252.3	23.54	11.717	
4,100.0	4,054.0	4,086.6	4,038.1	12.3	12.6	98.89	-164.3	556.6	284.2	260.0	24.23	11.729	
4,200.0	4,152.4	4,186.3	4,136.2	12.6	12.9	98.98	-168.9	573.5	292.6	267.7	24.92	11.740	
4,300.0	4,250.9	4,285.9	4,234.3	13.0	13.3	99.07	-173.6	590.4	301.0	275.4	25.61	11.751	
4,400.0	4,349.4	4,385.6	4,332.4	13.3	13.6	99.15	-178.2	607.3	309.4	283.1	26.30	11.761	
4,500.0	4,447.9	4,485.2	4,430.5	13.7	14.0	99.23	-182.9	624.2	317.7	290.8	26.99	11.771	
4,600.0	4,546.4	4,584.9	4,528.6	14.0	14.3	99.30	-187.5	641.1	326.1	298.4	27.69	11.780	
4,700.0	4,644.9	4,684.5	4,626.7	14.4	14.7	99.37	-192.2	658.0	334.5	306.1	28.38	11.788	
4,800.0	4,743.3	4,784.2	4,724.8	14.7	15.0	99.44	-196.9	674.9	342.9	313.8	29.07	11.796	
4,900.0	4,841.8	4,883.8	4,822.9	15.1	15.4	99.50	-201.5	691.8	351.3	321.5	29.76	11.804	
5,000.0	4,940.3	4,983.5	4,921.0	15.4	15.7	99.56	-206.2	708.7	359.6	329.2	30.45	11.812	
5,100.0	5,038.8	5,083.1	5,019.0	15.8	16.1	99.62	-210.8	725.6	368.0	336.9	31.14	11.819	

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 McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - McConahay 1C-34H-H266 - Hz - Plan #1

Survey Program: 0-Geolink MWD

Offset Site Error: 0.0 ft

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,137.3	5,182.8	5,117.1	16.1	16.5	99.67	-215.5	742.5	376.4	344.6	31.83	11.825	
5,300.0	5,235.8	5,282.4	5,215.2	16.5	16.8	99.73	-220.1	759.4	384.8	352.3	32.52	11.832	
5,400.0	5,334.2	5,382.1	5,313.3	16.8	17.2	99.78	-224.8	776.3	393.2	360.0	33.21	11.838	
5,500.0	5,432.7	5,481.7	5,411.4	17.2	17.5	99.82	-229.4	793.2	401.6	367.6	33.90	11.844	
5,600.0	5,531.2	5,581.4	5,509.5	17.5	17.9	99.87	-234.1	810.1	409.9	375.3	34.59	11.850	
5,700.0	5,629.7	5,681.0	5,607.6	17.9	18.2	99.92	-238.8	827.0	418.3	383.0	35.29	11.855	
5,800.0	5,728.2	5,780.7	5,705.7	18.2	18.6	99.96	-243.4	843.9	426.7	390.7	35.98	11.860	
5,900.0	5,826.7	5,880.3	5,803.8	18.6	18.9	100.00	-248.1	860.8	435.1	398.4	36.67	11.865	
6,000.0	5,925.1	5,979.9	5,901.9	18.9	19.3	100.04	-252.7	877.7	443.5	406.1	37.36	11.870	
6,100.0	6,023.6	6,079.6	6,000.0	19.3	19.6	100.08	-257.4	894.6	451.8	413.8	38.05	11.875	
6,200.0	6,122.1	6,179.2	6,098.1	19.6	20.0	100.11	-262.0	911.5	460.2	421.5	38.74	11.879	
6,300.0	6,220.6	6,278.9	6,196.2	20.0	20.4	100.15	-266.7	928.4	468.6	429.2	39.43	11.883	
6,400.0	6,319.1	6,378.5	6,294.3	20.4	20.7	100.18	-271.4	945.3	477.0	436.9	40.13	11.887	
6,500.0	6,417.5	6,478.2	6,392.4	20.7	21.1	100.21	-276.0	962.2	485.4	444.6	40.82	11.891	
6,600.0	6,516.0	6,577.8	6,490.4	21.1	21.4	100.25	-280.7	979.1	493.8	452.3	41.51	11.895	
6,700.0	6,614.5	6,677.5	6,588.5	21.4	21.8	100.28	-285.3	996.0	502.2	460.0	42.20	11.899	
6,800.0	6,713.0	6,777.1	6,686.6	21.8	22.1	100.31	-290.0	1,012.9	510.5	467.6	42.89	11.903	
6,900.0	6,811.5	6,876.8	6,784.7	22.1	22.5	100.34	-294.6	1,029.8	518.9	475.3	43.58	11.906	
7,000.0	6,910.4	6,972.3	6,878.9	22.4	22.8	115.56	-299.2	1,045.3	527.5	483.3	44.16	11.945	
7,100.0	7,010.2	7,060.0	6,966.1	22.4	22.9	-108.83	-305.3	1,049.2	538.1	493.8	44.27	12.155	
7,200.0	7,108.1	7,150.0	7,055.1	22.2	22.8	-97.08	-314.0	1,039.5	551.0	507.0	43.93	12.541	
7,300.0	7,201.3	7,236.5	7,138.0	21.7	22.6	-93.85	-324.3	1,017.3	565.8	522.6	43.16	13.110	
7,400.0	7,286.9	7,326.0	7,219.0	21.0	22.2	-92.15	-336.9	981.6	582.2	540.2	41.97	13.872	
7,500.0	7,362.2	7,416.8	7,294.2	20.2	21.6	-90.98	-351.4	933.1	599.8	559.4	40.45	14.831	
7,600.0	7,425.1	7,509.2	7,361.7	19.2	20.9	-90.10	-367.4	872.1	618.2	579.5	38.70	15.974	
7,700.0	7,473.5	7,603.8	7,419.5	18.4	20.2	-89.41	-384.7	799.4	636.8	599.9	36.90	17.257	
7,800.0	7,506.0	7,701.0	7,465.2	17.6	19.4	-88.89	-403.0	715.7	655.2	619.9	35.28	18.571	
7,900.0	7,521.6	7,801.4	7,496.7	17.1	18.7	-88.53	-421.9	622.5	672.8	638.7	34.08	19.742	
8,000.0	7,523.0	7,905.5	7,511.3	16.9	18.1	-89.01	-440.9	521.3	689.2	655.7	33.52	20.564	
8,100.0	7,523.0	8,006.3	7,512.0	17.1	17.7	-89.09	-458.4	422.0	704.9	671.2	33.69	20.920	
8,200.0	7,523.0	8,105.1	7,512.0	17.6	17.3	-89.11	-475.6	324.7	720.5	686.0	34.56	20.850	
8,300.0	7,523.0	8,203.9	7,512.0	18.6	17.5	-89.13	-492.7	227.5	736.2	700.1	36.06	20.417	
8,400.0	7,523.0	8,302.6	7,512.0	19.8	18.7	-89.15	-509.9	130.2	751.8	713.7	38.12	19.720	
8,500.0	7,523.0	8,401.4	7,512.0	21.3	20.1	-89.17	-527.0	32.9	767.5	726.8	40.67	18.871	
8,600.0	7,523.0	8,500.2	7,512.0	22.9	21.7	-89.19	-544.2	-64.4	783.1	739.5	43.61	17.956	
8,700.0	7,523.0	8,598.9	7,512.0	24.7	23.4	-89.20	-561.3	-161.6	798.7	751.9	46.88	17.039	
8,800.0	7,523.0	8,697.7	7,512.0	26.5	25.2	-89.22	-578.5	-258.9	814.4	764.0	50.41	16.157	
8,900.0	7,523.0	8,796.5	7,512.0	28.5	27.1	-89.23	-595.6	-356.2	830.0	775.9	54.14	15.331	
9,000.0	7,523.0	8,895.2	7,512.0	30.5	29.1	-89.25	-612.8	-453.4	845.7	787.6	58.05	14.569	
9,100.0	7,523.0	8,994.0	7,512.0	32.6	31.1	-89.26	-629.9	-550.7	861.3	799.2	62.09	13.873	
9,200.0	7,523.0	9,092.8	7,512.0	34.8	33.2	-89.27	-647.1	-648.0	877.0	810.7	66.24	13.239	
9,300.0	7,523.0	9,191.5	7,512.0	37.0	35.3	-89.29	-664.2	-745.2	892.6	822.1	70.48	12.664	
9,400.0	7,523.0	9,290.3	7,512.0	39.2	37.4	-89.30	-681.4	-842.5	908.2	833.4	74.81	12.141	
9,500.0	7,523.0	9,389.1	7,512.0	41.5	39.6	-89.31	-698.5	-939.8	923.9	844.7	79.19	11.667	
9,600.0	7,523.0	9,487.9	7,512.0	43.7	41.8	-89.32	-715.7	-1,037.0	939.5	855.9	83.63	11.234	
9,700.0	7,523.0	9,586.6	7,512.0	46.0	44.0	-89.33	-732.8	-1,134.3	955.2	867.1	88.11	10.840	
9,800.0	7,523.0	9,685.4	7,512.0	48.3	46.3	-89.34	-750.0	-1,231.6	970.8	878.2	92.64	10.480	
9,900.0	7,523.0	9,784.2	7,512.0	50.7	48.5	-89.35	-767.1	-1,328.8	986.5	889.3	97.20	10.149	
10,000.0	7,523.0	9,882.9	7,512.0	53.0	50.8	-89.36	-784.3	-1,426.1	1,002.1	900.3	101.78	9.846	
10,100.0	7,523.0	9,981.7	7,512.0	55.4	53.1	-89.37	-801.5	-1,523.4	1,017.7	911.3	106.39	9.566	
10,200.0	7,523.0	10,080.5	7,512.0	57.7	55.4	-89.38	-818.6	-1,620.6	1,033.4	922.4	111.03	9.307	
10,300.0	7,523.0	10,179.2	7,512.0	60.1	57.7	-89.39	-835.8	-1,717.9	1,049.0	933.3	115.68	9.068	

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 McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - McConahay 1C-34H-H266 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,400.0	7,523.0	10,278.0	7,512.0	62.5	60.0	-89.40	-852.9	-1,815.2	1,064.7	944.3	120.35	8.846	
10,500.0	7,523.0	10,376.8	7,512.0	64.8	62.4	-89.41	-870.1	-1,912.4	1,080.3	955.3	125.04	8.640	
10,600.0	7,523.0	10,475.5	7,512.0	67.2	64.7	-89.42	-887.2	-2,009.7	1,096.0	966.2	129.74	8.448	
10,700.0	7,523.0	10,574.3	7,512.0	69.6	67.0	-89.43	-904.4	-2,107.0	1,111.6	977.1	134.45	8.268	
10,800.0	7,523.0	10,673.1	7,512.0	72.0	69.4	-89.43	-921.5	-2,204.3	1,127.2	988.1	139.17	8.100	
10,900.0	7,523.0	10,771.8	7,512.0	74.4	71.7	-89.44	-938.7	-2,301.5	1,142.9	999.0	143.90	7.942	
11,000.0	7,523.0	10,870.6	7,512.0	76.9	74.1	-89.45	-955.8	-2,398.8	1,158.5	1,009.9	148.64	7.794	
11,100.0	7,523.0	10,969.4	7,512.0	79.3	76.4	-89.46	-973.0	-2,496.1	1,174.2	1,020.8	153.39	7.655	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - McConahay 1D-34H-H266 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	1.0	1.0	0.0	0.0	180.00	-21.9	0.0	21.9				
100.0	100.0	101.0	101.0	0.1	0.1	180.00	-21.9	0.0	21.9	21.6	0.26	82.934	
166.3	166.3	167.3	167.3	0.2	0.2	180.00	-21.9	0.0	21.9	21.4	0.50	44.148	CC
200.0	200.0	201.0	201.0	0.3	0.3	180.00	-21.9	0.0	21.9	21.2	0.61	35.678	ES
300.0	300.0	300.7	300.7	0.5	0.5	178.53	-22.5	0.6	22.5	21.6	0.96	23.439	
400.0	400.0	400.3	400.3	0.7	0.7	174.68	-24.5	2.3	24.6	23.3	1.31	18.766	
500.0	500.0	500.0	499.9	0.8	0.8	93.69	-27.8	5.1	28.3	26.7	1.66	17.033	
600.0	600.0	599.3	598.9	1.0	1.0	92.60	-32.4	9.1	33.7	31.7	2.02	16.665	SF
700.0	699.9	698.5	697.9	1.2	1.3	93.01	-38.3	14.1	40.6	38.2	2.39	16.987	
800.0	799.7	797.5	796.4	1.4	1.5	94.23	-45.5	20.3	49.1	46.3	2.78	17.686	
900.0	899.4	896.2	894.4	1.6	1.7	95.81	-53.9	27.5	59.2	56.0	3.19	18.590	
1,000.0	998.9	994.5	992.0	1.8	2.0	97.48	-63.6	35.8	71.0	67.3	3.62	19.594	
1,100.0	1,098.3	1,092.5	1,088.9	2.1	2.3	99.09	-74.5	45.2	84.4	80.3	4.09	20.628	
1,200.0	1,197.4	1,190.1	1,185.2	2.3	2.6	100.58	-86.6	55.6	99.5	94.9	4.59	21.649	
1,300.0	1,296.3	1,287.3	1,280.8	2.6	3.0	101.92	-99.9	67.0	116.2	111.1	5.14	22.628	
1,400.0	1,394.9	1,383.9	1,375.5	2.9	3.3	103.11	-114.4	79.4	134.7	129.0	5.72	23.550	
1,500.0	1,493.4	1,480.1	1,469.5	3.3	3.7	104.05	-129.9	92.7	154.6	148.3	6.33	24.443	
1,600.0	1,591.9	1,575.9	1,562.7	3.6	4.1	104.39	-146.6	107.1	175.8	168.8	6.95	25.302	
1,700.0	1,690.4	1,671.1	1,655.0	3.9	4.5	104.34	-164.4	122.3	198.1	190.5	7.58	26.134	
1,800.0	1,788.9	1,765.8	1,746.4	4.3	5.0	104.01	-183.2	138.5	221.6	213.3	8.22	26.947	
1,900.0	1,887.3	1,861.6	1,838.5	4.6	5.5	103.52	-203.2	155.6	246.0	237.1	8.87	27.729	
2,000.0	1,985.8	1,958.6	1,931.7	4.9	6.0	103.10	-223.5	173.1	270.6	261.0	9.53	28.395	
2,100.0	2,084.3	2,055.5	2,024.8	5.3	6.5	102.75	-243.8	190.5	295.1	284.9	10.19	28.967	
2,200.0	2,182.8	2,152.4	2,118.0	5.6	6.9	102.45	-264.2	207.9	319.7	308.9	10.85	29.464	
2,300.0	2,281.3	2,249.3	2,211.1	6.0	7.4	102.20	-284.5	225.4	344.3	332.8	11.52	29.898	
2,400.0	2,379.8	2,346.2	2,304.3	6.3	7.9	101.97	-304.8	242.8	368.9	356.7	12.18	30.281	
2,500.0	2,478.2	2,443.2	2,397.4	6.7	8.4	101.78	-325.1	260.3	393.5	380.6	12.85	30.622	
2,600.0	2,576.7	2,540.1	2,490.6	7.0	8.9	101.61	-345.4	277.7	418.1	404.6	13.52	30.925	
2,700.0	2,675.2	2,637.0	2,583.7	7.3	9.4	101.46	-365.7	295.1	442.7	428.5	14.19	31.198	
2,800.0	2,773.7	2,733.9	2,676.9	7.7	9.9	101.32	-386.0	312.6	467.3	452.4	14.86	31.445	
2,900.0	2,872.2	2,830.8	2,770.0	8.0	10.4	101.20	-406.4	330.0	491.9	476.4	15.53	31.669	
3,000.0	2,970.7	2,927.8	2,863.2	8.4	10.9	101.09	-426.7	347.4	516.5	500.3	16.21	31.872	
3,100.0	3,069.1	3,024.7	2,956.3	8.7	11.4	100.99	-447.0	364.9	541.1	524.3	16.88	32.059	
3,200.0	3,167.6	3,121.6	3,049.5	9.1	11.9	100.90	-467.3	382.3	565.7	548.2	17.55	32.230	
3,300.0	3,266.1	3,218.5	3,142.6	9.4	12.4	100.81	-487.6	399.7	590.4	572.1	18.23	32.388	
3,400.0	3,364.6	3,315.4	3,235.8	9.8	12.9	100.74	-507.9	417.2	615.0	596.1	18.90	32.533	
3,500.0	3,463.1	3,412.4	3,328.9	10.1	13.4	100.67	-528.3	434.6	639.6	620.0	19.58	32.668	
3,600.0	3,561.5	3,509.3	3,422.1	10.5	13.9	100.60	-548.6	452.0	664.2	644.0	20.25	32.794	
3,700.0	3,660.0	3,606.2	3,515.2	10.8	14.4	100.54	-568.9	469.5	688.8	667.9	20.93	32.911	
3,800.0	3,758.5	3,703.1	3,608.4	11.2	14.9	100.48	-589.2	486.9	713.4	691.8	21.61	33.020	
3,900.0	3,857.0	3,800.0	3,701.5	11.5	15.4	100.43	-609.5	504.4	738.1	715.8	22.28	33.122	
4,000.0	3,955.5	3,897.0	3,794.7	11.9	15.9	100.38	-629.8	521.8	762.7	739.7	22.96	33.218	
4,100.0	4,054.0	3,993.9	3,887.8	12.3	16.4	100.33	-650.2	539.2	787.3	763.7	23.64	33.308	
4,200.0	4,152.4	4,090.8	3,981.0	12.6	16.9	100.29	-670.5	556.7	811.9	787.6	24.31	33.393	
4,300.0	4,250.9	4,187.7	4,074.1	13.0	17.4	100.25	-690.8	574.1	836.5	811.6	24.99	33.473	
4,400.0	4,349.4	4,284.6	4,167.3	13.3	17.9	100.21	-711.1	591.5	861.2	835.5	25.67	33.548	
4,500.0	4,447.9	4,381.6	4,260.4	13.7	18.4	100.17	-731.4	609.0	885.8	859.4	26.35	33.620	
4,600.0	4,546.4	4,478.5	4,353.6	14.0	18.9	100.14	-751.7	626.4	910.4	883.4	27.03	33.687	
4,700.0	4,644.9	4,575.4	4,446.7	14.4	19.4	100.10	-772.0	643.8	935.0	907.3	27.70	33.752	
4,800.0	4,743.3	4,672.3	4,539.9	14.7	19.9	100.07	-792.4	661.3	959.7	931.3	28.38	33.813	
4,900.0	4,841.8	4,769.2	4,633.0	15.1	20.4	100.04	-812.7	678.7	984.3	955.2	29.06	33.871	
5,000.0	4,940.3	4,866.2	4,726.2	15.4	20.9	100.01	-833.0	696.1	1,008.9	979.2	29.74	33.926	

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 McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - McConahay 1D-34H-H266 - Hz - Plan #1

Survey Program: 0-Geolink MWD

Offset Site Error: 0.0 ft

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,038.8	4,963.1	4,819.3	15.8	21.4	99.99	-853.3	713.6	1,033.5	1,003.1	30.42	33.979	
5,200.0	5,137.3	5,060.0	4,912.5	16.1	21.9	99.96	-873.6	731.0	1,058.2	1,027.1	31.10	34.029	
5,300.0	5,235.8	5,156.9	5,005.6	16.5	22.4	99.94	-893.9	748.5	1,082.8	1,051.0	31.77	34.077	
5,400.0	5,334.2	5,253.8	5,098.7	16.8	23.0	99.91	-914.3	765.9	1,107.4	1,075.0	32.45	34.123	
5,500.0	5,432.7	5,350.8	5,191.9	17.2	23.5	99.89	-934.6	783.3	1,132.0	1,098.9	33.13	34.167	
5,600.0	5,531.2	5,447.7	5,285.0	17.5	24.0	99.87	-954.9	800.8	1,156.7	1,122.8	33.81	34.209	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - McConahay 1E-34H-H266 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	0.00	10.9	0.0	17.0				
100.0	100.0	87.0	87.0	0.1	0.1	0.00	10.9	0.0	10.9	10.7	0.26	41.552	
200.0	200.0	187.0	187.0	0.3	0.3	0.00	10.9	0.0	10.9	10.3	0.61	17.941	
300.0	300.0	287.0	287.0	0.5	0.5	0.00	10.9	0.0	10.9	10.0	0.96	11.405	CC, ES
400.0	400.0	386.9	386.9	0.7	0.7	2.15	11.4	0.4	11.4	10.1	1.31	8.747	
500.0	500.0	486.7	486.6	0.8	0.8	-72.64	13.2	2.0	13.1	11.4	1.66	7.903	
600.0	600.0	586.4	586.3	1.0	1.0	-72.95	16.4	4.7	15.7	13.7	2.01	7.785	
700.0	699.9	686.1	685.8	1.2	1.2	-75.06	20.8	8.5	19.2	16.8	2.38	8.049	
800.0	799.7	785.8	785.2	1.4	1.4	-77.93	26.5	13.4	23.6	20.8	2.76	8.536	
900.0	899.4	885.3	884.2	1.6	1.6	-80.92	33.6	19.5	29.0	25.9	3.17	9.151	
1,000.0	998.9	984.6	983.0	1.8	1.9	-83.70	41.9	26.6	35.5	31.9	3.62	9.829	
1,100.0	1,098.3	1,083.9	1,081.4	2.1	2.1	-86.17	51.5	34.9	43.1	39.0	4.09	10.524	
1,200.0	1,197.4	1,183.0	1,179.5	2.3	2.4	-88.30	62.4	44.2	51.7	47.1	4.62	11.207	
1,300.0	1,296.3	1,281.9	1,277.1	2.6	2.7	-90.13	74.6	54.7	61.4	56.3	5.18	11.857	
1,400.0	1,394.9	1,380.6	1,374.2	2.9	3.1	-91.69	88.0	66.2	72.2	66.5	5.80	12.464	
1,500.0	1,493.4	1,479.9	1,471.7	3.3	3.4	-92.90	102.3	78.5	83.7	77.3	6.43	13.022	
1,600.0	1,591.9	1,579.2	1,569.2	3.6	3.8	-93.81	116.6	90.8	95.2	88.2	7.07	13.464	
1,700.0	1,690.4	1,678.5	1,666.7	3.9	4.1	-94.52	130.9	103.1	106.8	99.1	7.73	13.819	
1,800.0	1,788.9	1,777.8	1,764.2	4.3	4.5	-95.09	145.2	115.3	118.3	110.0	8.39	14.111	
1,900.0	1,887.3	1,877.1	1,861.7	4.6	4.9	-95.57	159.5	127.6	129.9	120.9	9.05	14.353	
2,000.0	1,985.8	1,976.5	1,959.2	4.9	5.2	-95.96	173.8	139.9	141.5	131.8	9.72	14.557	
2,100.0	2,084.3	2,075.8	2,056.8	5.3	5.6	-96.29	188.1	152.2	153.0	142.7	10.39	14.730	
2,200.0	2,182.8	2,175.1	2,154.3	5.6	5.9	-96.58	202.4	164.5	164.6	153.6	11.06	14.880	
2,300.0	2,281.3	2,274.4	2,251.8	6.0	6.3	-96.83	216.8	176.8	176.2	164.5	11.74	15.010	
2,400.0	2,379.8	2,373.8	2,349.3	6.3	6.7	-97.05	231.1	189.1	187.8	175.4	12.42	15.124	
2,500.0	2,478.2	2,473.1	2,446.8	6.7	7.1	-97.25	245.4	201.4	199.4	186.3	13.10	15.224	
2,600.0	2,576.7	2,572.4	2,544.3	7.0	7.4	-97.42	259.7	213.7	211.0	197.2	13.78	15.314	
2,700.0	2,675.2	2,671.7	2,641.9	7.3	7.8	-97.57	274.0	226.0	222.6	208.1	14.46	15.394	
2,800.0	2,773.7	2,771.1	2,739.4	7.7	8.2	-97.71	288.3	238.3	234.2	219.0	15.14	15.466	
2,900.0	2,872.2	2,870.4	2,836.9	8.0	8.5	-97.84	302.6	250.5	245.7	229.9	15.82	15.531	
3,000.0	2,970.7	2,969.7	2,934.4	8.4	8.9	-97.95	316.9	262.8	257.3	240.8	16.51	15.589	
3,100.0	3,069.1	3,069.0	3,031.9	8.7	9.3	-98.06	331.2	275.1	268.9	251.7	17.19	15.643	
3,200.0	3,167.6	3,168.4	3,129.4	9.1	9.6	-98.15	345.5	287.4	280.5	262.7	17.88	15.692	
3,300.0	3,266.1	3,267.7	3,227.0	9.4	10.0	-98.24	359.8	299.7	292.1	273.6	18.56	15.738	
3,400.0	3,364.6	3,367.0	3,324.5	9.8	10.4	-98.32	374.1	312.0	303.7	284.5	19.25	15.779	
3,500.0	3,463.1	3,466.3	3,422.0	10.1	10.8	-98.40	388.5	324.3	315.3	295.4	19.94	15.818	
3,600.0	3,561.5	3,565.7	3,519.5	10.5	11.1	-98.47	402.8	336.6	326.9	306.3	20.62	15.853	
3,700.0	3,660.0	3,665.0	3,617.0	10.8	11.5	-98.54	417.1	348.9	338.5	317.2	21.31	15.886	
3,800.0	3,758.5	3,764.3	3,714.5	11.2	11.9	-98.60	431.4	361.2	350.1	328.1	22.00	15.917	
3,900.0	3,857.0	3,863.6	3,812.1	11.5	12.2	-98.65	445.7	373.5	361.7	339.0	22.68	15.946	
4,000.0	3,955.5	3,963.0	3,909.6	11.9	12.6	-98.71	460.0	385.7	373.3	350.0	23.37	15.973	
4,100.0	4,054.0	4,062.3	4,007.1	12.3	13.0	-98.76	474.3	398.0	384.9	360.9	24.06	15.998	
4,200.0	4,152.4	4,161.6	4,104.6	12.6	13.4	-98.81	488.6	410.3	396.5	371.8	24.75	16.022	
4,300.0	4,250.9	4,260.9	4,202.1	13.0	13.7	-98.85	502.9	422.6	408.1	382.7	25.44	16.045	
4,400.0	4,349.4	4,360.3	4,299.6	13.3	14.1	-98.89	517.2	434.9	419.7	393.6	26.13	16.066	
4,500.0	4,447.9	4,459.6	4,397.2	13.7	14.5	-98.93	531.5	447.2	431.3	404.5	26.82	16.086	
4,600.0	4,546.4	4,558.9	4,494.7	14.0	14.9	-98.97	545.8	459.5	442.9	415.4	27.50	16.104	
4,700.0	4,644.9	4,658.2	4,592.2	14.4	15.2	-99.01	560.2	471.8	454.5	426.3	28.19	16.122	
4,800.0	4,743.3	4,757.6	4,689.7	14.7	15.6	-99.04	574.5	484.1	466.1	437.3	28.88	16.139	
4,900.0	4,841.8	4,856.9	4,787.2	15.1	16.0	-99.07	588.8	496.4	477.7	448.2	29.57	16.155	
5,000.0	4,940.3	4,956.2	4,884.7	15.4	16.3	-99.11	603.1	508.7	489.3	459.1	30.26	16.171	
5,100.0	5,038.8	5,055.5	4,982.3	15.8	16.7	-99.13	617.4	520.9	501.0	470.0	30.95	16.185	

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 McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - McConahay 1E-34H-H266 - Hz - Plan #1

Survey Program: 0-Geolink MWD

Offset Site Error: 0.0 ft

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,137.3	5,154.8	5,079.8	16.1	17.1	-99.16	631.7	533.2	512.6	480.9	31.64	16.199	
5,300.0	5,235.8	5,254.2	5,177.3	16.5	17.5	-99.19	646.0	545.5	524.2	491.8	32.33	16.212	
5,400.0	5,334.2	5,353.5	5,274.8	16.8	17.8	-99.22	660.3	557.8	535.8	502.7	33.02	16.225	
5,500.0	5,432.7	5,452.8	5,372.3	17.2	18.2	-99.24	674.6	570.1	547.4	513.7	33.71	16.237	
5,600.0	5,531.2	5,552.1	5,469.8	17.5	18.6	-99.26	688.9	582.4	559.0	524.6	34.40	16.249	
5,700.0	5,629.7	5,651.5	5,567.4	17.9	19.0	-99.29	703.2	594.7	570.6	535.5	35.09	16.260	
5,800.0	5,728.2	5,750.8	5,664.9	18.2	19.3	-99.31	717.6	607.0	582.2	546.4	35.78	16.271	
5,900.0	5,826.7	5,850.1	5,762.4	18.6	19.7	-99.33	731.9	619.3	593.8	557.3	36.47	16.281	
6,000.0	5,925.1	5,949.4	5,859.9	18.9	20.1	-99.35	746.2	631.6	605.4	568.2	37.16	16.291	
6,100.0	6,023.6	6,048.8	5,957.4	19.3	20.5	-99.37	760.5	643.9	617.0	579.1	37.85	16.300	
6,200.0	6,122.1	6,148.1	6,054.9	19.6	20.8	-99.39	774.8	656.1	628.6	590.1	38.54	16.309	
6,300.0	6,220.6	6,247.4	6,152.5	20.0	21.2	-99.41	789.1	668.4	640.2	601.0	39.23	16.318	
6,400.0	6,319.1	6,346.7	6,250.0	20.4	21.6	-99.42	803.4	680.7	651.8	611.9	39.92	16.326	
6,500.0	6,417.5	6,446.1	6,347.5	20.7	22.0	-99.44	817.7	693.0	663.4	622.8	40.61	16.334	
6,600.0	6,516.0	6,545.4	6,445.0	21.1	22.3	-99.46	832.0	705.3	675.0	633.7	41.30	16.342	
6,700.0	6,614.5	6,644.7	6,542.5	21.4	22.7	-99.47	846.3	717.6	686.6	644.6	42.00	16.350	
6,800.0	6,713.0	6,744.0	6,640.0	21.8	23.1	-99.49	860.6	729.9	698.2	655.5	42.69	16.357	
6,900.0	6,811.5	6,815.1	6,710.1	22.1	23.3	-99.72	870.9	735.7	711.5	668.3	43.22	16.463	
7,000.0	6,910.4	6,880.3	6,774.5	22.4	23.4	-86.37	880.3	733.5	728.3	684.6	43.72	16.660	
7,100.0	7,010.2	6,950.0	6,842.6	22.4	23.5	46.93	890.3	722.9	743.7	700.0	43.73	17.005	
7,200.0	7,108.1	7,000.0	6,890.5	22.2	23.4	56.94	897.2	710.2	756.5	713.4	43.15	17.533	
7,300.0	7,201.3	7,072.8	6,957.8	21.7	23.3	58.94	907.0	684.4	766.3	724.4	41.90	18.289	
7,400.0	7,286.9	7,136.9	7,013.9	21.0	23.2	59.95	915.1	654.6	773.1	732.9	40.17	19.246	
7,500.0	7,362.2	7,200.0	7,065.6	20.2	23.0	60.94	922.5	619.3	776.7	738.6	38.08	20.399	
7,600.0	7,425.1	7,266.5	7,115.7	19.2	22.8	62.24	929.7	576.1	777.3	741.5	35.80	21.712	
7,700.0	7,473.5	7,332.5	7,160.1	18.4	22.6	63.89	936.0	527.7	775.1	741.4	33.64	23.040	
7,800.0	7,506.0	7,400.0	7,199.5	17.6	22.3	65.95	941.6	473.3	770.4	738.5	31.88	24.167	
7,900.0	7,521.6	7,468.2	7,232.6	17.1	22.1	68.39	946.2	413.8	763.9	733.1	30.79	24.806	
8,000.0	7,523.0	7,539.8	7,259.6	16.9	21.9	70.66	949.9	347.7	757.0	726.4	30.65	24.700	
8,100.0	7,523.0	7,617.4	7,279.4	17.1	21.7	72.18	952.6	272.7	753.5	722.4	31.11	24.220	
8,174.9	7,523.0	7,678.6	7,287.9	17.5	21.6	72.84	953.6	212.2	752.9	721.1	31.81	23.671	
8,200.0	7,523.0	7,700.0	7,289.3	17.6	21.5	72.96	953.7	190.9	752.9	720.9	32.05	23.490	
8,300.0	7,523.0	7,793.8	7,290.0	18.6	21.5	73.04	953.5	97.1	754.1	720.6	33.57	22.466	
8,400.0	7,523.0	7,893.8	7,290.0	19.8	21.7	73.07	953.2	-2.9	755.5	719.8	35.68	21.174	
8,500.0	7,523.0	7,993.7	7,290.0	21.3	22.3	73.10	952.8	-102.9	756.8	718.5	38.26	19.781	
8,600.0	7,523.0	8,093.7	7,290.0	22.9	23.2	73.13	952.5	-202.9	758.1	716.9	41.23	18.388	
8,700.0	7,523.0	8,193.7	7,290.0	24.7	24.5	73.16	952.1	-302.8	759.5	715.0	44.51	17.063	
8,800.0	7,523.0	8,293.7	7,290.0	26.5	26.1	73.19	951.8	-402.8	760.8	712.8	48.04	15.837	
8,900.0	7,523.0	8,393.7	7,290.0	28.5	27.8	73.22	951.4	-502.8	762.2	710.4	51.76	14.724	
9,000.0	7,523.0	8,493.7	7,290.0	30.5	29.7	73.25	951.1	-602.8	763.5	707.8	55.65	13.720	
9,100.0	7,523.0	8,593.7	7,290.0	32.6	31.6	73.28	950.7	-702.8	764.8	705.2	59.66	12.821	
9,200.0	7,523.0	8,693.7	7,290.0	34.8	33.6	73.31	950.4	-802.8	766.2	702.4	63.77	12.015	
9,300.0	7,523.0	8,793.7	7,290.0	37.0	35.7	73.34	950.0	-902.8	767.5	699.5	67.96	11.293	
9,400.0	7,523.0	8,893.7	7,290.0	39.2	37.9	73.37	949.7	-1,002.8	768.8	696.6	72.23	10.644	
9,500.0	7,523.0	8,993.7	7,290.0	41.5	40.1	73.40	949.3	-1,102.8	770.2	693.6	76.56	10.060	
9,600.0	7,523.0	9,093.6	7,290.0	43.7	42.3	73.43	949.0	-1,202.8	771.5	690.6	80.93	9.533	
9,700.0	7,523.0	9,193.6	7,290.0	46.0	44.5	73.46	948.6	-1,302.7	772.9	687.5	85.35	9.056	
9,800.0	7,523.0	9,293.6	7,290.0	48.3	46.8	73.49	948.3	-1,402.7	774.2	684.4	89.80	8.621	
9,900.0	7,523.0	9,393.6	7,290.0	50.7	49.0	73.52	947.9	-1,502.7	775.5	681.3	94.28	8.226	
10,000.0	7,523.0	9,493.6	7,290.0	53.0	51.3	73.55	947.6	-1,602.7	776.9	678.1	98.79	7.864	
10,100.0	7,523.0	9,593.6	7,290.0	55.4	53.7	73.58	947.2	-1,702.7	778.2	674.9	103.33	7.532	
10,200.0	7,523.0	9,693.6	7,290.0	57.7	56.0	73.61	946.9	-1,802.7	779.5	671.7	107.88	7.226	

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 McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - McConahay 1E-34H-H266 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,300.0	7,523.0	9,793.6	7,290.0	60.1	58.3	73.63	946.5	-1,902.7	780.9	668.4	112.45	6.944	
10,400.0	7,523.0	9,893.6	7,290.0	62.5	60.7	73.66	946.2	-2,002.7	782.2	665.2	117.04	6.683	
10,500.0	7,523.0	9,993.6	7,290.0	64.8	63.0	73.69	945.8	-2,102.7	783.6	661.9	121.65	6.441	
10,600.0	7,523.0	10,093.5	7,290.0	67.2	65.4	73.72	945.5	-2,202.6	784.9	658.6	126.27	6.216	
10,700.0	7,523.0	10,193.5	7,290.0	69.6	67.8	73.75	945.1	-2,302.6	786.2	655.4	130.89	6.007	
10,800.0	7,523.0	10,293.5	7,290.0	72.0	70.1	73.78	944.8	-2,402.6	787.6	652.1	135.54	5.811	
10,900.0	7,523.0	10,393.5	7,290.0	74.4	72.5	73.81	944.4	-2,502.6	788.9	648.7	140.19	5.628	
11,000.0	7,523.0	10,493.5	7,290.0	76.9	74.9	73.83	944.1	-2,602.6	790.3	645.4	144.85	5.456	
11,100.0	7,523.0	10,593.5	7,290.0	79.3	77.3	73.86	943.7	-2,702.6	791.6	642.1	149.51	5.295	
11,200.0	7,523.0	10,693.5	7,290.0	81.7	79.7	73.89	943.4	-2,802.6	793.0	638.8	154.19	5.143	
11,300.0	7,523.0	10,793.5	7,290.0	84.1	82.1	73.92	943.0	-2,902.6	794.3	635.4	158.92	4.998	
11,400.0	7,523.0	10,893.5	7,290.0	86.5	84.5	73.91	942.7	-3,002.6	793.8	629.9	163.88	4.844	
11,500.0	7,523.0	10,993.5	7,290.0	89.0	86.9	73.89	942.3	-3,102.6	792.7	624.2	168.54	4.703	
11,600.0	7,523.0	11,093.5	7,290.0	91.4	89.4	73.86	942.0	-3,202.6	791.6	618.4	173.19	4.570	
11,700.0	7,523.0	11,193.5	7,290.0	93.8	91.8	73.84	941.6	-3,302.5	790.4	612.6	177.86	4.444	
11,800.0	7,523.0	11,293.4	7,290.0	96.3	94.2	73.81	941.3	-3,402.5	789.3	606.8	182.52	4.324	
11,900.0	7,523.0	11,393.4	7,290.0	98.7	96.6	73.79	940.9	-3,502.5	788.2	601.0	187.18	4.211	
12,000.0	7,523.0	11,493.4	7,290.0	101.2	99.0	73.77	940.6	-3,602.5	787.0	595.2	191.85	4.102	
12,100.0	7,523.0	11,593.4	7,290.0	103.6	101.5	73.74	940.3	-3,702.5	785.9	589.4	196.52	3.999	
12,135.6	7,523.0	11,628.2	7,290.0	104.5	102.3	73.73	940.1	-3,737.3	785.5	587.3	198.17	3.964	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - MCCONAHAY 31-34 (EXISTING) - ENCANA WELL - GYROS

Offset Site Error: 0.0 ft

Survey Program: 100-Gyro

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	-54.26	645.2	-896.6	1,104.6				
100.0	100.0	100.9	100.9	0.1	0.1	-54.25	645.2	-896.3	1,104.4	1,104.2	0.20	5,526.238	
200.0	200.0	204.7	204.7	0.3	0.2	-54.22	645.3	-895.4	1,103.7	1,103.3	0.47	2,373.040	
300.0	300.0	309.7	309.7	0.5	0.3	-54.17	645.4	-894.0	1,102.7	1,102.0	0.73	1,507.163	
400.0	400.0	408.5	408.5	0.7	0.3	-54.13	645.4	-892.6	1,101.6	1,100.6	0.99	1,109.587	
500.0	500.0	527.3	527.3	0.8	0.4	-131.78	644.3	-890.5	1,100.2	1,098.9	1.27	865.564	
600.0	600.0	641.8	641.7	1.0	0.6	-131.93	641.5	-887.3	1,098.2	1,096.7	1.55	709.885	
700.0	699.9	743.3	743.0	1.2	0.6	-132.16	638.2	-884.4	1,096.9	1,095.0	1.82	604.259	
756.4	756.2	798.4	798.1	1.3	0.7	-132.31	636.5	-882.7	1,096.6	1,094.7	1.97	557.353	
800.0	799.7	840.3	839.9	1.4	0.7	-132.42	635.3	-881.5	1,096.8	1,094.7	2.08	526.038	
900.0	899.4	937.0	936.6	1.6	0.8	-132.73	632.7	-878.7	1,098.2	1,095.9	2.36	465.029	
1,000.0	998.9	1,037.5	1,037.0	1.8	0.9	-133.09	630.4	-875.7	1,101.0	1,098.4	2.65	415.449	
1,100.0	1,098.3	1,135.1	1,134.6	2.1	1.0	-133.48	628.2	-872.6	1,104.9	1,101.9	2.95	374.989	
1,200.0	1,197.4	1,224.6	1,224.0	2.3	1.1	-133.91	626.2	-870.6	1,110.8	1,107.6	3.25	342.144	
1,300.0	1,296.3	1,324.9	1,324.3	2.6	1.2	-134.41	624.5	-868.4	1,118.4	1,114.8	3.57	313.456	
1,400.0	1,394.9	1,425.6	1,425.0	2.9	1.3	-134.93	623.3	-865.6	1,127.1	1,123.2	3.90	288.836	
1,500.0	1,493.4	1,521.5	1,520.8	3.3	1.4	-135.50	622.2	-863.0	1,136.6	1,132.4	4.24	268.391	
1,600.0	1,591.9	1,624.0	1,623.2	3.6	1.5	-136.10	621.1	-860.2	1,146.3	1,141.7	4.57	250.603	
1,700.0	1,690.4	1,726.9	1,726.1	3.9	1.5	-136.71	619.5	-857.2	1,155.6	1,150.7	4.91	235.200	
1,800.0	1,788.9	1,822.6	1,821.7	4.3	1.6	-137.26	618.1	-854.3	1,165.1	1,159.8	5.25	222.080	
1,900.0	1,887.3	1,918.8	1,917.9	4.6	1.7	-137.83	616.4	-852.0	1,175.0	1,169.4	5.58	210.650	
8,200.0	7,523.0	7,530.7	7,528.3	17.6	6.6	91.21	657.2	-865.9	1,146.6	1,122.4	24.17	47.431	
8,300.0	7,523.0	7,530.3	7,527.9	18.6	6.6	91.15	657.2	-865.9	1,055.0	1,029.9	25.12	41.999	
8,400.0	7,523.0	7,529.8	7,527.4	19.8	6.6	91.09	657.2	-865.9	965.1	938.8	26.33	36.651	
8,500.0	7,523.0	7,529.3	7,526.9	21.3	6.6	91.03	657.2	-865.9	877.4	849.6	27.76	31.601	
8,600.0	7,523.0	7,528.8	7,526.4	22.9	6.6	90.96	657.2	-865.9	792.6	763.2	29.38	26.981	
8,700.0	7,523.0	7,528.3	7,525.9	24.7	6.6	90.90	657.2	-865.9	711.8	680.6	31.13	22.863	
8,800.0	7,523.0	7,527.8	7,525.4	26.5	6.6	90.83	657.3	-865.9	636.4	603.4	33.00	19.284	
8,900.0	7,523.0	7,527.3	7,524.9	28.5	6.6	90.77	657.3	-865.9	568.7	533.7	34.97	16.265	
9,000.0	7,523.0	7,526.8	7,524.4	30.5	6.6	90.70	657.3	-865.9	511.7	474.7	37.00	13.828	
9,100.0	7,523.0	7,526.2	7,523.8	32.6	6.6	90.63	657.3	-865.9	469.3	430.2	39.10	12.002	
9,200.0	7,523.0	7,525.7	7,523.3	34.8	6.6	90.56	657.3	-865.9	445.7	404.4	41.25	10.804	
9,258.0	7,523.0	7,525.4	7,523.0	36.1	6.6	90.51	657.3	-865.9	441.9	399.4	42.52	10.393	CC, ES
9,300.0	7,523.0	7,525.1	7,522.7	37.0	6.6	90.48	657.3	-865.9	443.9	400.4	43.44	10.219	
9,400.0	7,523.0	7,524.6	7,522.1	39.2	6.6	90.41	657.3	-865.9	464.1	418.5	45.66	10.165	SF
9,500.0	7,523.0	7,524.0	7,521.6	41.5	6.6	90.33	657.3	-865.9	503.8	455.9	47.91	10.515	
9,600.0	7,523.0	7,523.4	7,521.0	43.7	6.6	90.25	657.3	-865.9	558.8	508.6	50.19	11.134	
9,700.0	7,523.0	7,522.8	7,520.4	46.0	6.6	90.18	657.3	-865.9	625.0	572.5	52.48	11.909	
9,800.0	7,523.0	7,522.1	7,519.7	48.3	6.6	90.10	657.3	-865.9	699.3	644.5	54.80	12.762	
9,900.0	7,523.0	7,521.5	7,519.1	50.7	6.6	90.01	657.3	-866.0	779.4	722.3	57.13	13.643	
10,000.0	7,523.0	7,520.9	7,518.5	53.0	6.6	89.93	657.3	-866.0	863.6	804.1	59.47	14.522	
10,100.0	7,523.0	7,520.2	7,517.8	55.4	6.5	89.84	657.3	-866.0	950.9	889.1	61.82	15.382	
10,200.0	7,523.0	7,519.5	7,517.1	57.7	6.5	89.75	657.3	-866.0	1,040.5	976.3	64.18	16.211	
10,300.0	7,523.0	7,518.8	7,516.4	60.1	6.5	89.66	657.3	-866.0	1,131.8	1,065.3	66.55	17.006	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - MCCONAHAY 41-34 (EXISTING) - ENCANA WELL - GYRO

Offset Site Error: 0.0 ft

Survey Program: 200-Gyro

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	29.78	775.9	444.0	894.0				
100.0	100.0	86.0	86.0	0.1	0.0	29.78	775.9	444.0	893.9	893.8	0.13	6,820.197	
200.0	200.0	191.7	191.7	0.3	0.1	29.81	775.4	444.3	893.7	893.3	0.39	2,317.670	
300.0	300.0	287.3	287.3	0.5	0.2	29.94	774.0	445.8	893.2	892.6	0.64	1,388.090	
400.0	400.0	390.3	390.2	0.7	0.3	30.14	772.2	448.4	893.0	892.1	0.91	983.485	
500.0	500.0	493.7	493.6	0.8	0.4	-47.30	769.9	451.0	891.7	890.5	1.19	752.409	
600.0	600.0	594.3	594.1	1.0	0.4	-47.26	767.7	453.0	889.1	887.6	1.45	612.079	
700.0	699.9	700.0	699.8	1.2	0.5	-47.36	765.2	454.2	884.7	882.9	1.73	512.722	
800.0	799.7	794.4	794.1	1.4	0.6	-47.57	763.2	455.1	879.1	877.1	1.99	440.662	
900.0	899.4	895.6	895.3	1.6	0.7	-47.90	761.5	455.9	872.8	870.5	2.28	383.561	
1,000.0	998.9	1,000.0	999.7	1.8	0.8	-48.38	759.6	456.0	864.9	862.3	2.57	336.475	
1,100.0	1,098.3	1,095.7	1,095.4	2.1	0.9	-48.91	757.7	456.3	855.8	852.9	2.87	298.230	
1,200.0	1,197.4	1,195.4	1,195.1	2.3	1.0	-49.57	756.0	456.7	845.9	842.7	3.19	265.310	
1,300.0	1,296.3	1,296.7	1,296.4	2.6	1.1	-50.34	753.9	457.3	834.8	831.3	3.53	236.709	
1,400.0	1,394.9	1,394.1	1,393.7	2.9	1.2	-51.20	751.8	457.9	822.6	818.7	3.88	211.885	
1,500.0	1,493.4	1,490.4	1,490.0	3.3	1.2	-52.02	749.9	458.7	810.3	806.1	4.25	190.779	
1,600.0	1,591.9	1,590.5	1,590.1	3.6	1.3	-52.91	748.0	459.4	798.2	793.6	4.62	172.615	
1,700.0	1,690.4	1,685.1	1,684.7	3.9	1.4	-53.79	746.4	459.9	786.4	781.4	5.00	157.163	
1,800.0	1,788.9	1,787.7	1,787.3	4.3	1.5	-54.76	744.7	460.5	775.0	769.6	5.40	143.533	
1,900.0	1,887.3	1,883.7	1,883.3	4.6	1.6	-55.71	743.0	460.9	763.4	757.6	5.79	131.757	
2,000.0	1,985.8	1,984.4	1,983.9	4.9	1.7	-56.73	741.3	461.4	752.3	746.1	6.20	121.315	
2,100.0	2,084.3	2,081.0	2,080.5	5.3	1.8	-57.76	739.6	461.6	741.2	734.6	6.61	112.144	
2,200.0	2,182.8	2,175.9	2,175.4	5.6	1.8	-58.82	738.4	461.7	730.9	723.8	7.02	104.064	
2,300.0	2,281.3	2,274.7	2,274.2	6.0	1.9	-59.95	737.4	461.8	721.1	713.6	7.45	96.830	
2,400.0	2,379.8	2,367.3	2,366.8	6.3	2.0	-61.10	736.9	461.4	711.7	703.9	7.87	90.442	
2,500.0	2,478.2	2,461.1	2,460.6	6.7	2.1	-62.33	737.4	460.7	703.7	695.4	8.30	84.781	
2,600.0	2,576.7	2,555.2	2,554.7	7.0	2.2	-63.61	738.4	459.9	696.5	687.8	8.74	79.718	
2,700.0	2,675.2	2,648.4	2,647.8	7.3	2.2	-64.92	740.1	458.9	690.4	681.2	9.18	75.224	
2,800.0	2,773.7	2,743.8	2,743.3	7.7	2.3	-66.28	742.4	458.2	685.4	675.8	9.63	71.197	
2,900.0	2,872.2	2,845.0	2,844.4	8.0	2.4	-67.73	745.0	457.5	680.9	670.8	10.09	67.501	
3,000.0	2,970.7	2,944.7	2,944.0	8.4	2.5	-69.15	746.8	457.1	676.2	665.7	10.55	64.104	
3,100.0	3,069.1	3,039.7	3,039.1	8.7	2.6	-70.51	748.9	456.8	672.4	661.4	11.01	61.088	
3,200.0	3,167.6	3,138.5	3,137.8	9.1	2.7	-71.91	751.3	456.9	669.2	657.7	11.47	58.336	
3,300.0	3,266.1	3,238.9	3,238.2	9.4	2.7	-73.33	753.5	457.3	666.1	654.2	11.94	55.799	
3,400.0	3,364.6	3,338.5	3,337.8	9.8	2.8	-74.69	755.4	458.2	663.3	650.9	12.40	53.472	
3,500.0	3,463.1	3,436.9	3,436.2	10.1	2.9	-76.03	757.3	459.4	660.8	647.9	12.87	51.345	
3,600.0	3,561.5	3,535.4	3,534.6	10.5	3.0	-77.35	759.2	460.9	658.8	645.5	13.33	49.406	
3,700.0	3,660.0	3,633.9	3,633.1	10.8	3.1	-78.68	761.1	462.3	657.0	643.2	13.80	47.616	
3,800.0	3,758.5	3,729.7	3,728.9	11.2	3.2	-80.03	763.3	463.1	656.1	641.8	14.26	46.007	
3,900.0	3,857.0	3,829.2	3,828.3	11.5	3.3	-81.41	765.7	464.2	655.6	640.9	14.72	44.527	
4,000.0	3,955.5	3,930.5	3,929.6	11.9	3.3	-82.81	767.9	465.6	655.3	640.1	15.19	43.148	
4,100.0	4,054.0	4,032.8	4,031.9	12.3	3.4	-84.20	769.5	467.2	654.7	639.1	15.65	41.843	
4,200.0	4,152.4	4,130.9	4,130.0	12.6	3.5	-85.52	770.9	468.9	654.4	638.3	16.10	40.641	
4,206.4	4,158.7	4,136.9	4,136.0	12.6	3.5	-85.60	771.0	469.0	654.4	638.2	16.13	40.569	
4,300.0	4,250.9	4,225.6	4,224.7	13.0	3.6	-86.85	772.6	469.9	654.8	638.3	16.55	39.569	
4,400.0	4,349.4	4,320.4	4,319.4	13.3	3.7	-88.23	774.7	470.2	656.3	639.3	16.99	38.623	
4,500.0	4,447.9	4,416.3	4,415.3	13.7	3.8	-89.66	777.3	470.0	658.6	641.2	17.43	37.784	
4,600.0	4,546.4	4,513.3	4,512.2	14.0	3.9	-91.09	780.1	469.7	661.7	643.9	17.87	37.038	
4,700.0	4,644.9	4,611.0	4,609.9	14.4	3.9	-92.52	783.1	469.2	665.4	647.1	18.30	36.370	
4,800.0	4,743.3	4,708.0	4,706.9	14.7	4.0	-93.90	786.4	469.2	669.7	651.0	18.72	35.776	
4,900.0	4,841.8	4,803.0	4,801.7	15.1	4.1	-95.18	790.1	469.5	674.8	655.6	19.14	35.261	
5,000.0	4,940.3	4,900.0	4,898.7	15.4	4.2	-96.45	794.4	470.0	680.7	661.1	19.55	34.818	

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 McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - MCCONAHAY 41-34 (EXISTING) - ENCANA WELL - GYRO

Offset Site Error: 0.0 ft

Survey Program: 200-Gyro

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	5,038.8	4,995.1	4,993.6	15.8	4.3	-97.68	799.0	470.2	687.3	667.3	19.96	34.441	
5,200.0	5,137.3	5,092.9	5,091.4	16.1	4.4	-98.95	803.7	470.0	694.5	674.1	20.36	34.116	
5,300.0	5,235.8	5,194.6	5,192.9	16.5	4.5	-100.28	808.3	469.5	701.8	681.1	20.75	33.821	
5,400.0	5,334.2	5,298.4	5,296.7	16.8	4.6	-101.64	812.2	468.8	709.0	687.8	21.14	33.538	
5,500.0	5,432.7	5,398.6	5,396.8	17.2	4.6	-102.94	815.5	468.2	715.9	694.4	21.52	33.273	
5,600.0	5,531.2	5,501.1	5,499.3	17.5	4.7	-104.25	818.5	467.9	722.9	701.0	21.89	33.024	
5,700.0	5,629.7	5,599.6	5,597.7	17.9	4.8	-105.50	820.9	467.3	729.9	707.7	22.25	32.802	
5,800.0	5,728.2	5,698.8	5,696.9	18.2	4.9	-106.79	823.0	466.2	737.2	714.6	22.60	32.616	
5,900.0	5,826.7	5,799.5	5,797.6	18.6	5.0	-108.11	824.7	464.8	744.7	721.8	22.94	32.458	
6,000.0	5,925.1	5,896.2	5,894.3	18.9	5.1	-109.36	826.3	463.4	752.5	729.3	23.28	32.327	
6,100.0	6,023.6	5,994.1	5,992.1	19.3	5.2	-110.58	828.1	462.1	760.8	737.2	23.61	32.231	
6,200.0	6,122.1	6,093.8	6,091.8	19.6	5.3	-111.83	829.7	460.5	769.4	745.5	23.92	32.162	
6,300.0	6,220.6	6,197.4	6,195.4	20.0	5.3	-113.11	830.8	458.9	778.0	753.7	24.23	32.106	
6,400.0	6,319.1	6,298.6	6,296.6	20.4	5.4	-114.33	831.5	457.7	786.3	761.8	24.53	32.051	
6,500.0	6,417.5	6,403.2	6,401.1	20.7	5.5	-115.56	831.8	456.9	794.4	769.6	24.83	31.998	
6,600.0	6,516.0	6,500.0	6,498.0	21.1	5.6	-116.67	831.9	456.4	802.5	777.4	25.12	31.951	
6,700.0	6,614.5	6,596.8	6,594.8	21.4	5.7	-117.76	832.1	455.8	811.1	785.7	25.40	31.933	
6,800.0	6,713.0	6,694.4	6,692.4	21.8	5.8	-118.85	832.3	454.9	820.2	794.5	25.68	31.944	
6,900.0	6,811.5	6,800.0	6,798.0	22.1	5.9	-120.01	832.1	454.2	829.2	803.3	25.94	31.966	
7,000.0	6,910.4	6,895.9	6,893.8	22.4	6.0	-106.26	831.6	453.4	836.3	810.2	26.11	32.031	
7,100.0	7,010.2	7,000.1	6,998.0	22.4	6.0	28.97	831.0	452.7	832.6	806.5	26.17	31.820	
7,200.0	7,108.1	7,100.0	7,097.9	22.2	6.1	42.18	830.2	452.3	816.9	790.7	26.19	31.192	
7,300.0	7,201.3	7,188.1	7,186.0	21.7	6.2	48.54	829.3	451.6	790.7	764.6	26.13	30.256	
7,400.0	7,286.9	7,280.4	7,278.4	21.0	6.3	55.67	828.5	450.8	755.9	729.8	26.03	29.043	
7,500.0	7,362.2	7,353.0	7,350.9	20.2	6.3	63.73	827.9	450.9	715.0	689.3	25.69	27.828	
7,600.0	7,425.1	7,412.0	7,410.0	19.2	6.4	72.30	827.9	451.0	673.1	648.0	25.10	26.813	
7,700.0	7,473.5	7,460.6	7,458.5	18.4	6.4	80.48	828.1	451.2	634.9	610.6	24.36	26.070	
7,800.0	7,506.0	7,492.5	7,490.4	17.6	6.5	86.53	828.2	451.4	606.0	582.3	23.66	25.614	
7,900.0	7,521.6	7,507.2	7,505.2	17.1	6.5	89.50	828.3	451.5	591.1	567.9	23.23	25.443	
7,938.5	7,523.8	7,509.1	7,507.0	17.0	6.5	89.73	828.3	451.5	589.8	566.6	23.21	25.417	CC, ES, SF
8,000.0	7,523.0	7,507.7	7,505.7	16.9	6.5	89.68	828.3	451.5	593.1	570.0	23.16	25.608	
8,100.0	7,523.0	7,506.8	7,504.8	17.1	6.5	89.59	828.3	451.5	611.8	588.3	23.45	26.087	
8,200.0	7,523.0	7,506.0	7,503.9	17.6	6.5	89.50	828.3	451.5	645.5	621.5	24.09	26.801	
8,300.0	7,523.0	7,505.1	7,503.0	18.6	6.5	89.42	828.3	451.5	692.2	667.2	25.03	27.653	
8,400.0	7,523.0	7,504.2	7,502.1	19.8	6.5	89.33	828.3	451.5	749.4	723.2	26.24	28.556	
8,500.0	7,523.0	7,503.3	7,501.2	21.3	6.5	89.25	828.3	451.5	814.9	787.2	27.68	29.445	
8,600.0	7,523.0	7,502.5	7,500.4	22.9	6.5	89.16	828.3	451.5	886.8	857.6	29.29	30.282	
8,700.0	7,523.0	7,501.6	7,499.5	24.7	6.5	89.08	828.2	451.5	963.8	932.8	31.04	31.051	
8,800.0	7,523.0	7,500.0	7,497.9	26.5	6.5	88.92	828.2	451.5	1,044.7	1,011.8	32.91	31.745	
8,900.0	7,523.0	7,500.0	7,497.9	28.5	6.5	88.92	828.2	451.5	1,128.6	1,093.8	34.87	32.366	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - MCCONAHAY 6-4-34 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 1089-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	-109.67	-179.2	-501.3	533.0				
100.0	100.0	75.0	75.0	0.1	0.1	-109.68	-179.3	-501.3	532.4	532.2	0.26	2,045.312	CC
200.0	200.0	174.7	174.7	0.3	0.3	-109.72	-179.7	-501.3	532.5	531.9	0.61	877.700	
300.0	300.0	274.3	274.3	0.5	0.5	-109.79	-180.3	-501.2	532.7	531.7	0.95	558.874	
400.0	400.0	373.9	373.9	0.7	0.7	-109.88	-181.2	-501.1	532.9	531.6	1.30	410.076	ES
500.0	500.0	473.5	473.5	0.8	0.9	172.39	-182.4	-501.0	534.0	532.4	1.68	317.409	
600.0	600.0	573.1	573.1	1.0	1.0	172.27	-183.9	-500.8	537.0	535.0	2.04	263.751	
700.0	699.9	672.6	672.6	1.2	1.2	172.14	-185.7	-500.6	541.8	539.4	2.39	226.775	
800.0	799.7	772.0	771.9	1.4	1.4	172.01	-187.8	-500.4	548.3	545.6	2.74	200.022	
900.0	899.4	871.2	871.1	1.6	1.6	171.87	-190.1	-500.2	556.7	553.6	3.09	179.986	
1,000.0	998.9	970.3	970.2	1.8	1.8	171.73	-192.7	-499.9	566.9	563.4	3.44	164.599	
1,100.0	1,098.3	1,069.2	1,069.0	2.1	1.9	171.60	-195.6	-499.6	578.8	575.0	3.79	152.564	
1,200.0	1,197.4	1,167.0	1,166.8	2.3	2.1	171.48	-198.6	-499.4	592.6	588.4	4.14	143.090	
1,300.0	1,296.3	1,266.5	1,266.3	2.6	2.3	171.42	-201.3	-499.4	608.2	603.7	4.49	135.425	
1,400.0	1,394.9	1,364.9	1,364.6	2.9	2.5	171.30	-204.8	-499.0	625.3	620.5	4.85	128.975	
1,500.0	1,493.4	1,462.4	1,461.8	3.3	2.7	170.90	-211.7	-497.4	643.5	638.2	5.24	122.831	
1,600.0	1,591.9	1,560.0	1,558.8	3.6	2.9	170.16	-222.2	-493.7	661.1	655.4	5.66	116.846	
1,700.0	1,690.4	1,655.0	1,652.7	3.9	3.2	169.16	-236.1	-489.6	679.8	673.7	6.11	111.303	
1,800.0	1,788.9	1,730.7	1,727.0	4.3	3.4	168.18	-250.2	-487.0	700.9	694.4	6.54	107.221	
1,900.0	1,887.3	1,818.8	1,812.8	4.6	3.8	166.85	-270.1	-483.8	723.9	716.9	7.05	102.680	
2,000.0	1,985.8	1,939.5	1,929.4	4.9	4.3	164.85	-300.1	-476.8	746.8	739.0	7.72	96.793	
2,100.0	2,084.3	2,040.3	2,027.2	5.3	4.7	163.35	-323.3	-469.2	767.6	759.3	8.31	92.419	
2,200.0	2,182.8	2,138.6	2,122.7	5.6	5.1	162.01	-345.2	-461.6	788.5	779.6	8.90	88.630	
2,300.0	2,281.3	2,230.0	2,211.5	6.0	5.4	160.81	-365.8	-454.6	809.9	800.4	9.47	85.504	
2,400.0	2,379.8	2,320.7	2,299.7	6.3	5.8	159.72	-386.0	-448.5	832.2	822.2	10.03	82.952	
2,500.0	2,478.2	2,411.6	2,388.2	6.7	6.2	158.72	-406.2	-443.1	855.5	844.9	10.60	80.691	
2,600.0	2,576.7	2,504.0	2,478.1	7.0	6.6	157.76	-426.9	-438.2	879.6	868.5	11.17	78.721	
2,700.0	2,675.2	2,593.4	2,565.0	7.3	6.9	156.87	-447.3	-433.8	904.5	892.8	11.75	76.991	
2,800.0	2,773.7	2,692.8	2,661.6	7.7	7.4	155.91	-470.3	-428.7	929.8	917.4	12.36	75.223	
2,900.0	2,872.2	2,799.9	2,765.9	8.0	7.8	154.98	-493.8	-423.0	954.3	941.3	12.99	73.458	
3,000.0	2,970.7	2,889.8	2,853.6	8.4	8.2	154.26	-513.4	-418.1	978.9	965.3	13.56	72.175	
3,100.0	3,069.1	2,977.0	2,938.4	8.7	8.6	153.55	-533.1	-413.5	1,004.2	990.1	14.13	71.046	
3,200.0	3,167.6	3,062.8	3,021.6	9.1	9.0	152.83	-553.7	-409.0	1,030.6	1,015.9	14.71	70.046	
3,300.0	3,266.1	3,163.7	3,119.3	9.4	9.4	152.03	-578.1	-404.1	1,057.6	1,042.2	15.34	68.921	
3,400.0	3,364.6	3,269.0	3,221.5	9.8	9.9	151.25	-602.9	-398.4	1,083.8	1,067.8	16.00	67.751	
3,500.0	3,463.1	3,354.0	3,304.0	10.1	10.3	150.66	-622.8	-394.0	1,110.4	1,093.9	16.56	67.053	
3,600.0	3,561.5	3,472.1	3,418.8	10.5	10.8	149.90	-649.6	-387.6	1,136.5	1,119.2	17.25	65.879	
3,700.0	3,660.0	3,567.7	3,512.0	10.8	11.2	149.35	-670.4	-382.1	1,161.8	1,143.9	17.85	65.097	SF

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 McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Offset Design S34-T2N-R66W (McConahay) - RANCHERO 32-34 (EXISTING) - ENCANA WELL - GYROS

Offset Site Error: 0.0 ft

Survey Program: 200-Gyro

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	-119.28	-487.8	-869.8	997.3				
100.0	100.0	86.0	86.0	0.1	0.0	-119.28	-487.8	-869.8	997.2	997.1	0.13	7,608.018	
200.0	200.0	181.8	181.8	0.3	0.1	-119.28	-487.7	-870.0	997.4	997.0	0.38	2,645.593	
300.0	300.0	281.8	281.8	0.5	0.2	-119.24	-487.5	-870.6	997.8	997.2	0.64	1,561.776	
400.0	400.0	383.5	383.5	0.7	0.2	-119.20	-486.9	-871.3	998.2	997.3	0.90	1,106.283	
500.0	500.0	483.4	483.3	0.8	0.3	163.26	-486.1	-872.1	999.3	998.1	1.16	857.967	
600.0	600.0	575.2	575.1	1.0	0.4	163.35	-485.5	-873.1	1,002.4	1,001.0	1.42	705.896	
700.0	699.9	671.4	671.4	1.2	0.5	163.47	-485.2	-874.7	1,007.9	1,006.2	1.68	600.081	
800.0	799.7	769.7	769.7	1.4	0.6	163.60	-485.0	-876.5	1,015.3	1,013.3	1.94	522.847	
900.0	899.4	873.5	873.4	1.6	0.7	163.78	-484.6	-878.5	1,024.2	1,022.0	2.21	463.442	
1,000.0	998.9	974.8	974.7	1.8	0.8	163.99	-483.7	-880.1	1,034.5	1,032.0	2.48	417.602	
1,100.0	1,098.3	1,074.1	1,074.0	2.1	0.9	164.17	-483.4	-881.4	1,046.3	1,043.6	2.74	381.433	
1,200.0	1,197.4	1,172.3	1,172.2	2.3	0.9	164.35	-483.5	-882.5	1,059.9	1,056.9	3.01	352.101	
1,300.0	1,296.3	1,268.5	1,268.4	2.6	1.0	164.57	-483.2	-883.9	1,075.3	1,072.0	3.28	328.125	
1,400.0	1,394.9	1,369.6	1,369.4	2.9	1.1	164.79	-483.2	-885.3	1,092.5	1,088.9	3.55	307.759	
1,500.0	1,493.4	1,469.8	1,469.7	3.3	1.2	165.06	-483.1	-886.4	1,110.1	1,106.3	3.82	290.332	
1,600.0	1,591.9	1,564.0	1,563.8	3.6	1.3	165.31	-482.9	-887.5	1,127.9	1,123.8	4.09	275.613	
1,700.0	1,690.4	1,658.9	1,658.7	3.9	1.4	165.56	-482.9	-889.1	1,146.2	1,141.8	4.36	262.778	
1,800.0	1,788.9	1,758.6	1,758.5	4.3	1.5	165.83	-482.6	-890.9	1,164.5	1,159.9	4.63	251.250	
8,300.0	7,523.0	7,482.0	7,480.1	18.6	6.5	-87.27	-390.2	-891.6	1,170.8	1,145.8	24.99	46.849	
8,400.0	7,523.0	7,482.0	7,480.1	19.8	6.5	-87.27	-390.2	-891.6	1,086.5	1,060.3	26.20	41.464	
8,500.0	7,523.0	7,482.0	7,480.1	21.3	6.5	-87.27	-390.2	-891.6	1,005.0	977.4	27.63	36.367	
8,600.0	7,523.0	7,482.0	7,480.1	22.9	6.5	-87.27	-390.2	-891.6	927.2	897.9	29.25	31.703	
8,700.0	7,523.0	7,482.0	7,480.1	24.7	6.5	-87.27	-390.2	-891.6	854.0	823.0	31.00	27.548	
8,800.0	7,523.0	7,482.0	7,480.1	26.5	6.5	-87.27	-390.2	-891.6	786.7	753.8	32.87	23.934	
8,900.0	7,523.0	7,482.0	7,480.1	28.5	6.5	-87.27	-390.2	-891.6	726.9	692.1	34.83	20.872	
9,000.0	7,523.0	7,482.0	7,480.1	30.5	6.5	-87.27	-390.2	-891.6	676.8	639.9	36.87	18.359	
9,100.0	7,523.0	7,482.0	7,480.1	32.6	6.5	-87.27	-390.2	-891.6	638.5	599.5	38.96	16.388	
9,200.0	7,523.0	7,482.0	7,480.1	34.8	6.5	-87.27	-390.2	-891.6	614.2	573.1	41.11	14.942	
9,300.0	7,523.0	7,482.0	7,480.1	37.0	6.5	-87.27	-390.2	-891.6	605.7	562.4	43.29	13.990	
9,302.0	7,523.0	7,482.0	7,480.1	37.0	6.5	-87.27	-390.2	-891.6	605.7	562.4	43.34	13.976	CC, ES
9,400.0	7,523.0	7,482.0	7,480.1	39.2	6.5	-87.27	-390.2	-891.6	613.6	568.1	45.51	13.481	
9,500.0	7,523.0	7,482.0	7,480.1	41.5	6.5	-87.27	-390.2	-891.6	637.2	589.5	47.76	13.342	SF
9,600.0	7,523.0	7,482.0	7,480.1	43.7	6.5	-87.27	-390.2	-891.6	675.0	625.0	50.04	13.491	
9,700.0	7,523.0	7,482.0	7,480.1	46.0	6.5	-87.27	-390.2	-891.6	724.8	672.4	52.33	13.850	
9,800.0	7,523.0	7,482.0	7,480.1	48.3	6.5	-87.27	-390.2	-891.6	784.1	729.5	54.64	14.351	
9,900.0	7,523.0	7,482.0	7,480.1	50.7	6.5	-87.27	-390.2	-891.6	851.2	794.2	56.97	14.941	
10,000.0	7,523.0	7,482.0	7,480.1	53.0	6.5	-87.27	-390.2	-891.6	924.2	864.9	59.31	15.583	
10,100.0	7,523.0	7,482.0	7,480.1	55.4	6.5	-87.27	-390.2	-891.6	1,001.8	940.2	61.66	16.248	
10,200.0	7,523.0	7,482.0	7,480.1	57.7	6.5	-87.27	-390.2	-891.6	1,083.2	1,019.2	64.02	16.920	
10,300.0	7,523.0	7,482.0	7,480.1	60.1	6.5	-87.27	-390.2	-891.6	1,167.4	1,101.0	66.39	17.585	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well McConahay 1B-34H-H266
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Reference Site:	S34-T2N-R66W (McConahay)	**MD Reference:**	WELL @ 5087.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	McConahay 1B-34H-H266	**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 #4	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 5087.0ft (Original Well Elev)	Coordinates are relative to: McConahay 1B-34H-H266
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000 °	Grid Convergence at Surface is: 0.48°