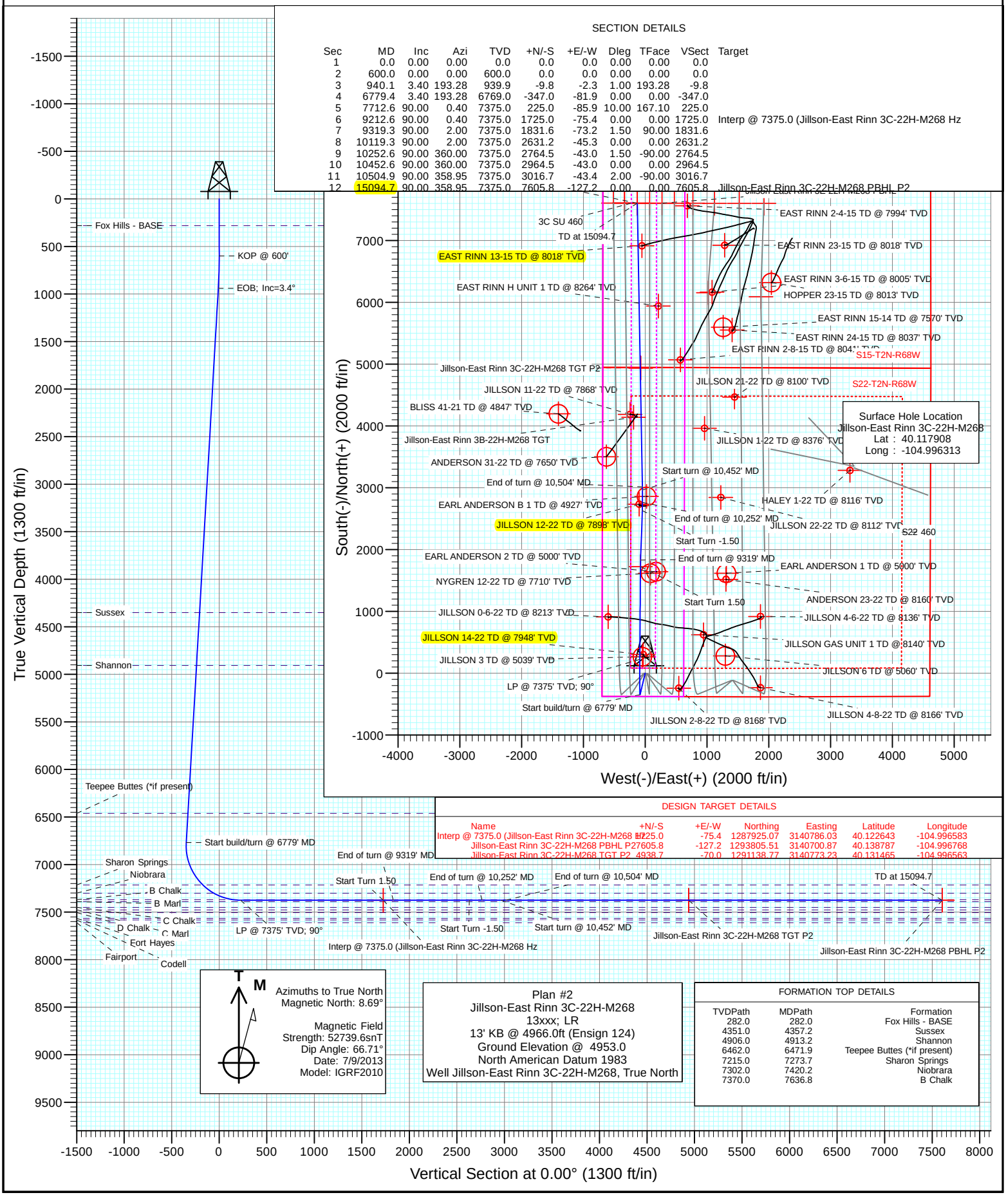
encana natural gas

Project: DJ Wattenberg
Site: S22-T2N-R68W (Jillson-East Rinn)
Well: Jillson-East Rinn 3C-22H-M268
Wellbore: Hz
Design: Plan #2

CATHEDRAL

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	940.1	3.40	193.28	939.9	-9.8	-2.3	1.00	193.28	-9.8	
4	6779.4	3.40	193.28	6769.0	-347.0	-81.9	0.00	0.00	-347.0	
5	7712.6	90.00	0.40	7375.0	225.0	-85.9	10.00	167.10	225.0	
6	9212.6	90.00	0.40	7375.0	1725.0	-75.4	0.00	0.00	1725.0	Interp @ 7375.0 (Jillson-East Rinn 3C-22H-M268 Hz
7	9319.3	90.00	2.00	7375.0	1831.6	-73.2	1.50	90.00	1831.6	
8	10119.3	90.00	2.00	7375.0	2631.2	-45.3	0.00	0.00	2631.2	
9	10252.6	90.00	360.00	7375.0	2764.5	-43.0	1.50	-90.00	2764.5	
10	10452.6	90.00	360.00	7375.0	2964.5	-43.0	0.00	0.00	2964.5	
11	10504.9	90.00	358.95	7375.0	3016.7	-43.4	2.00	-90.00	3016.7	
12	15094.7	90.00	358.95	7375.0	7605.8	-127.2	0.00	0.00	7605.8	Jillson-East Rinn 3C-22H-M268 PBHL P2



DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Interp @ 7375.0 (Jillson-East Rinn 3C-22H-M268 Hz	1725.0	-75.4	1287925.07	3140786.03	40.122643	-104.996583
Jillson-East Rinn 3C-22H-M268 PBHL P2	7605.8	-127.2	1293805.51	3140700.87	40.138787	-104.996768
Jillson-East Rinn 3C-22H-M268 TGT P2	4938.7	-70.0	1291138.77	3140773.23	40.131465	-104.996563

T M

Azimuths to True North
Magnetic North: 8.69°

Magnetic Field
Strength: 52739.6snT
Dip Angle: 66.71°
Date: 7/9/2013
Model: IGRF2010

Plan #2
Jillson-East Rinn 3C-22H-M268
13xxx; LR
13' KB @ 4966.0ft (Ensign 124)
Ground Elevation @ 4953.0
North American Datum 1983
Well Jillson-East Rinn 3C-22H-M268, True North

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
282.0	282.0	Fox Hills - BASE
4351.0	4357.2	Sussex
4906.0	4913.2	Shannon
6462.0	6471.9	Teepee Buttes (*if present)
7215.0	7273.7	Sharon Springs
7302.0	7420.2	Niobrara
7370.0	7636.8	B Chalk

Planning Report

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Project:	DJ Wattenberg	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site:	S22-T2N-R68W (Jillson-East Rinn)	**North Reference:**	True
Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Project DJ Wattenberg

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

Site S22-T2N-R68W (Jillson-East Rinn)

Site Position:		**Northing:**	1,289,542.88 ft	**Latitude:**	40.127030
From:	Lat/Long	**Easting:**	3,144,231.14 ft	**Longitude:**	-104.984230
Position Uncertainty:	0.0 ft	**Slot Radius:**	13.200 in	**Grid Convergence:**	0.33 °

Well Jillson-East Rinn 3C-22H-M268

Well Position	**+N/-S**	0.0 ft	**Northing:**	1,286,200.53 ft	**Latitude:**	40.117908
	+E/-W	0.0 ft	**Easting:**	3,140,871.28 ft	**Longitude:**	-104.996313
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,953.0 ft

Wellbore Hz

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/9/2013	8.69	66.71	52,740

Design Plan #2

Audit Notes:

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

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

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
940.1	3.40	193.28	939.9	-9.8	-2.3	1.00	1.00	0.00	193.28	
6,779.4	3.40	193.28	6,769.0	-347.0	-81.9	0.00	0.00	0.00	0.00	
7,712.6	90.00	0.40	7,375.0	225.0	-85.9	10.00	9.28	17.91	167.10	
9,212.6	90.00	0.40	7,375.0	1,725.0	-75.4	0.00	0.00	0.00	0.00	Interp @ 7375.0 (Jills
9,319.3	90.00	2.00	7,375.0	1,831.6	-73.2	1.50	0.00	1.50	90.00	
10,119.3	90.00	2.00	7,375.0	2,631.2	-45.3	0.00	0.00	0.00	0.00	
10,252.6	90.00	360.00	7,375.0	2,764.5	-43.0	1.50	0.00	-1.50	-90.00	
10,452.6	90.00	360.00	7,375.0	2,964.5	-43.0	0.00	0.00	0.00	0.00	
10,504.9	90.00	358.95	7,375.0	3,016.7	-43.4	2.00	0.00	-2.00	-90.00	
15,094.7	90.00	358.95	7,375.0	7,605.8	-127.2	0.00	0.00	0.00	0.00	Jillson-East Rinn 3C-2

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Project:	DJ Wattenberg	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site:	S22-T2N-R68W (Jillson-East Rinn)	**North Reference:**	True
Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
282.0	0.00	0.00	282.0	0.0	0.0	0.0	0.00	0.00	Fox Hills - BASE
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	KOP @ 600'
700.0	1.00	193.28	700.0	-0.8	-0.2	-0.8	1.00	1.00	
800.0	2.00	193.28	800.0	-3.4	-0.8	-3.4	1.00	1.00	
900.0	3.00	193.28	899.9	-7.6	-1.8	-7.6	1.00	1.00	
940.1	3.40	193.28	939.9	-9.8	-2.3	-9.8	1.00	1.00	EOB; Inc=3.4°
1,000.0	3.40	193.28	999.7	-13.3	-3.1	-13.3	0.00	0.00	
1,100.0	3.40	193.28	1,099.5	-19.1	-4.5	-19.1	0.00	0.00	
1,200.0	3.40	193.28	1,199.3	-24.8	-5.9	-24.8	0.00	0.00	
1,300.0	3.40	193.28	1,299.2	-30.6	-7.2	-30.6	0.00	0.00	
1,400.0	3.40	193.28	1,399.0	-36.4	-8.6	-36.4	0.00	0.00	
1,500.0	3.40	193.28	1,498.8	-42.2	-9.9	-42.2	0.00	0.00	
1,600.0	3.40	193.28	1,598.6	-47.9	-11.3	-47.9	0.00	0.00	
1,700.0	3.40	193.28	1,698.5	-53.7	-12.7	-53.7	0.00	0.00	
1,800.0	3.40	193.28	1,798.3	-59.5	-14.0	-59.5	0.00	0.00	
1,900.0	3.40	193.28	1,898.1	-65.2	-15.4	-65.2	0.00	0.00	
2,000.0	3.40	193.28	1,997.9	-71.0	-16.8	-71.0	0.00	0.00	
2,100.0	3.40	193.28	2,097.8	-76.8	-18.1	-76.8	0.00	0.00	
2,200.0	3.40	193.28	2,197.6	-82.6	-19.5	-82.6	0.00	0.00	
2,300.0	3.40	193.28	2,297.4	-88.3	-20.8	-88.3	0.00	0.00	
2,400.0	3.40	193.28	2,397.2	-94.1	-22.2	-94.1	0.00	0.00	
2,500.0	3.40	193.28	2,497.1	-99.9	-23.6	-99.9	0.00	0.00	
2,600.0	3.40	193.28	2,596.9	-105.7	-24.9	-105.7	0.00	0.00	
2,700.0	3.40	193.28	2,696.7	-111.4	-26.3	-111.4	0.00	0.00	
2,800.0	3.40	193.28	2,796.5	-117.2	-27.7	-117.2	0.00	0.00	
2,900.0	3.40	193.28	2,896.4	-123.0	-29.0	-123.0	0.00	0.00	
3,000.0	3.40	193.28	2,996.2	-128.8	-30.4	-128.8	0.00	0.00	
3,100.0	3.40	193.28	3,096.0	-134.5	-31.7	-134.5	0.00	0.00	
3,200.0	3.40	193.28	3,195.8	-140.3	-33.1	-140.3	0.00	0.00	
3,300.0	3.40	193.28	3,295.6	-146.1	-34.5	-146.1	0.00	0.00	
3,400.0	3.40	193.28	3,395.5	-151.9	-35.8	-151.9	0.00	0.00	
3,500.0	3.40	193.28	3,495.3	-157.6	-37.2	-157.6	0.00	0.00	
3,600.0	3.40	193.28	3,595.1	-163.4	-38.6	-163.4	0.00	0.00	
3,700.0	3.40	193.28	3,694.9	-169.2	-39.9	-169.2	0.00	0.00	
3,800.0	3.40	193.28	3,794.8	-175.0	-41.3	-175.0	0.00	0.00	
3,900.0	3.40	193.28	3,894.6	-180.7	-42.7	-180.7	0.00	0.00	
4,000.0	3.40	193.28	3,994.4	-186.5	-44.0	-186.5	0.00	0.00	
4,100.0	3.40	193.28	4,094.2	-192.3	-45.4	-192.3	0.00	0.00	
4,200.0	3.40	193.28	4,194.1	-198.1	-46.7	-198.1	0.00	0.00	
4,300.0	3.40	193.28	4,293.9	-203.8	-48.1	-203.8	0.00	0.00	
4,357.2	3.40	193.28	4,351.0	-207.1	-48.9	-207.1	0.00	0.00	Sussex
4,400.0	3.40	193.28	4,393.7	-209.6	-49.5	-209.6	0.00	0.00	
4,500.0	3.40	193.28	4,493.5	-215.4	-50.8	-215.4	0.00	0.00	
4,600.0	3.40	193.28	4,593.4	-221.2	-52.2	-221.2	0.00	0.00	
4,700.0	3.40	193.28	4,693.2	-226.9	-53.6	-226.9	0.00	0.00	
4,800.0	3.40	193.28	4,793.0	-232.7	-54.9	-232.7	0.00	0.00	

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Project:	DJ Wattenberg	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site:	S22-T2N-R68W (Jillson-East Rinn)	**North Reference:**	True
Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,900.0	3.40	193.28	4,892.8	-238.5	-56.3	-238.5	0.00	0.00	
4,913.2	3.40	193.28	4,906.0	-239.2	-56.5	-239.2	0.00	0.00	Shannon
5,000.0	3.40	193.28	4,992.7	-244.3	-57.6	-244.3	0.00	0.00	
5,100.0	3.40	193.28	5,092.5	-250.0	-59.0	-250.0	0.00	0.00	
5,200.0	3.40	193.28	5,192.3	-255.8	-60.4	-255.8	0.00	0.00	
5,300.0	3.40	193.28	5,292.1	-261.6	-61.7	-261.6	0.00	0.00	
5,400.0	3.40	193.28	5,392.0	-267.4	-63.1	-267.4	0.00	0.00	
5,500.0	3.40	193.28	5,491.8	-273.1	-64.5	-273.1	0.00	0.00	
5,600.0	3.40	193.28	5,591.6	-278.9	-65.8	-278.9	0.00	0.00	
5,700.0	3.40	193.28	5,691.4	-284.7	-67.2	-284.7	0.00	0.00	
5,800.0	3.40	193.28	5,791.3	-290.4	-68.5	-290.4	0.00	0.00	
5,900.0	3.40	193.28	5,891.1	-296.2	-69.9	-296.2	0.00	0.00	
6,000.0	3.40	193.28	5,990.9	-302.0	-71.3	-302.0	0.00	0.00	
6,100.0	3.40	193.28	6,090.7	-307.8	-72.6	-307.8	0.00	0.00	
6,200.0	3.40	193.28	6,190.5	-313.5	-74.0	-313.5	0.00	0.00	
6,300.0	3.40	193.28	6,290.4	-319.3	-75.4	-319.3	0.00	0.00	
6,400.0	3.40	193.28	6,390.2	-325.1	-76.7	-325.1	0.00	0.00	
6,471.9	3.40	193.28	6,462.0	-329.2	-77.7	-329.2	0.00	0.00	Teepee Buttes (*if present)
6,500.0	3.40	193.28	6,490.0	-330.9	-78.1	-330.9	0.00	0.00	
6,600.0	3.40	193.28	6,589.8	-336.6	-79.4	-336.6	0.00	0.00	
6,700.0	3.40	193.28	6,689.7	-342.4	-80.8	-342.4	0.00	0.00	
6,779.4	3.40	193.28	6,769.0	-347.0	-81.9	-347.0	0.00	0.00	Start build/turn @ 6779' MD
6,800.0	1.47	211.46	6,789.5	-347.8	-82.2	-347.8	9.99	-9.38	
6,900.0	8.77	355.48	6,889.2	-341.3	-83.4	-341.3	10.00	7.30	
7,000.0	18.75	358.16	6,986.2	-317.6	-84.6	-317.6	10.00	9.98	
7,100.0	28.75	359.02	7,077.6	-277.3	-85.5	-277.3	10.00	9.99	
7,200.0	38.75	359.45	7,160.6	-221.9	-86.2	-221.9	10.00	10.00	
7,273.7	46.12	359.67	7,215.0	-172.2	-86.6	-172.2	10.00	10.00	Sharon Springs
7,300.0	48.74	359.73	7,232.8	-152.8	-86.7	-152.8	9.99	9.99	
7,400.0	58.74	359.94	7,291.8	-72.3	-86.9	-72.3	10.00	10.00	
7,420.2	60.76	359.98	7,302.0	-54.8	-86.9	-54.8	10.01	10.01	Niobrara
7,500.0	68.74	0.10	7,336.0	17.3	-86.9	17.3	10.00	10.00	
7,600.0	78.74	0.25	7,364.0	113.2	-86.6	113.2	10.00	10.00	
7,636.8	82.43	0.30	7,370.0	149.5	-86.4	149.5	10.00	10.00	B Chalk
7,700.0	88.74	0.38	7,374.9	212.5	-86.0	212.5	10.00	10.00	
7,712.6	90.00	0.40	7,375.0	225.0	-85.9	225.0	10.01	10.01	LP @ 7375' TVD; 90°
7,800.0	90.00	0.40	7,375.0	312.5	-85.3	312.5	0.00	0.00	
7,900.0	90.00	0.40	7,375.0	412.4	-84.6	412.4	0.00	0.00	
8,000.0	90.00	0.40	7,375.0	512.4	-83.9	512.4	0.00	0.00	
8,100.0	90.00	0.40	7,375.0	612.4	-83.2	612.4	0.00	0.00	
8,200.0	90.00	0.40	7,375.0	712.4	-82.5	712.4	0.00	0.00	
8,300.0	90.00	0.40	7,375.0	812.4	-81.8	812.4	0.00	0.00	
8,400.0	90.00	0.40	7,375.0	912.4	-81.1	912.4	0.00	0.00	
8,500.0	90.00	0.40	7,375.0	1,012.4	-80.4	1,012.4	0.00	0.00	
8,600.0	90.00	0.40	7,375.0	1,112.4	-79.7	1,112.4	0.00	0.00	
8,700.0	90.00	0.40	7,375.0	1,212.4	-79.0	1,212.4	0.00	0.00	
8,800.0	90.00	0.40	7,375.0	1,312.4	-78.3	1,312.4	0.00	0.00	
8,900.0	90.00	0.40	7,375.0	1,412.4	-77.6	1,412.4	0.00	0.00	
9,000.0	90.00	0.40	7,375.0	1,512.4	-76.9	1,512.4	0.00	0.00	
9,100.0	90.00	0.40	7,375.0	1,612.4	-76.2	1,612.4	0.00	0.00	
9,200.0	90.00	0.40	7,375.0	1,712.4	-75.5	1,712.4	0.00	0.00	
9,212.6	90.00	0.40	7,375.0	1,725.0	-75.4	1,725.0	0.00	0.00	Start Turn 1.50

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Project:	DJ Wattenberg	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site:	S22-T2N-R68W (Jillson-East Rinn)	**North Reference:**	True
Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
9,300.0	90.00	1.71	7,375.0	1,812.4	-73.8	1,812.4	1.50	0.00	
9,319.3	90.00	2.00	7,375.0	1,831.6	-73.2	1,831.6	1.50	0.00	End of turn @ 9319' MD
9,400.0	90.00	2.00	7,375.0	1,912.3	-70.4	1,912.3	0.00	0.00	
9,500.0	90.00	2.00	7,375.0	2,012.3	-66.9	2,012.3	0.00	0.00	
9,600.0	90.00	2.00	7,375.0	2,112.2	-63.4	2,112.2	0.00	0.00	
9,700.0	90.00	2.00	7,375.0	2,212.2	-59.9	2,212.2	0.00	0.00	
9,800.0	90.00	2.00	7,375.0	2,312.1	-56.4	2,312.1	0.00	0.00	
9,900.0	90.00	2.00	7,375.0	2,412.0	-52.9	2,412.0	0.00	0.00	
10,000.0	90.00	2.00	7,375.0	2,512.0	-49.5	2,512.0	0.00	0.00	
10,100.0	90.00	2.00	7,375.0	2,611.9	-46.0	2,611.9	0.00	0.00	
10,119.3	90.00	2.00	7,375.0	2,631.2	-45.3	2,631.2	0.00	0.00	Start Turn -1.50
10,200.0	90.00	0.79	7,375.0	2,711.9	-43.3	2,711.9	1.50	0.00	
10,252.6	90.00	360.00	7,375.0	2,764.5	-43.0	2,764.5	1.50	0.00	End of turn @ 10,252' MD
10,300.0	90.00	360.00	7,375.0	2,811.9	-43.0	2,811.9	0.00	0.00	
10,400.0	90.00	360.00	7,375.0	2,911.9	-43.0	2,911.9	0.00	0.00	
10,452.6	90.00	360.00	7,375.0	2,964.5	-43.0	2,964.5	0.00	0.00	Start turn @ 10,452' MD
10,500.0	90.00	359.05	7,375.0	3,011.9	-43.4	3,011.9	2.00	0.00	
10,504.9	90.00	358.95	7,375.0	3,016.7	-43.4	3,016.7	2.00	0.00	End of turn @ 10,504' MD
10,600.0	90.00	358.95	7,375.0	3,111.9	-45.2	3,111.9	0.00	0.00	
10,700.0	90.00	358.95	7,375.0	3,211.8	-47.0	3,211.8	0.00	0.00	
10,800.0	90.00	358.95	7,375.0	3,311.8	-48.8	3,311.8	0.00	0.00	
10,900.0	90.00	358.95	7,375.0	3,411.8	-50.7	3,411.8	0.00	0.00	
11,000.0	90.00	358.95	7,375.0	3,511.8	-52.5	3,511.8	0.00	0.00	
11,100.0	90.00	358.95	7,375.0	3,611.8	-54.3	3,611.8	0.00	0.00	
11,200.0	90.00	358.95	7,375.0	3,711.8	-56.1	3,711.8	0.00	0.00	
11,300.0	90.00	358.95	7,375.0	3,811.7	-58.0	3,811.7	0.00	0.00	
11,400.0	90.00	358.95	7,375.0	3,911.7	-59.8	3,911.7	0.00	0.00	
11,500.0	90.00	358.95	7,375.0	4,011.7	-61.6	4,011.7	0.00	0.00	
11,600.0	90.00	358.95	7,375.0	4,111.7	-63.4	4,111.7	0.00	0.00	
11,700.0	90.00	358.95	7,375.0	4,211.7	-65.3	4,211.7	0.00	0.00	
11,800.0	90.00	358.95	7,375.0	4,311.7	-67.1	4,311.7	0.00	0.00	
11,900.0	90.00	358.95	7,375.0	4,411.6	-68.9	4,411.6	0.00	0.00	
12,000.0	90.00	358.95	7,375.0	4,511.6	-70.7	4,511.6	0.00	0.00	
12,100.0	90.00	358.95	7,375.0	4,611.6	-72.6	4,611.6	0.00	0.00	
12,200.0	90.00	358.95	7,375.0	4,711.6	-74.4	4,711.6	0.00	0.00	
12,300.0	90.00	358.95	7,375.0	4,811.6	-76.2	4,811.6	0.00	0.00	
12,400.0	90.00	358.95	7,375.0	4,911.6	-78.0	4,911.6	0.00	0.00	
12,500.0	90.00	358.95	7,375.0	5,011.5	-79.9	5,011.5	0.00	0.00	
12,600.0	90.00	358.95	7,375.0	5,111.5	-81.7	5,111.5	0.00	0.00	
12,700.0	90.00	358.95	7,375.0	5,211.5	-83.5	5,211.5	0.00	0.00	
12,800.0	90.00	358.95	7,375.0	5,311.5	-85.3	5,311.5	0.00	0.00	
12,900.0	90.00	358.95	7,375.0	5,411.5	-87.2	5,411.5	0.00	0.00	
13,000.0	90.00	358.95	7,375.0	5,511.5	-89.0	5,511.5	0.00	0.00	
13,100.0	90.00	358.95	7,375.0	5,611.4	-90.8	5,611.4	0.00	0.00	
13,200.0	90.00	358.95	7,375.0	5,711.4	-92.6	5,711.4	0.00	0.00	
13,300.0	90.00	358.95	7,375.0	5,811.4	-94.5	5,811.4	0.00	0.00	
13,400.0	90.00	358.95	7,375.0	5,911.4	-96.3	5,911.4	0.00	0.00	
13,500.0	90.00	358.95	7,375.0	6,011.4	-98.1	6,011.4	0.00	0.00	
13,600.0	90.00	358.95	7,375.0	6,111.4	-99.9	6,111.4	0.00	0.00	
13,700.0	90.00	358.95	7,375.0	6,211.4	-101.8	6,211.4	0.00	0.00	
13,800.0	90.00	358.95	7,375.0	6,311.3	-103.6	6,311.3	0.00	0.00	
13,900.0	90.00	358.95	7,375.0	6,411.3	-105.4	6,411.3	0.00	0.00	

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Project:	DJ Wattenberg	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site:	S22-T2N-R68W (Jillson-East Rinn)	**North Reference:**	True
Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
14,000.0	90.00	358.95	7,375.0	6,511.3	-107.2	6,511.3	0.00	0.00	
14,100.0	90.00	358.95	7,375.0	6,611.3	-109.1	6,611.3	0.00	0.00	
14,200.0	90.00	358.95	7,375.0	6,711.3	-110.9	6,711.3	0.00	0.00	
14,300.0	90.00	358.95	7,375.0	6,811.3	-112.7	6,811.3	0.00	0.00	
14,400.0	90.00	358.95	7,375.0	6,911.2	-114.5	6,911.2	0.00	0.00	
14,500.0	90.00	358.95	7,375.0	7,011.2	-116.4	7,011.2	0.00	0.00	
14,600.0	90.00	358.95	7,375.0	7,111.2	-118.2	7,111.2	0.00	0.00	
14,700.0	90.00	358.95	7,375.0	7,211.2	-120.0	7,211.2	0.00	0.00	
14,800.0	90.00	358.95	7,375.0	7,311.2	-121.8	7,311.2	0.00	0.00	
14,900.0	90.00	358.95	7,375.0	7,411.2	-123.7	7,411.2	0.00	0.00	
15,000.0	90.00	358.95	7,375.0	7,511.1	-125.5	7,511.1	0.00	0.00	
15,094.7	90.00	358.95	7,375.0	7,605.8	-127.2	7,605.8	0.00	0.00	TD at 15094.7

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
Jillson-East Rinn 3C-22ł	0.00	0.00	7,341.0	7,605.8	-127.2	1,293,805.51	3,140,700.87	40.138787	-104.996768
- plan misses target center by 34.0ft at 15094.7ft MD (7375.0 TVD, 7605.8 N, -127.2 E)									
- Point									
Jillson-East Rinn 3C-22ł	0.00	0.00	7,375.0	4,938.7	-70.0	1,291,138.77	3,140,773.23	40.131465	-104.996563
- plan misses target center by 8.5ft at 12427.0ft MD (7375.0 TVD, 4938.6 N, -78.5 E)									
- Point									
Jillson-East Rinn 3C-22ł	0.00	0.00	7,341.0	4,938.7	-70.0	1,291,138.77	3,140,773.23	40.131465	-104.996563
- plan misses target center by 35.1ft at 12427.0ft MD (7375.0 TVD, 4938.6 N, -78.5 E)									
- Point									
Interp @ 7375.0 (Jillson-	0.00	0.00	7,375.0	1,725.0	-75.4	1,287,925.07	3,140,786.03	40.122643	-104.996583
- plan hits target center									
- Point									
Jillson-East Rinn 3C-22ł	0.00	0.00	7,375.0	7,605.8	-127.2	1,293,805.51	3,140,700.87	40.138787	-104.996768
- plan hits target center									
- Point									

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
282.0	282.0	Fox Hills - BASE			
4,357.2	4,351.0	Sussex			
4,913.2	4,906.0	Shannon			
6,471.9	6,462.0	Teepee Buttes (*if present)			
7,273.7	7,215.0	Sharon Springs			
7,420.2	7,302.0	Niobrara			
7,636.8	7,370.0	B Chalk			

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Project:	DJ Wattenberg	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site:	S22-T2N-R68W (Jillson-East Rinn)	**North Reference:**	True
Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
600.0	600.0	0.0	0.0	KOP @ 600'
940.1	939.9	-9.8	-2.3	EOB; Inc=3.4°
6,779.4	6,769.0	-347.0	-81.9	Start build/turn @ 6779' MD
7,712.6	7,375.0	225.0	-85.9	LP @ 7375' TVD; 90°
9,212.6	7,375.0	1,725.0	-75.4	Start Turn 1.50
9,319.3	7,375.0	1,831.6	-73.2	End of turn @ 9319' MD
10,119.3	7,375.0	2,631.2	-45.3	Start Turn -1.50
10,252.6	7,375.0	2,764.5	-43.0	End of turn @ 10,252' MD
10,452.6	7,375.0	2,964.5	-43.0	Start turn @ 10,452' MD
10,504.9	7,375.0	3,016.7	-43.4	End of turn @ 10,504' MD
15,094.7	7,375.0	7,605.8	-127.2	TD at 15094.7

EnCana Oil & Gas (USA) Inc

DJ Wattenberg
S22-T2N-R68W (Jillson-East Rinn)
Jillson-East Rinn 3C-22H-M268
Hz
Plan #2

Anticollision Report

06 May, 2014

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Reference	Plan #2

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

Survey Tool Program **Date** 5/6/2014

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	15,094.7	Plan #2 (Hz)	Geolink MWD	Geolink MWD

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

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
S22-T2N-R68W (Jillson-East Rinn)						
ANDERSON 23-22 (EXISTING) - ENCANA WELL - NO S						Out of range
ANDERSON 31-22 (EXISTING) - KERR-MCGEE WELL	11,001.2	7,401.6	573.9	491.9	7.000	CC, ES
ANDERSON 31-22 (EXISTING) - KERR-MCGEE WELL	11,100.0	7,401.6	582.3	498.7	6.959	SF
BLISS 41-21 (EXISTING) - KPK WELL - SURVEYS						Out of range
EARL ANDERSON 1 (EXISTING) - KPK WELL - NO SUR						Out of range
EARL ANDERSON 2 (EXISTING) - KPK WELL - NO SUR						Out of range
EARL ANDERSON B 1 (EXISTING) - KPK WELL - NO S						Out of range
EAST RINN 13-15 (EXISTING) - ENCANA WELL - SURV	14,403.8	7,679.6	63.0	-75.6	0.455	Level 1, CC, ES, SF
EAST RINN 15-14 (EXISTING) AL - VESSELS WELL - N						Out of range
EAST RINN 23-15 (EXISTING) - ENCANA WELL - SURV						Out of range
EAST RINN 24-15 (EXISTING) - ENCANA WELL - SURV						Out of range
EAST RINN 2-4-15 (EXISTING) - ENCANA WELL - SUR	15,039.3	7,473.1	813.8	665.4	5.482	CC, ES
EAST RINN 2-4-15 (EXISTING) - ENCANA WELL - SUR	15,094.7	7,472.6	815.7	666.3	5.459	SF
EAST RINN 2-8-15 (EXISTING) - ENCANA WELL - SUR	12,536.6	7,893.4	645.9	513.0	4.862	CC, ES
EAST RINN 2-8-15 (EXISTING) - ENCANA WELL - SUR	12,600.0	7,894.6	649.0	515.0	4.845	SF
EAST RINN 3-6-15 (EXISTING) - ENCANA WELL - SUR						Out of range
EAST RINN H UNIT 1 (EXISTING) - ENCANA WELL - N	13,424.0	7,286.0	310.9	191.6	2.606	CC, ES, SF
HALEY 1-22 (EXISTING) - ENCANA WELL - NO SURVE						Out of range
Haley 31-22 - DD - Plan #1						Out of range
Haley 4-2-22 - DD - Plan #1						Out of range
Haley 8-4-22 - DD - Plan #1						Out of range
HOPPER 23-15 (EXISTING) - KERR-MCGEE WELL - SU						Out of range
JILLSON 0-6-22 (EXISTING) - ENCANA WELL - SURVE	8,389.2	7,660.1	514.7	478.7	14.284	CC
JILLSON 0-6-22 (EXISTING) - ENCANA WELL - SURVE	8,400.0	7,660.2	514.8	478.6	14.228	ES
JILLSON 0-6-22 (EXISTING) - ENCANA WELL - SURVE	8,500.0	7,661.4	526.5	488.9	13.995	SF
JILLSON 11-22 (EXISTING) - ENCANA WELL - GYRO	11,678.7	7,293.8	178.2	89.1	2.000	CC, ES, SF
JILLSON 1-22 (EXISTING) - ENCANA WELL - NO SURV						Out of range
JILLSON 12-22 (EXISTING) - ENCANA WELL - GYRO	10,216.2	7,314.8	56.3	-7.6	0.880	Level 1, CC, ES, SF
JILLSON 14-22 (EXISTING) - ENCANA WELL - GYRO	7,790.2	7,361.6	52.7	25.1	1.911	CC, ES, SF
JILLSON 21-22 (EXISTING) - ENCANA WELL - NO SUR						Out of range
JILLSON 22-22 (EXISTING) - ENCANA WELL - NO SUR						Out of range
JILLSON 2-8-22 (EXISTING) - ENCANA WELL - SURVE	5,245.1	5,378.8	617.4	589.7	22.289	CC
JILLSON 2-8-22 (EXISTING) - ENCANA WELL - SURVE	7,158.5	7,262.9	620.9	588.6	19.240	ES
JILLSON 2-8-22 (EXISTING) - ENCANA WELL - SURVE	7,200.0	7,295.9	621.4	589.0	19.178	SF
JILLSON 3 (EXISTING) - FOUNDATION WELL - NO SU	600.0	580.0	270.3	268.2	132.675	CC, ES
JILLSON 3 (EXISTING) - FOUNDATION WELL - NO SU	5,100.0	5,039.0	518.0	500.3	29.244	SF
JILLSON 4-6-22 (EXISTING) - ENCANA WELL - SURVE						Out of range
JILLSON 4-8-22 (EXISTING) - ENCANA WELL - SURVE						Out of range
JILLSON 6 (EXISTING) - FOUNDATION WELL - NO SU						Out of range
JILLSON GAS UNIT 1 (EXISTING) - ENCANA WELL - N						Out of range
Jillson-East Rinn 3A-22H-M268 - Hz - Plan #2	162.1	174.1	20.1	19.6	38.684	CC
Jillson-East Rinn 3A-22H-M268 - Hz - Plan #2	200.0	212.0	20.1	19.5	30.862	ES
Jillson-East Rinn 3A-22H-M268 - Hz - Plan #2	15,094.7	15,182.7	392.0	125.2	1.469	Level 3, SF
Jillson-East Rinn 3B-22H-M268 - Hz - Plan #3	262.1	274.1	10.1	9.2	11.578	CC
Jillson-East Rinn 3B-22H-M268 - Hz - Plan #3	300.0	312.0	10.1	9.1	10.056	ES
Jillson-East Rinn 3B-22H-M268 - Hz - Plan #3	15,094.7	15,316.6	294.8	102.7	1.534	SF
Jillson-East Rinn 3D-22H-M268 - Hz - Plan #1	463.4	472.4	10.1	8.5	6.426	CC
Jillson-East Rinn 3D-22H-M268 - Hz - Plan #1	600.0	609.0	10.3	8.2	5.034	ES
Jillson-East Rinn 3D-22H-M268 - Hz - Plan #1	15,094.7	15,278.2	274.6	73.8	1.367	Level 3, SF
Jillson-East Rinn 3E-22H-M268 - Hz - Plan #1	263.4	272.4	19.9	19.0	22.861	CC
Jillson-East Rinn 3E-22H-M268 - Hz - Plan #1	300.0	309.0	19.9	18.9	19.932	ES
Jillson-East Rinn 3E-22H-M268 - Hz - Plan #1	15,094.7	14,711.4	554.5	355.8	2.791	SF
Jillson-East Rinn 3F-22H-M268 - Hz - Plan #1	263.4	272.4	29.9	29.1	34.449	CC

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

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
S22-T2N-R68W (Jillson-East Rinn)						
Jillson-East Rinn 3F-22H-M268 - Hz - Plan #1	300.0	309.0	29.9	28.9	30.036	ES
Jillson-East Rinn 3F-22H-M268 - Hz - Plan #1	15,094.7	14,721.6	712.3	482.4	3.097	SF
Jillson-East Rinn 3G-22H-N268 - Hz - Plan #2	10,276.3	10,422.1	820.1	714.3	7.745	CC
Jillson-East Rinn 3G-22H-N268 - Hz - Plan #2	15,094.7	15,238.3	904.0	631.5	3.318	ES, SF
Jillson-East Rinn 3H-22H-N268 - Hz - Plan #3						Out of range
Jillson-East Rinn 3I-22H-N268 - Hz - Plan #1						Out of range
Jillson-East Rinn 3J-22H-N268 - Hz - Plan #1						Out of range
NYGREN 12-22 (EXISTING) - KERR-MCGEE WELL - N	9,106.9	7,329.0	160.6	115.1	3.527	CC, ES, SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - ANDERSON 31-22 (EXISTING) - KERR-MCGEE WELL - NO SUR

Offset Site Error: 0.0 ft

Survey Program: 1500-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
10,200.0	7,375.0	7,401.6	7,299.0	50.9	19.4	-90.00	3,502.5	-626.3	982.4	913.9	68.46	14.349	
10,300.0	7,375.0	7,401.6	7,299.0	52.6	19.4	-90.00	3,502.5	-626.3	904.1	834.0	70.10	12.897	
10,400.0	7,375.0	7,401.6	7,299.0	54.3	19.4	-90.00	3,502.5	-626.3	830.2	758.4	71.80	11.563	
10,500.0	7,375.0	7,401.6	7,299.0	56.0	19.4	-90.00	3,502.5	-626.3	762.0	688.6	73.41	10.379	
10,600.0	7,375.0	7,401.6	7,299.0	57.8	19.4	-90.00	3,502.5	-626.3	700.3	625.1	75.11	9.323	
10,700.0	7,375.0	7,401.6	7,299.0	59.5	19.4	-90.00	3,502.5	-626.3	648.2	571.3	76.82	8.437	
10,800.0	7,375.0	7,401.6	7,299.0	61.2	19.4	-90.00	3,502.5	-626.3	608.2	529.6	78.53	7.744	
10,900.0	7,375.0	7,401.6	7,299.0	62.9	19.4	-90.00	3,502.5	-626.3	582.8	502.5	80.25	7.262	
11,000.0	7,375.0	7,401.6	7,299.0	64.6	19.4	-90.00	3,502.5	-626.3	573.9	491.9	81.97	7.002	
11,001.2	7,375.0	7,401.6	7,299.0	64.6	19.4	-90.00	3,502.5	-626.3	573.9	491.9	81.99	7.000	CC, ES
11,100.0	7,375.0	7,401.6	7,299.0	66.3	19.4	-90.00	3,502.5	-626.3	582.3	498.7	83.69	6.959	SF
11,200.0	7,375.0	7,401.6	7,299.0	68.1	19.4	-90.00	3,502.5	-626.3	607.4	521.9	85.41	7.111	
11,300.0	7,375.0	7,401.6	7,299.0	69.8	19.4	-90.00	3,502.5	-626.3	647.0	559.9	87.13	7.426	
11,400.0	7,375.0	7,401.6	7,299.0	71.5	19.4	-90.00	3,502.5	-626.3	698.8	610.0	88.86	7.865	
11,500.0	7,375.0	7,401.6	7,299.0	73.2	19.4	-90.00	3,502.5	-626.3	760.4	669.8	90.58	8.394	
11,600.0	7,375.0	7,401.6	7,299.0	75.0	19.4	-90.00	3,502.5	-626.3	829.4	737.1	92.31	8.985	
11,700.0	7,375.0	7,401.6	7,299.0	76.7	19.4	-90.00	3,502.5	-626.3	904.2	810.2	94.04	9.616	
11,800.0	7,375.0	7,401.6	7,299.0	78.4	19.4	-90.00	3,502.5	-626.3	983.6	887.8	95.77	10.270	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - EAST RINN 13-15 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 106-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
13,500.0	7,375.0	7,679.8	7,297.9	107.9	37.0	90.49	6,916.2	-51.6	906.0	783.2	122.85	7.375	
13,600.0	7,375.0	7,679.8	7,297.9	109.7	37.0	90.47	6,916.2	-51.6	806.3	681.7	124.59	6.472	
13,700.0	7,375.0	7,679.7	7,297.9	111.4	37.0	90.45	6,916.2	-51.6	706.6	580.3	126.33	5.593	
13,800.0	7,375.0	7,679.7	7,297.9	113.2	37.0	90.43	6,916.2	-51.6	607.1	479.0	128.07	4.740	
13,900.0	7,375.0	7,679.7	7,297.9	114.9	37.0	90.41	6,916.2	-51.6	507.7	377.9	129.81	3.911	
14,000.0	7,375.0	7,679.7	7,297.8	116.7	37.0	90.39	6,916.2	-51.6	408.7	277.1	131.56	3.107	
14,100.0	7,375.0	7,679.7	7,297.8	118.4	37.0	90.38	6,916.2	-51.6	310.3	177.0	133.30	2.328	
14,200.0	7,375.0	7,679.6	7,297.8	120.1	37.0	90.36	6,916.2	-51.6	213.3	78.3	135.04	1.580	
14,300.0	7,375.0	7,679.6	7,297.8	121.9	37.0	90.34	6,916.2	-51.6	121.4	-15.3	136.79	0.888	Level 1
14,400.0	7,375.0	7,679.6	7,297.8	123.6	37.0	90.33	6,916.2	-51.6	63.2	-75.4	138.53	0.456	Level 1
14,403.8	7,375.0	7,679.6	7,297.8	123.7	37.0	90.33	6,916.2	-51.6	63.0	-75.6	138.60	0.455	Level 1, CC, ES, SF
14,500.0	7,375.0	7,679.6	7,297.7	125.4	37.0	90.31	6,916.2	-51.6	115.0	-25.3	140.28	0.820	Level 1
14,600.0	7,375.0	7,679.6	7,297.7	127.1	37.0	90.29	6,916.2	-51.6	206.1	64.1	142.02	1.451	Level 3
14,700.0	7,375.0	7,679.5	7,297.7	128.9	37.0	90.28	6,916.2	-51.6	302.8	159.1	143.77	2.106	
14,800.0	7,375.0	7,679.5	7,297.7	130.6	37.0	90.26	6,916.2	-51.6	401.2	255.7	145.51	2.757	
14,900.0	7,375.0	7,679.5	7,297.7	132.4	37.0	90.25	6,916.2	-51.6	500.2	352.9	147.26	3.397	
15,000.0	7,375.0	7,679.5	7,297.7	134.1	37.0	90.23	6,916.2	-51.6	599.5	450.5	149.00	4.024	
15,094.7	7,375.0	7,679.5	7,297.6	135.8	37.0	90.22	6,916.2	-51.6	693.8	543.1	150.66	4.605	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - EAST RINN 2-4-15 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 106-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
14,500.0	7,375.0	7,478.1	7,322.6	125.4	23.6	91.77	7,565.2	687.1	976.3	837.2	139.05	7.021	
14,600.0	7,375.0	7,477.2	7,321.7	127.1	23.6	91.71	7,565.2	687.1	924.8	784.0	140.79	6.569	
14,700.0	7,375.0	7,476.3	7,320.8	128.9	23.6	91.65	7,565.2	687.2	881.7	739.2	142.54	6.186	
14,800.0	7,375.0	7,475.4	7,319.9	130.6	23.6	91.58	7,565.2	687.2	848.3	704.0	144.29	5.879	
14,900.0	7,375.0	7,474.5	7,318.9	132.4	23.6	91.52	7,565.3	687.2	825.7	679.6	146.03	5.654	
15,000.0	7,375.0	7,473.5	7,318.0	134.1	23.6	91.45	7,565.3	687.2	814.8	667.0	147.78	5.513	
15,039.3	7,375.0	7,473.1	7,317.6	134.8	23.6	91.42	7,565.3	687.2	813.8	665.4	148.47	5.482	CC, ES
15,094.7	7,375.0	7,472.6	7,317.0	135.8	23.6	91.38	7,565.3	687.3	815.7	666.3	149.43	5.459	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - EAST RINN 2-8-15 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 136-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
11,800.0	7,375.0	7,878.4	7,284.9	78.4	47.0	88.89	5,059.6	565.3	979.6	859.5	120.04	8.160	
11,900.0	7,375.0	7,880.5	7,287.0	80.1	47.0	89.08	5,059.6	565.3	906.8	785.0	121.78	7.446	
12,000.0	7,375.0	7,882.6	7,289.1	81.9	47.0	89.27	5,059.7	565.3	839.6	716.1	123.52	6.798	
12,100.0	7,375.0	7,884.0	7,290.5	83.6	47.0	89.39	5,059.7	565.3	779.6	654.3	125.25	6.224	
12,200.0	7,375.0	7,886.6	7,293.2	85.3	47.0	89.62	5,059.8	565.3	728.3	601.3	126.99	5.735	
12,300.0	7,375.0	7,888.6	7,295.2	87.1	47.0	89.80	5,059.8	565.3	687.8	559.1	128.73	5.343	
12,400.0	7,375.0	7,890.6	7,297.2	88.8	47.0	89.98	5,059.8	565.3	660.2	529.7	130.47	5.060	
12,500.0	7,375.0	7,892.6	7,299.2	90.6	47.0	90.16	5,059.9	565.3	646.9	514.7	132.21	4.893	
12,536.6	7,375.0	7,893.4	7,299.9	91.2	47.0	90.22	5,059.9	565.3	645.9	513.0	132.84	4.862	CC, ES
12,600.0	7,375.0	7,894.6	7,301.2	92.3	47.0	90.33	5,059.9	565.2	649.0	515.0	133.94	4.845	SF
12,700.0	7,375.0	7,896.6	7,303.1	94.0	47.0	90.51	5,060.0	565.2	666.2	530.5	135.68	4.910	
12,800.0	7,375.0	7,898.6	7,305.1	95.8	47.0	90.68	5,060.0	565.2	697.5	560.1	137.42	5.076	
12,900.0	7,375.0	7,900.6	7,307.1	97.5	47.0	90.86	5,060.0	565.2	741.1	601.9	139.15	5.326	
13,000.0	7,375.0	7,902.6	7,309.1	99.2	47.0	91.04	5,060.1	565.2	794.9	654.0	140.89	5.642	
13,100.0	7,375.0	7,904.5	7,311.1	101.0	47.0	91.21	5,060.1	565.2	857.0	714.4	142.62	6.009	
13,200.0	7,375.0	7,906.5	7,313.0	102.7	47.0	91.39	5,060.2	565.2	925.8	781.4	144.35	6.414	
13,300.0	7,375.0	7,908.5	7,315.0	104.5	47.0	91.56	5,060.2	565.2	999.9	853.8	146.08	6.845	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - EAST RINN H UNIT 1 (EXISTING) - ENCANA WELL - NO SURVE

Offset Site Error: 0.0 ft

Survey Program: 8264-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
12,500.0	7,375.0	7,286.0	7,286.0	90.6	12.7	90.00	5,941.1	214.2	974.9	871.7	103.27	9.441	
12,600.0	7,375.0	7,286.0	7,286.0	92.3	12.7	90.00	5,941.1	214.2	880.7	775.7	105.00	8.388	
12,700.0	7,375.0	7,286.0	7,286.0	94.0	12.7	90.00	5,941.1	214.2	788.0	681.2	106.74	7.382	
12,800.0	7,375.0	7,286.0	7,286.0	95.8	12.7	90.00	5,941.1	214.2	697.2	588.7	108.48	6.427	
12,900.0	7,375.0	7,286.0	7,286.0	97.5	12.7	90.00	5,941.1	214.2	609.3	499.1	110.22	5.528	
13,000.0	7,375.0	7,286.0	7,286.0	99.2	12.7	90.00	5,941.1	214.2	525.8	413.9	111.96	4.697	
13,100.0	7,375.0	7,286.0	7,286.0	101.0	12.7	90.00	5,941.1	214.2	449.1	335.4	113.70	3.950	
13,200.0	7,375.0	7,286.0	7,286.0	102.7	12.7	90.00	5,941.1	214.2	383.2	267.8	115.44	3.320	
13,300.0	7,375.0	7,286.0	7,286.0	104.5	12.7	90.00	5,941.1	214.2	334.8	217.6	117.18	2.857	
13,400.0	7,375.0	7,286.0	7,286.0	106.2	12.7	90.00	5,941.1	214.2	311.9	193.0	118.92	2.623	
13,424.0	7,375.0	7,286.0	7,286.0	106.6	12.7	90.00	5,941.1	214.2	310.9	191.6	119.34	2.606	CC, ES, SF
13,500.0	7,375.0	7,286.0	7,286.0	107.9	12.7	90.00	5,941.1	214.2	320.1	199.4	120.66	2.653	
13,600.0	7,375.0	7,286.0	7,286.0	109.7	12.7	90.00	5,941.1	214.2	357.3	234.9	122.40	2.919	
13,700.0	7,375.0	7,286.0	7,286.0	111.4	12.7	90.00	5,941.1	214.2	415.8	291.6	124.14	3.349	
13,800.0	7,375.0	7,286.0	7,286.0	113.2	12.7	90.00	5,941.1	214.2	487.9	362.0	125.89	3.876	
13,900.0	7,375.0	7,286.0	7,286.0	114.9	12.7	90.00	5,941.1	214.2	568.6	440.9	127.63	4.455	
14,000.0	7,375.0	7,286.0	7,286.0	116.7	12.7	90.00	5,941.1	214.2	654.6	525.2	129.37	5.060	
14,100.0	7,375.0	7,286.0	7,286.0	118.4	12.7	90.00	5,941.1	214.2	744.1	613.0	131.12	5.675	
14,200.0	7,375.0	7,286.0	7,286.0	120.1	12.7	90.00	5,941.1	214.2	836.0	703.1	132.86	6.292	
14,300.0	7,375.0	7,286.0	7,286.0	121.9	12.7	90.00	5,941.1	214.2	929.5	794.9	134.60	6.906	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - JILLSON 0-6-22 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 73-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
2,000.0	1,997.9	2,264.1	2,189.7	3.7	9.9	-159.55	739.5	528.2	992.7	979.7	13.01	76.275	
2,100.0	2,097.8	2,339.7	2,260.4	3.9	10.4	-161.03	742.6	501.6	981.6	967.9	13.71	71.596	
2,200.0	2,197.6	2,416.2	2,332.2	4.1	10.9	-162.55	747.1	475.6	973.6	959.2	14.43	67.480	
2,300.0	2,297.4	2,509.0	2,418.6	4.3	11.6	-164.53	754.4	442.8	967.7	952.4	15.31	63.205	
2,400.0	2,397.2	2,602.5	2,504.9	4.5	12.3	-166.67	762.3	407.8	962.9	946.7	16.23	59.319	
2,500.0	2,497.1	2,706.0	2,600.1	4.7	13.1	-169.11	771.7	368.2	959.7	942.4	17.25	55.640	
2,600.0	2,596.9	2,794.0	2,681.0	4.9	13.7	-171.21	778.5	334.0	956.8	938.7	18.11	52.827	
2,700.0	2,696.7	2,895.8	2,775.4	5.1	14.4	-173.51	786.2	296.6	956.2	937.1	19.05	50.200	
2,800.0	2,796.5	3,002.1	2,874.5	5.3	15.1	-175.80	791.9	258.8	955.3	935.4	19.95	47.881	
2,895.2	2,891.6	3,096.1	2,962.5	5.5	15.8	-177.77	795.7	225.9	954.8	934.0	20.77	45.963	
2,900.0	2,896.3	3,099.6	2,965.7	5.5	15.8	-177.85	795.8	224.6	954.8	934.0	20.81	45.889	
3,000.0	2,996.2	3,172.0	3,033.1	5.7	16.3	-179.43	799.8	198.5	956.6	935.1	21.49	44.504	
3,100.0	3,096.0	3,242.9	3,098.9	5.9	16.8	178.99	805.3	172.7	961.9	939.7	22.17	43.380	
3,200.0	3,195.8	3,337.3	3,186.3	6.1	17.5	176.87	814.1	137.9	969.9	946.9	23.01	42.146	
3,300.0	3,295.6	3,432.7	3,274.2	6.3	18.2	174.71	822.6	101.8	978.9	955.0	23.86	41.031	
3,400.0	3,395.5	3,512.0	3,346.9	6.5	18.8	172.91	830.1	71.2	989.7	965.2	24.58	40.270	
7,600.0	7,364.0	7,640.8	7,363.9	13.5	32.6	-71.82	905.0	-595.6	941.4	914.6	26.82	35.108	
7,700.0	7,374.9	7,652.3	7,375.4	14.1	32.6	-86.78	905.1	-595.8	860.1	831.8	28.32	30.367	
7,800.0	7,375.0	7,653.5	7,376.6	14.9	32.6	-88.59	905.1	-595.8	782.3	753.2	29.07	26.913	
7,900.0	7,375.0	7,654.6	7,377.7	15.8	32.6	-88.71	905.1	-595.8	710.1	680.1	29.99	23.675	
8,000.0	7,375.0	7,655.7	7,378.8	16.8	32.6	-88.83	905.1	-595.8	645.3	614.2	31.05	20.783	
8,100.0	7,375.0	7,656.8	7,379.9	18.0	32.6	-88.96	905.1	-595.8	590.4	558.2	32.21	18.327	
8,200.0	7,375.0	7,658.0	7,381.0	19.3	32.6	-89.08	905.2	-595.8	548.4	514.9	33.47	16.385	
8,300.0	7,375.0	7,659.1	7,382.2	20.6	32.6	-89.21	905.2	-595.9	522.4	487.6	34.80	15.012	
8,389.2	7,375.0	7,660.1	7,383.2	21.8	32.6	-89.32	905.2	-595.9	514.7	478.7	36.03	14.284	CC
8,400.0	7,375.0	7,660.2	7,383.3	22.0	32.6	-89.33	905.2	-595.9	514.8	478.6	36.19	14.228	ES
8,500.0	7,375.0	7,661.4	7,384.5	23.4	32.6	-89.46	905.2	-595.9	526.5	488.9	37.62	13.995	SF
8,600.0	7,375.0	7,662.5	7,385.6	24.9	32.6	-89.59	905.2	-595.9	556.2	517.1	39.10	14.225	
8,700.0	7,375.0	7,663.7	7,386.8	26.4	32.6	-89.72	905.2	-595.9	601.3	560.7	40.61	14.806	
8,800.0	7,375.0	7,664.9	7,387.9	27.9	32.6	-89.85	905.2	-595.9	658.6	616.4	42.15	15.624	
8,900.0	7,375.0	7,666.0	7,389.1	29.5	32.6	-89.98	905.3	-595.9	725.2	681.4	43.71	16.589	
9,000.0	7,375.0	7,667.2	7,390.3	31.1	32.6	-90.11	905.3	-596.0	798.7	753.5	45.30	17.634	
9,100.0	7,375.0	7,668.4	7,391.5	32.7	32.6	-90.25	905.3	-596.0	877.6	830.7	46.90	18.713	
9,200.0	7,375.0	7,669.6	7,392.7	34.3	32.6	-90.38	905.3	-596.0	960.4	911.8	48.51	19.796	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - JILLSON 11-22 (EXISTING) - ENCANA WELL - GYRO

Offset Site Error: 0.0 ft

Survey Program: 100-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,700.0	7,375.0	7,299.8	7,297.9	59.5	12.9	-91.58	4,187.1	-243.0	994.8	922.6	72.20	13.779	
10,800.0	7,375.0	7,299.2	7,297.3	61.2	12.9	-91.38	4,187.1	-243.0	896.6	822.7	73.92	12.130	
10,900.0	7,375.0	7,298.5	7,296.7	62.9	12.9	-91.18	4,187.1	-243.0	798.8	723.2	75.64	10.562	
11,000.0	7,375.0	7,297.9	7,296.1	64.6	12.9	-90.98	4,187.1	-243.0	701.7	624.4	77.36	9.071	
11,100.0	7,375.0	7,297.3	7,295.4	66.3	12.9	-90.78	4,187.1	-243.0	605.5	526.5	79.08	7.657	
11,200.0	7,375.0	7,296.7	7,294.8	68.1	12.9	-90.59	4,187.1	-243.0	510.8	430.0	80.80	6.322	
11,300.0	7,375.0	7,296.1	7,294.2	69.8	12.9	-90.39	4,187.1	-243.0	418.5	336.0	82.53	5.072	
11,400.0	7,375.0	7,295.5	7,293.6	71.5	12.9	-90.20	4,187.1	-243.0	330.8	246.6	84.25	3.926	
11,500.0	7,375.0	7,294.9	7,293.0	73.2	12.9	-90.00	4,187.1	-243.0	252.4	166.4	85.98	2.935	
11,600.0	7,375.0	7,294.3	7,292.4	75.0	12.9	-89.81	4,187.1	-243.0	194.8	107.1	87.71	2.221	
11,678.7	7,375.0	7,293.8	7,291.9	76.3	12.9	-89.66	4,187.1	-243.0	178.2	89.1	89.07	2.000	CC, ES, SF
11,700.0	7,375.0	7,293.7	7,291.8	76.7	12.9	-89.62	4,187.1	-243.0	179.4	90.0	89.43	2.006	
11,800.0	7,375.0	7,293.1	7,291.2	78.4	12.9	-89.43	4,187.2	-243.0	215.5	124.4	91.16	2.364	
11,900.0	7,375.0	7,292.5	7,290.6	80.1	12.9	-89.24	4,187.2	-243.0	284.1	191.2	92.89	3.058	
12,000.0	7,375.0	7,291.9	7,290.0	81.9	12.9	-89.05	4,187.2	-243.0	367.4	272.7	94.61	3.883	
12,100.0	7,375.0	7,291.3	7,289.5	83.6	12.9	-88.86	4,187.2	-243.0	457.4	361.0	96.34	4.748	
12,200.0	7,375.0	7,290.7	7,288.9	85.3	12.9	-88.68	4,187.2	-243.0	550.9	452.8	98.07	5.617	
12,300.0	7,375.0	7,290.2	7,288.3	87.1	12.9	-88.49	4,187.2	-243.0	646.3	546.5	99.79	6.476	
12,400.0	7,375.0	7,289.6	7,287.7	88.8	12.9	-88.31	4,187.2	-243.0	742.9	641.4	101.52	7.318	
12,500.0	7,375.0	7,289.0	7,287.2	90.6	12.9	-88.13	4,187.2	-243.0	840.4	737.1	103.24	8.140	
12,600.0	7,375.0	7,288.5	7,286.6	92.3	12.9	-87.95	4,187.2	-243.0	938.3	833.3	104.97	8.939	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - JILLSON 12-22 (EXISTING) - ENCANA WELL - GYRO

Offset Site Error: 0.0 ft

Survey Program: 100-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,300.0	7,375.0	7,304.9	7,302.9	35.9	12.9	-79.24	2,728.6	-99.4	916.7	868.7	47.93	19.123	
9,400.0	7,375.0	7,306.0	7,304.0	37.6	12.9	-81.15	2,728.6	-99.4	816.9	767.1	49.77	16.414	
9,500.0	7,375.0	7,307.1	7,305.1	39.2	12.9	-82.22	2,728.7	-99.4	717.2	665.7	51.52	13.921	
9,600.0	7,375.0	7,308.2	7,306.2	40.9	12.9	-83.30	2,728.7	-99.4	617.6	564.3	53.26	11.594	
9,700.0	7,375.0	7,309.3	7,307.3	42.5	12.9	-84.37	2,728.7	-99.4	518.1	463.1	55.01	9.417	
9,800.0	7,375.0	7,310.4	7,308.4	44.2	12.9	-85.44	2,728.7	-99.4	418.8	362.1	56.76	7.380	
9,900.0	7,375.0	7,311.4	7,309.5	45.9	12.9	-86.51	2,728.7	-99.4	320.1	261.6	58.50	5.472	
10,000.0	7,375.0	7,312.5	7,310.6	47.6	12.9	-87.58	2,728.7	-99.4	222.5	162.2	60.23	3.694	
10,100.0	7,375.0	7,313.6	7,311.6	49.3	12.9	-88.64	2,728.7	-99.4	128.5	66.5	61.95	2.074	
10,200.0	7,375.0	7,314.6	7,312.7	50.9	12.9	-89.69	2,728.7	-99.4	58.6	-5.1	63.69	0.920	Level 1
10,216.2	7,375.0	7,314.8	7,312.9	51.2	12.9	-89.87	2,728.7	-99.4	56.3	-7.6	63.97	0.880	Level 1, CC, ES, SF
10,300.0	7,375.0	7,315.7	7,313.8	52.6	12.9	-90.77	2,728.7	-99.4	100.5	35.1	65.40	1.536	
10,400.0	7,375.0	7,316.8	7,314.8	54.3	12.9	-91.85	2,728.8	-99.4	191.6	124.5	67.08	2.857	
10,500.0	7,375.0	7,317.8	7,315.9	56.0	12.9	-92.71	2,728.8	-99.5	288.6	219.9	68.75	4.198	
10,600.0	7,375.0	7,318.9	7,316.9	57.8	12.9	-93.67	2,728.8	-99.5	386.9	316.5	70.40	5.496	
10,700.0	7,375.0	7,319.9	7,318.0	59.5	12.9	-94.64	2,728.8	-99.5	485.9	413.9	72.03	6.746	
10,800.0	7,375.0	7,321.0	7,319.0	61.2	12.9	-95.61	2,728.8	-99.5	585.2	511.6	73.64	7.948	
10,900.0	7,375.0	7,322.0	7,320.1	62.9	12.9	-96.57	2,728.8	-99.5	684.8	609.5	75.22	9.103	
11,000.0	7,375.0	7,323.0	7,321.1	64.6	12.9	-97.52	2,728.8	-99.5	784.4	707.6	76.79	10.215	
11,100.0	7,375.0	7,324.1	7,322.1	66.3	12.9	-98.46	2,728.8	-99.5	884.1	805.8	78.33	11.287	
11,200.0	7,375.0	7,325.1	7,323.1	68.1	12.9	-99.40	2,728.8	-99.5	983.9	904.1	79.85	12.322	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - JILLSON 14-22 (EXISTING) - ENCANA WELL - GYRO

Offset Site Error: 0.0 ft

Survey Program: 100-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	9.37	259.4	42.8	263.4				
100.0	100.0	87.2	87.2	0.2	0.2	9.62	258.7	43.8	262.4	262.1	0.31	848.375	
200.0	200.0	186.8	186.8	0.3	0.3	10.26	256.9	46.5	261.1	260.5	0.66	393.727	
300.0	300.0	285.9	285.8	0.5	0.5	10.79	255.6	48.7	260.3	259.2	1.01	256.946	
400.0	400.0	385.2	385.1	0.7	0.7	11.13	254.8	50.1	259.7	258.3	1.36	190.819	
500.0	500.0	484.4	484.3	0.8	0.9	11.32	254.4	50.9	259.4	257.7	1.71	151.942	
600.0	600.0	584.9	584.8	1.0	1.0	11.40	254.2	51.2	259.3	257.2	2.06	126.126	
620.8	620.8	605.9	605.8	1.1	1.1	178.12	254.1	51.2	259.2	257.1	2.13	121.651	
700.0	700.0	685.2	685.1	1.2	1.2	178.10	253.8	51.0	259.8	257.3	2.41	108.001	
800.0	800.0	784.8	784.7	1.4	1.4	178.01	253.5	50.5	262.0	259.3	2.75	95.261	
900.0	899.9	884.9	884.8	1.6	1.6	177.92	253.4	49.9	266.1	263.0	3.10	85.932	
1,000.0	999.7	984.0	983.9	1.7	1.7	177.78	253.3	49.0	271.6	268.2	3.44	78.935	
1,100.0	1,099.5	1,084.2	1,084.1	1.9	1.9	177.58	253.4	47.8	277.5	273.7	3.79	73.229	
1,200.0	1,199.3	1,183.8	1,183.7	2.1	2.1	177.37	253.5	46.5	283.2	279.1	4.14	68.470	
1,300.0	1,299.2	1,283.0	1,282.9	2.3	2.2	177.11	253.8	45.0	289.1	284.6	4.48	64.491	
1,400.0	1,399.0	1,383.1	1,382.9	2.5	2.4	176.86	254.1	43.4	295.1	290.3	4.83	61.079	
1,500.0	1,498.8	1,482.9	1,482.7	2.7	2.6	176.62	254.4	41.8	301.1	295.9	5.18	58.113	
1,600.0	1,598.6	1,582.7	1,582.6	2.9	2.8	176.40	254.7	40.3	307.0	301.5	5.53	55.522	
1,700.0	1,698.5	1,682.7	1,682.5	3.1	2.9	176.20	255.0	38.9	313.0	307.1	5.88	53.232	
1,800.0	1,798.3	1,782.2	1,782.0	3.3	3.1	176.02	255.2	37.5	318.9	312.7	6.23	51.204	
1,900.0	1,898.1	1,883.2	1,882.9	3.5	3.3	175.86	255.4	36.2	324.8	318.2	6.58	49.363	
2,000.0	1,997.9	1,983.9	1,983.6	3.7	3.5	175.80	255.1	35.4	330.3	323.4	6.93	47.662	
2,100.0	2,097.8	2,084.0	2,083.8	3.9	3.6	175.80	254.6	34.9	335.7	328.4	7.28	46.108	
2,200.0	2,197.6	2,183.9	2,183.7	4.1	3.8	175.80	254.1	34.3	341.0	333.3	7.63	44.692	
2,300.0	2,297.4	2,283.2	2,283.0	4.3	4.0	175.74	253.7	33.5	346.3	338.3	7.98	43.413	
2,400.0	2,397.2	2,383.1	2,382.9	4.5	4.2	175.64	253.4	32.4	351.8	343.5	8.33	42.247	
2,500.0	2,497.1	2,483.7	2,483.5	4.7	4.3	175.51	253.1	31.0	357.2	348.5	8.68	41.155	
2,600.0	2,596.9	2,583.6	2,583.4	4.9	4.5	175.36	252.6	29.5	362.4	353.3	9.03	40.136	
2,700.0	2,696.7	2,683.4	2,683.1	5.1	4.7	175.21	252.1	28.0	367.6	358.2	9.38	39.197	
2,800.0	2,796.5	2,783.1	2,782.9	5.3	4.9	175.05	251.7	26.4	372.9	363.1	9.73	38.327	
2,900.0	2,896.3	2,883.8	2,883.5	5.5	5.0	174.87	251.3	24.6	378.1	368.0	10.08	37.504	
3,000.0	2,996.2	2,982.9	2,982.6	5.7	5.2	174.68	250.8	22.7	383.2	372.8	10.43	36.740	
3,100.0	3,096.0	3,082.3	3,082.0	5.9	5.4	174.50	250.4	20.9	388.6	377.8	10.78	36.042	
3,200.0	3,195.8	3,182.6	3,182.2	6.1	5.6	174.36	250.1	19.3	393.9	382.8	11.13	35.386	
3,300.0	3,295.6	3,282.2	3,281.9	6.3	5.7	174.27	249.7	18.0	399.2	387.7	11.48	34.770	
3,400.0	3,395.5	3,381.3	3,380.9	6.5	5.9	174.15	249.4	16.6	404.7	392.8	11.83	34.202	
3,500.0	3,495.3	3,480.6	3,480.2	6.7	6.1	173.99	249.3	14.8	410.3	398.1	12.18	33.679	
3,600.0	3,595.1	3,580.1	3,579.6	6.9	6.3	173.81	249.4	12.9	416.0	403.5	12.53	33.194	
3,700.0	3,694.9	3,679.5	3,679.0	7.1	6.4	173.67	249.6	11.1	421.8	409.0	12.88	32.742	
3,800.0	3,794.8	3,777.9	3,777.5	7.3	6.6	173.53	249.9	9.5	427.9	414.6	13.23	32.333	
3,900.0	3,894.6	3,876.5	3,876.0	7.5	6.8	173.41	250.5	8.0	434.2	420.6	13.58	31.970	
4,000.0	3,994.4	3,974.2	3,973.8	7.7	7.0	173.30	251.4	6.6	440.9	427.0	13.93	31.652	
4,100.0	4,094.2	4,073.2	4,072.7	7.9	7.1	173.15	252.8	4.9	448.0	433.7	14.28	31.371	
4,200.0	4,194.1	4,171.0	4,170.5	8.1	7.3	172.98	254.4	3.0	455.3	440.6	14.63	31.121	
4,300.0	4,293.9	4,265.4	4,264.8	8.3	7.5	172.78	256.7	0.9	463.3	448.3	14.97	30.943	
4,400.0	4,393.7	4,362.1	4,361.4	8.6	7.7	172.53	260.1	-1.5	472.4	457.1	15.32	30.837	
4,500.0	4,493.5	4,461.3	4,460.5	8.8	7.8	172.29	263.8	-3.9	481.8	466.1	15.67	30.740	
4,600.0	4,593.4	4,561.3	4,560.5	9.0	8.0	172.06	267.6	-6.3	491.2	475.2	16.03	30.646	
4,700.0	4,693.2	4,662.5	4,661.6	9.2	8.2	171.86	271.2	-8.5	500.4	484.0	16.38	30.539	
4,800.0	4,793.0	4,763.6	4,762.6	9.4	8.4	171.69	274.3	-10.6	509.2	492.4	16.74	30.418	
4,900.0	4,892.8	4,864.8	4,863.7	9.6	8.6	171.55	277.2	-12.5	517.7	500.6	17.09	30.287	
5,000.0	4,992.6	4,965.7	4,964.6	9.8	8.7	171.42	279.8	-14.4	526.0	508.6	17.45	30.145	

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 Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - JILLSON 14-22 (EXISTING) - ENCANA WELL - GYRO — **Offset Site Error:** 0.0 ft

Survey Program: 100-Geolink MWD — **Offset Well Error:** 0.0 ft

Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,092.5	5,066.1	5,064.9	10.0	8.9	171.30	282.2	-16.2	534.1	516.3	17.80	30.000	
5,200.0	5,192.3	5,166.6	5,165.4	10.2	9.1	171.20	284.5	-17.9	542.0	523.9	18.16	29.854	
5,300.0	5,292.1	5,266.4	5,265.1	10.4	9.3	171.11	286.6	-19.4	549.9	531.4	18.51	29.710	
5,400.0	5,391.9	5,365.9	5,364.6	10.6	9.4	171.04	288.7	-20.8	557.8	538.9	18.86	29.575	
5,500.0	5,491.8	5,465.7	5,464.4	10.8	9.6	170.99	290.8	-22.1	565.6	546.4	19.21	29.444	
5,600.0	5,591.6	5,566.2	5,564.9	11.0	9.8	170.96	292.9	-23.2	573.4	553.9	19.56	29.314	
5,700.0	5,691.4	5,666.7	5,665.3	11.2	10.0	170.94	294.7	-24.2	581.1	561.2	19.91	29.181	
5,800.0	5,791.2	5,766.4	5,765.0	11.4	10.2	170.93	296.5	-25.1	588.7	568.4	20.26	29.050	
5,900.0	5,891.1	5,870.6	5,869.2	11.6	10.3	170.92	298.1	-26.0	596.0	575.4	20.62	28.904	
6,000.0	5,990.9	5,972.2	5,970.8	11.8	10.5	170.98	298.9	-26.3	602.6	581.6	20.97	28.733	
6,100.0	6,090.7	6,073.6	6,072.2	12.0	10.7	171.06	299.5	-26.4	609.0	587.7	21.32	28.562	
6,200.0	6,190.5	6,173.5	6,172.0	12.2	10.9	171.12	299.9	-26.6	615.2	593.6	21.67	28.390	
6,300.0	6,290.4	6,273.3	6,271.9	12.4	11.0	171.17	300.3	-27.0	621.5	599.5	22.02	28.226	
6,400.0	6,390.2	6,373.2	6,371.8	12.6	11.2	171.22	300.7	-27.3	627.8	605.4	22.37	28.065	
6,500.0	6,490.0	6,472.6	6,471.2	12.8	11.4	171.26	301.2	-27.7	634.0	611.3	22.72	27.911	
6,600.0	6,589.8	6,572.2	6,570.8	13.0	11.6	171.30	301.7	-28.1	640.4	617.3	23.06	27.764	
6,700.0	6,689.7	6,671.9	6,670.5	13.2	11.7	171.34	302.2	-28.5	646.7	623.3	23.41	27.622	
6,800.0	6,789.5	6,772.0	6,770.6	13.4	11.9	153.21	302.7	-28.9	652.7	628.9	23.77	27.456	
6,900.0	6,889.1	6,873.2	6,871.8	13.5	12.1	9.45	303.1	-29.1	646.6	622.8	23.88	27.079	
7,000.0	6,986.2	6,971.4	6,970.0	13.4	12.3	7.28	303.2	-29.6	623.2	599.7	23.51	26.513	
7,100.0	7,077.6	7,064.6	7,063.2	13.3	12.4	7.32	303.2	-30.3	583.1	560.5	22.69	25.702	
7,200.0	7,160.6	7,148.2	7,146.8	13.1	12.6	8.40	302.9	-31.0	527.7	506.2	21.51	24.528	
7,300.0	7,232.8	7,220.1	7,218.6	13.0	12.7	10.82	302.7	-31.7	458.8	438.7	20.16	22.765	
7,400.0	7,291.8	7,278.9	7,277.5	13.0	12.8	15.94	302.5	-32.2	378.8	359.8	19.00	19.938	
7,500.0	7,336.0	7,322.5	7,321.1	13.2	12.9	27.74	302.4	-32.5	290.2	271.0	19.20	15.114	
7,600.0	7,364.0	7,350.0	7,348.6	13.5	12.9	55.57	302.3	-32.6	196.7	173.3	23.44	8.391	
7,700.0	7,374.9	7,360.6	7,359.2	14.1	12.9	88.22	302.3	-32.7	104.5	77.6	26.88	3.887	
7,790.2	7,376.0	7,361.6	7,360.2	14.8	12.9	90.24	302.3	-32.7	52.7	25.1	27.59	1.911	CC, ES, SF
7,800.0	7,375.0	7,360.6	7,359.2	14.9	12.9	90.23	302.3	-32.7	53.6	25.9	27.66	1.938	
7,900.0	7,375.0	7,360.5	7,359.1	15.8	12.9	90.07	302.3	-32.7	121.8	93.2	28.59	4.259	
8,000.0	7,375.0	7,360.4	7,358.9	16.8	12.9	89.92	302.3	-32.7	216.3	186.6	29.64	7.296	
8,100.0	7,375.0	7,360.2	7,358.8	18.0	12.9	89.76	302.3	-32.7	314.2	283.4	30.81	10.199	
8,200.0	7,375.0	7,360.1	7,358.6	19.3	12.9	89.61	302.3	-32.7	413.1	381.1	32.06	12.885	
8,300.0	7,375.0	7,359.9	7,358.5	20.6	12.9	89.45	302.3	-32.7	512.5	479.1	33.39	15.347	
8,400.0	7,375.0	7,359.8	7,358.3	22.0	12.9	89.29	302.3	-32.7	612.0	577.3	34.78	17.597	
8,500.0	7,375.0	7,359.6	7,358.2	23.4	12.9	89.13	302.3	-32.7	711.7	675.5	36.22	19.651	
8,600.0	7,375.0	7,359.5	7,358.1	24.9	12.9	88.97	302.3	-32.7	811.5	773.8	37.69	21.528	
8,700.0	7,375.0	7,359.3	7,357.9	26.4	12.9	88.81	302.3	-32.7	911.3	872.1	39.20	23.244	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - JILLSON 2-8-22 (EXISTING) - ENCANA WELL - SURVEYS — **Offset Site Error:** 0.0 ft

Survey Program: 73-Geolink MWD — **Offset Well Error:** 0.0 ft

Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
1,500.0	1,498.8	1,719.7	1,690.6	2.7	5.5	-127.00	346.6	893.3	999.1	992.0	7.06	141.454	
1,600.0	1,598.6	1,831.4	1,798.6	2.9	6.1	-126.13	320.2	882.8	984.4	976.7	7.68	128.102	
1,700.0	1,698.5	1,936.4	1,899.9	3.1	6.6	-125.28	294.8	871.8	968.7	960.4	8.30	116.718	
1,800.0	1,798.3	2,033.8	1,993.7	3.3	7.0	-124.45	271.0	861.4	952.9	944.1	8.89	107.176	
1,900.0	1,898.1	2,137.3	2,093.6	3.5	7.6	-123.60	246.6	849.9	937.3	927.8	9.51	98.609	
2,000.0	1,997.9	2,241.4	2,193.9	3.7	8.1	-122.70	221.3	837.5	920.8	910.7	10.15	90.728	
2,100.0	2,097.8	2,335.4	2,284.2	3.9	8.6	-121.81	197.9	826.5	904.6	893.8	10.77	84.028	
2,200.0	2,197.6	2,433.9	2,379.1	4.1	9.0	-120.87	173.8	815.1	888.8	877.4	11.40	77.936	
2,300.0	2,297.4	2,527.2	2,468.9	4.3	9.5	-119.94	150.9	804.4	873.4	861.3	12.05	72.509	
2,400.0	2,397.2	2,639.2	2,576.7	4.5	10.1	-118.81	123.7	791.0	857.8	845.0	12.76	67.211	
2,500.0	2,497.1	2,745.9	2,679.1	4.7	10.6	-117.71	97.5	776.4	840.7	827.3	13.48	62.359	
2,600.0	2,596.9	2,845.6	2,774.5	4.9	11.2	-116.59	72.3	762.6	823.7	809.5	14.19	58.048	
2,700.0	2,696.7	2,936.8	2,862.0	5.1	11.6	-115.54	49.6	749.8	806.8	791.9	14.86	54.283	
2,800.0	2,796.5	3,023.4	2,945.1	5.3	12.1	-114.51	28.1	738.8	791.5	776.0	15.52	51.002	
2,900.0	2,896.3	3,115.8	3,034.1	5.5	12.5	-113.39	5.7	728.0	777.6	761.4	16.22	47.946	
3,000.0	2,996.2	3,219.7	3,133.9	5.7	13.1	-112.02	-20.4	716.0	764.1	747.1	17.02	44.892	
3,100.0	3,096.0	3,322.8	3,232.7	5.9	13.6	-110.55	-47.1	703.2	750.0	732.2	17.84	42.051	
3,200.0	3,195.8	3,421.5	3,327.3	6.1	14.2	-109.16	-72.0	690.3	735.9	717.3	18.62	39.522	
3,300.0	3,295.6	3,514.6	3,416.8	6.3	14.6	-107.84	-94.8	678.4	722.6	703.2	19.37	37.309	
3,400.0	3,395.5	3,616.8	3,515.2	6.5	15.1	-106.41	-119.1	665.3	709.7	689.5	20.16	35.207	
3,500.0	3,495.3	3,718.4	3,613.2	6.7	15.6	-105.04	-142.0	651.3	696.3	675.4	20.93	33.274	
3,600.0	3,595.1	3,801.2	3,693.3	6.9	16.0	-103.95	-159.9	640.3	683.9	662.3	21.58	31.694	
3,700.0	3,694.9	3,892.5	3,782.1	7.1	16.4	-102.80	-178.7	630.6	674.4	652.2	22.25	30.311	
3,800.0	3,794.8	3,988.4	3,875.8	7.3	16.8	-101.77	-196.0	620.1	665.0	642.2	22.89	29.060	
3,900.0	3,894.6	4,077.9	3,963.9	7.5	17.1	-101.01	-209.6	611.6	657.1	633.7	23.43	28.043	
4,000.0	3,994.4	4,172.2	4,057.1	7.7	17.4	-100.40	-221.7	603.8	650.5	626.5	23.95	27.157	
4,100.0	4,094.2	4,267.7	4,151.7	7.9	17.6	-99.89	-232.6	596.5	644.5	620.1	24.45	26.360	
4,200.0	4,194.1	4,365.0	4,248.3	8.1	17.9	-99.49	-242.3	589.7	639.2	614.3	24.91	25.661	
4,300.0	4,293.9	4,467.0	4,349.7	8.3	18.1	-99.30	-250.0	582.7	633.8	608.5	25.32	25.031	
4,400.0	4,393.7	4,558.6	4,441.0	8.6	18.2	-99.33	-254.6	577.1	629.0	603.4	25.66	24.515	
4,500.0	4,493.5	4,656.6	4,538.8	8.8	18.4	-99.42	-259.0	572.0	625.1	599.1	26.00	24.038	
4,600.0	4,593.4	4,751.3	4,633.4	9.0	18.6	-99.58	-262.5	567.3	621.3	595.0	26.31	23.613	
4,700.0	4,693.2	4,841.7	4,723.6	9.2	18.7	-99.86	-264.5	564.3	619.2	592.6	26.58	23.300	
4,800.0	4,793.0	4,935.7	4,817.6	9.4	18.7	-100.29	-265.3	562.4	618.2	591.4	26.81	23.063	
4,900.0	4,892.8	5,033.5	4,915.4	9.6	18.8	-100.86	-264.8	561.2	618.1	591.0	27.02	22.877	
5,000.0	4,992.6	5,134.1	5,016.0	9.8	18.9	-101.49	-263.8	559.9	617.9	590.7	27.22	22.705	
5,100.0	5,092.5	5,234.6	5,116.5	10.0	19.0	-102.15	-262.5	558.5	617.7	590.3	27.41	22.533	
5,200.0	5,192.3	5,334.9	5,216.8	10.2	19.0	-102.80	-261.3	557.0	617.5	589.9	27.61	22.361	
5,245.1	5,237.3	5,378.8	5,260.6	10.3	19.1	-103.08	-260.7	556.4	617.4	589.7	27.70	22.289 CC	
5,300.0	5,292.1	5,432.1	5,314.0	10.4	19.1	-103.44	-260.0	555.7	617.5	589.7	27.81	22.208	
5,400.0	5,391.9	5,530.7	5,412.5	10.6	19.2	-104.12	-258.4	554.8	618.0	590.0	27.99	22.077	
5,500.0	5,491.8	5,632.5	5,514.3	10.8	19.2	-104.82	-256.7	553.7	618.4	590.2	28.18	21.943	
5,600.0	5,591.6	5,733.5	5,615.2	11.0	19.3	-105.50	-255.1	552.3	618.6	590.3	28.37	21.803	
5,700.0	5,691.4	5,833.8	5,715.6	11.2	19.4	-106.17	-253.7	550.8	618.8	590.2	28.57	21.662	
5,800.0	5,791.2	5,935.3	5,817.1	11.4	19.5	-106.83	-252.5	549.1	618.9	590.1	28.78	21.507	
5,900.0	5,891.1	6,036.7	5,918.4	11.6	19.6	-107.43	-251.8	547.1	618.7	589.8	28.99	21.342	
5,977.9	5,968.8	6,113.4	5,995.1	11.7	19.7	-107.88	-251.4	545.6	618.7	589.5	29.16	21.218	
6,000.0	5,990.9	6,135.2	6,016.9	11.8	19.7	-108.01	-251.3	545.2	618.7	589.5	29.20	21.185	
6,100.0	6,090.7	6,233.6	6,115.3	12.0	19.8	-108.61	-250.4	543.5	618.9	589.5	29.41	21.043	
6,200.0	6,190.5	6,332.2	6,213.8	12.2	19.9	-109.24	-249.4	542.0	619.3	589.7	29.61	20.917	
6,300.0	6,290.4	6,430.4	6,312.1	12.4	20.0	-109.87	-248.2	540.6	620.1	590.3	29.81	20.799	
6,400.0	6,390.2	6,528.6	6,410.2	12.6	20.1	-110.47	-247.3	539.6	621.2	591.2	30.03	20.687	

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 Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - JILLSON 2-8-22 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 73-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
6,500.0	6,490.0	6,627.7	6,509.3	12.8	20.2	-111.04	-246.6	538.8	622.6	592.3	30.24	20.585	
6,600.0	6,589.8	6,727.0	6,608.7	13.0	20.3	-111.64	-245.7	538.0	624.1	593.6	30.46	20.491	
6,700.0	6,689.7	6,826.2	6,707.8	13.2	20.4	-112.23	-244.8	537.3	625.7	595.1	30.67	20.401	
6,800.0	6,789.5	6,925.6	6,807.2	13.4	20.5	-130.98	-244.0	536.7	627.5	596.6	30.88	20.319	
6,900.0	6,889.1	7,025.5	6,907.1	13.5	20.6	85.63	-243.3	536.1	627.3	596.1	31.15	20.133	
7,000.0	6,986.2	7,122.3	7,003.9	13.4	20.7	85.31	-242.9	535.6	624.6	593.1	31.57	19.783	
7,100.0	7,077.6	7,213.3	7,094.9	13.3	20.7	88.14	-242.4	535.2	621.6	589.6	32.04	19.403	
7,158.5	7,127.4	7,262.9	7,144.5	13.2	20.8	90.34	-242.1	535.0	620.9	588.6	32.27	19.240 ES	
7,200.0	7,160.6	7,295.9	7,177.5	13.1	20.8	91.97	-241.9	534.9	621.4	589.0	32.40	19.178 SF	
7,300.0	7,232.8	7,367.6	7,249.2	13.0	20.9	95.65	-241.4	534.7	627.7	595.1	32.56	19.276	
7,400.0	7,291.8	7,426.6	7,308.2	13.0	21.0	98.15	-241.0	534.7	644.1	611.5	32.57	19.772	
7,500.0	7,336.0	7,471.1	7,352.7	13.2	21.0	98.65	-240.7	534.7	673.0	640.3	32.63	20.624	
7,600.0	7,364.0	7,499.6	7,381.2	13.5	21.0	96.47	-240.5	534.7	714.9	681.9	32.94	21.703	
7,700.0	7,374.9	7,511.2	7,392.8	14.1	21.0	91.17	-240.4	534.7	768.3	734.8	33.53	22.914	
7,800.0	7,375.0	7,512.1	7,393.7	14.9	21.0	90.34	-240.4	534.7	830.7	796.4	34.30	24.222	
7,900.0	7,375.0	7,512.9	7,394.4	15.8	21.0	90.41	-240.4	534.7	899.9	864.6	35.22	25.549	
8,000.0	7,375.0	7,513.6	7,395.2	16.8	21.0	90.48	-240.4	534.7	974.4	938.1	36.28	26.858	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - JILLSON 3 (EXISTING) - FOUNDATION WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 5039-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	-9.35	266.7	-43.9	271.0				
100.0	100.0	80.0	80.0	0.2	0.1	-9.35	266.7	-43.9	270.3	270.0	0.29	926.590	
200.0	200.0	180.0	180.0	0.3	0.3	-9.35	266.7	-43.9	270.3	269.6	0.64	421.794	
300.0	300.0	280.0	280.0	0.5	0.5	-9.35	266.7	-43.9	270.3	269.3	0.99	273.043	
400.0	400.0	380.0	380.0	0.7	0.7	-9.35	266.7	-43.9	270.3	268.9	1.34	201.856	
500.0	500.0	480.0	480.0	0.8	0.8	-9.35	266.7	-43.9	270.3	268.6	1.69	160.112	
600.0	600.0	580.0	580.0	1.0	1.0	-9.35	266.7	-43.9	270.3	268.2	2.04	132.675	CC, ES
700.0	700.0	680.0	680.0	1.2	1.2	157.44	266.7	-43.9	271.1	268.7	2.39	113.610	
800.0	800.0	780.0	780.0	1.4	1.4	157.64	266.7	-43.9	273.5	270.7	2.73	100.007	
900.0	899.9	879.9	879.9	1.6	1.5	157.97	266.7	-43.9	277.5	274.4	3.08	90.006	
1,000.0	999.7	979.7	979.7	1.7	1.7	158.40	266.7	-43.9	282.9	279.5	3.43	82.403	
1,100.0	1,099.5	1,079.5	1,079.5	1.9	1.9	158.83	266.7	-43.9	288.4	284.6	3.78	76.226	
1,200.0	1,199.3	1,179.3	1,179.3	2.1	2.1	159.25	266.7	-43.9	294.0	289.8	4.13	71.098	
1,300.0	1,299.2	1,279.2	1,279.2	2.3	2.2	159.65	266.7	-43.9	299.5	295.0	4.49	66.776	
1,400.0	1,399.0	1,379.0	1,379.0	2.5	2.4	160.04	266.7	-43.9	305.1	300.3	4.84	63.083	
1,500.0	1,498.8	1,478.8	1,478.8	2.7	2.6	160.41	266.7	-43.9	310.7	305.5	5.19	59.893	
1,600.0	1,598.6	1,578.6	1,578.6	2.9	2.8	160.77	266.7	-43.9	316.3	310.7	5.54	57.110	
1,700.0	1,698.5	1,678.5	1,678.5	3.1	2.9	161.12	266.7	-43.9	321.9	316.0	5.89	54.661	
1,800.0	1,798.3	1,778.3	1,778.3	3.3	3.1	161.46	266.7	-43.9	327.5	321.3	6.24	52.490	
1,900.0	1,898.1	1,878.1	1,878.1	3.5	3.3	161.78	266.7	-43.9	333.1	326.5	6.59	50.553	
2,000.0	1,997.9	1,977.9	1,977.9	3.7	3.5	162.10	266.7	-43.9	338.8	331.8	6.94	48.813	
2,100.0	2,097.8	2,077.8	2,077.8	3.9	3.6	162.40	266.7	-43.9	344.4	337.1	7.29	47.243	
2,200.0	2,197.6	2,177.6	2,177.6	4.1	3.8	162.69	266.7	-43.9	350.1	342.4	7.64	45.818	
2,300.0	2,297.4	2,277.4	2,277.4	4.3	4.0	162.98	266.7	-43.9	355.8	347.8	7.99	44.520	
2,400.0	2,397.2	2,377.2	2,377.2	4.5	4.1	163.25	266.7	-43.9	361.4	353.1	8.34	43.333	
2,500.0	2,497.1	2,477.1	2,477.1	4.7	4.3	163.52	266.7	-43.9	367.1	358.4	8.69	42.242	
2,600.0	2,596.9	2,576.9	2,576.9	4.9	4.5	163.78	266.7	-43.9	372.8	363.8	9.04	41.237	
2,700.0	2,696.7	2,676.7	2,676.7	5.1	4.7	164.03	266.7	-43.9	378.5	369.1	9.39	40.308	
2,800.0	2,796.5	2,776.5	2,776.5	5.3	4.8	164.27	266.7	-43.9	384.2	374.5	9.74	39.447	
2,900.0	2,896.3	2,876.3	2,876.3	5.5	5.0	164.51	266.7	-43.9	389.9	379.9	10.09	38.646	
3,000.0	2,996.2	2,976.2	2,976.2	5.7	5.2	164.74	266.7	-43.9	395.7	385.2	10.44	37.900	
3,100.0	3,096.0	3,076.0	3,076.0	5.9	5.4	164.96	266.7	-43.9	401.4	390.6	10.79	37.203	
3,200.0	3,195.8	3,175.8	3,175.8	6.1	5.5	165.18	266.7	-43.9	407.1	396.0	11.14	36.550	
3,300.0	3,295.6	3,275.6	3,275.6	6.3	5.7	165.39	266.7	-43.9	412.9	401.4	11.49	35.938	
3,400.0	3,395.5	3,375.5	3,375.5	6.5	5.9	165.59	266.7	-43.9	418.6	406.8	11.84	35.363	
3,500.0	3,495.3	3,475.3	3,475.3	6.7	6.1	165.79	266.7	-43.9	424.4	412.2	12.19	34.821	
3,600.0	3,595.1	3,575.1	3,575.1	6.9	6.2	165.99	266.7	-43.9	430.1	417.6	12.54	34.310	
3,700.0	3,694.9	3,674.9	3,674.9	7.1	6.4	166.18	266.7	-43.9	435.9	423.0	12.89	33.827	
3,800.0	3,794.8	3,774.8	3,774.8	7.3	6.6	166.36	266.7	-43.9	441.6	428.4	13.23	33.370	
3,900.0	3,894.6	3,874.6	3,874.6	7.5	6.8	166.54	266.7	-43.9	447.4	433.8	13.58	32.937	
4,000.0	3,994.4	3,974.4	3,974.4	7.7	6.9	166.71	266.7	-43.9	453.2	439.2	13.93	32.526	
4,100.0	4,094.2	4,074.2	4,074.2	7.9	7.1	166.88	266.7	-43.9	459.0	444.7	14.28	32.135	
4,200.0	4,194.1	4,174.1	4,174.1	8.1	7.3	167.05	266.7	-43.9	464.7	450.1	14.63	31.764	
4,300.0	4,293.9	4,273.9	4,273.9	8.3	7.5	167.21	266.7	-43.9	470.5	455.5	14.98	31.410	
4,400.0	4,393.7	4,373.7	4,373.7	8.6	7.6	167.37	266.7	-43.9	476.3	461.0	15.33	31.072	
4,500.0	4,493.5	4,473.5	4,473.5	8.8	7.8	167.52	266.7	-43.9	482.1	466.4	15.68	30.750	
4,600.0	4,593.4	4,573.4	4,573.4	9.0	8.0	167.67	266.7	-43.9	487.9	471.9	16.03	30.442	
4,700.0	4,693.2	4,673.2	4,673.2	9.2	8.2	167.82	266.7	-43.9	493.7	477.3	16.38	30.148	
4,800.0	4,793.0	4,773.0	4,773.0	9.4	8.3	167.96	266.7	-43.9	499.5	482.8	16.72	29.866	
4,900.0	4,892.8	4,872.8	4,872.8	9.6	8.5	168.10	266.7	-43.9	505.3	488.2	17.07	29.596	
5,000.0	4,992.6	4,972.6	4,972.6	9.8	8.7	168.24	266.7	-43.9	511.1	493.7	17.42	29.336	
5,100.0	5,092.5	5,039.0	5,039.0	10.0	8.8	168.33	266.7	-43.9	518.0	500.3	17.71	29.244	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 Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - JILLSON 3 (EXISTING) - FOUNDATION WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 5039-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,192.3	5,039.0	5,039.0	10.2	8.8	168.33	266.7	-43.9	539.5	521.6	17.89	30.156	
5,300.0	5,292.1	5,039.0	5,039.0	10.4	8.8	168.33	266.7	-43.9	577.7	559.6	18.06	31.978	
5,400.0	5,391.9	5,039.0	5,039.0	10.6	8.8	168.33	266.7	-43.9	629.6	611.4	18.24	34.517	
5,500.0	5,491.8	5,039.0	5,039.0	10.8	8.8	168.33	266.7	-43.9	692.2	673.7	18.42	37.584	
5,600.0	5,591.6	5,039.0	5,039.0	11.0	8.8	168.33	266.7	-43.9	762.7	744.1	18.59	41.025	
5,700.0	5,691.4	5,039.0	5,039.0	11.2	8.8	168.33	266.7	-43.9	839.3	820.6	18.77	44.721	
5,800.0	5,791.2	5,039.0	5,039.0	11.4	8.8	168.33	266.7	-43.9	920.4	901.5	18.94	48.586	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3A-22H-M268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	12.0	12.0	0.0	0.0	-89.98	0.0	-20.1	20.1				
100.0	100.0	112.0	112.0	0.2	0.2	-89.98	0.0	-20.1	20.1	19.8	0.30	66.306	
162.1	162.1	174.1	174.1	0.3	0.3	-89.98	0.0	-20.1	20.1	19.6	0.52	38.684	CC
200.0	200.0	212.0	212.0	0.3	0.3	-90.00	0.0	-20.1	20.1	19.5	0.65	30.862	ES
300.0	300.0	311.7	311.7	0.5	0.5	-92.04	-0.7	-20.9	20.9	19.9	1.00	20.903	
400.0	400.0	411.4	411.3	0.7	0.7	-96.67	-2.7	-23.0	23.1	21.8	1.35	17.112	
500.0	500.0	510.9	510.8	0.8	0.9	-102.50	-5.8	-26.2	26.9	25.2	1.70	15.821	
600.0	600.0	610.3	609.9	1.0	1.1	-108.24	-10.1	-30.8	32.4	30.4	2.05	15.842	
700.0	700.0	709.8	709.2	1.2	1.3	54.71	-15.4	-36.2	39.0	36.6	2.41	16.194	
800.0	800.0	809.7	808.7	1.4	1.5	53.74	-20.7	-41.8	44.6	41.9	2.76	16.171	
900.0	899.9	909.6	908.3	1.6	1.7	54.61	-26.0	-47.4	49.3	46.2	3.12	15.793	
1,000.0	999.7	1,009.5	1,007.9	1.7	1.9	56.62	-31.4	-53.0	53.2	49.7	3.49	15.230	
1,100.0	1,099.5	1,109.4	1,107.5	1.9	2.1	58.49	-36.7	-58.6	57.0	53.2	3.87	14.749	
1,200.0	1,199.3	1,209.3	1,207.2	2.1	2.4	60.11	-42.0	-64.2	60.9	56.7	4.25	14.352	
1,300.0	1,299.2	1,309.2	1,306.8	2.3	2.6	61.55	-47.4	-69.7	64.9	60.3	4.63	14.018	
1,400.0	1,399.0	1,409.1	1,406.4	2.5	2.8	62.81	-52.7	-75.3	68.9	63.8	5.01	13.735	
1,500.0	1,498.8	1,509.0	1,506.0	2.7	3.0	63.94	-58.0	-80.9	72.9	67.5	5.40	13.492	
1,600.0	1,598.6	1,608.9	1,605.6	2.9	3.2	64.95	-63.4	-86.5	76.9	71.1	5.79	13.281	
1,700.0	1,698.5	1,708.8	1,705.2	3.1	3.4	65.86	-68.7	-92.1	81.0	74.8	6.18	13.096	
1,800.0	1,798.3	1,808.7	1,804.8	3.3	3.7	66.68	-74.0	-97.7	85.1	78.5	6.58	12.934	
1,900.0	1,898.1	1,908.7	1,904.4	3.5	3.9	67.43	-79.4	-103.2	89.1	82.2	6.97	12.789	
2,000.0	1,997.9	2,008.6	2,004.0	3.7	4.1	68.11	-84.7	-108.8	93.3	85.9	7.37	12.660	
2,100.0	2,097.8	2,108.5	2,103.7	3.9	4.3	68.73	-90.0	-114.4	97.4	89.6	7.76	12.545	
2,200.0	2,197.6	2,208.4	2,203.3	4.1	4.5	69.30	-95.4	-120.0	101.5	93.3	8.16	12.441	
2,300.0	2,297.4	2,308.3	2,302.9	4.3	4.8	69.83	-100.7	-125.6	105.6	97.1	8.56	12.346	
2,400.0	2,397.2	2,408.2	2,402.5	4.5	5.0	70.32	-106.0	-131.2	109.8	100.8	8.96	12.260	
2,500.0	2,497.1	2,508.1	2,502.1	4.7	5.2	70.77	-111.4	-136.7	114.0	104.6	9.35	12.181	
2,600.0	2,596.9	2,608.0	2,601.7	4.9	5.4	71.19	-116.7	-142.3	118.1	108.4	9.75	12.109	
2,700.0	2,696.7	2,707.9	2,701.3	5.1	5.6	71.58	-122.0	-147.9	122.3	112.1	10.15	12.043	
2,800.0	2,796.5	2,807.8	2,800.9	5.3	5.9	71.95	-127.4	-153.5	126.5	115.9	10.55	11.982	
2,900.0	2,896.3	2,907.8	2,900.5	5.5	6.1	72.29	-132.7	-159.1	130.6	119.7	10.96	11.925	
3,000.0	2,996.2	3,007.7	3,000.2	5.7	6.3	72.61	-138.0	-164.6	134.8	123.5	11.36	11.872	
3,100.0	3,096.0	3,107.6	3,099.8	5.9	6.5	72.91	-143.4	-170.2	139.0	127.3	11.76	11.823	
3,200.0	3,195.8	3,207.5	3,199.4	6.1	6.7	73.20	-148.7	-175.8	143.2	131.0	12.16	11.778	
3,300.0	3,295.6	3,307.4	3,299.0	6.3	7.0	73.47	-154.0	-181.4	147.4	134.8	12.56	11.735	
3,400.0	3,395.5	3,407.3	3,398.6	6.5	7.2	73.72	-159.4	-187.0	151.6	138.6	12.96	11.695	
3,500.0	3,495.3	3,507.2	3,498.2	6.7	7.4	73.96	-164.7	-192.6	155.8	142.4	13.36	11.657	
3,600.0	3,595.1	3,607.1	3,597.8	6.9	7.6	74.19	-170.0	-198.1	160.0	146.2	13.77	11.622	
3,700.0	3,694.9	3,707.0	3,697.4	7.1	7.8	74.40	-175.4	-203.7	164.2	150.0	14.17	11.589	
3,800.0	3,794.8	3,806.9	3,797.0	7.3	8.1	74.61	-180.7	-209.3	168.4	153.8	14.57	11.557	
3,900.0	3,894.6	3,906.9	3,896.6	7.5	8.3	74.80	-186.0	-214.9	172.6	157.6	14.97	11.528	
4,000.0	3,994.4	4,006.8	3,996.3	7.7	8.5	74.99	-191.4	-220.5	176.8	161.4	15.38	11.500	
4,100.0	4,094.2	4,106.7	4,095.9	7.9	8.7	75.16	-196.7	-226.1	181.0	165.3	15.78	11.473	
4,200.0	4,194.1	4,206.6	4,195.5	8.1	8.9	75.33	-202.0	-231.6	185.2	169.1	16.18	11.448	
4,300.0	4,293.9	4,306.5	4,295.1	8.3	9.2	75.49	-207.3	-237.2	189.5	172.9	16.59	11.424	
4,400.0	4,393.7	4,406.4	4,394.7	8.6	9.4	75.65	-212.7	-242.8	193.7	176.7	16.99	11.401	
4,500.0	4,493.5	4,506.3	4,494.3	8.8	9.6	75.80	-218.0	-248.4	197.9	180.5	17.39	11.379	
4,600.0	4,593.4	4,606.2	4,593.9	9.0	9.8	75.94	-223.3	-254.0	202.1	184.3	17.79	11.358	
4,700.0	4,693.2	4,706.1	4,693.5	9.2	10.0	76.07	-228.7	-259.6	206.3	188.1	18.20	11.339	
4,800.0	4,793.0	4,806.0	4,793.1	9.4	10.3	76.20	-234.0	-265.1	210.6	192.0	18.60	11.320	
4,900.0	4,892.8	4,905.9	4,892.8	9.6	10.5	76.33	-239.3	-270.7	214.8	195.8	19.01	11.302	
5,000.0	4,992.6	5,005.9	4,992.4	9.8	10.7	76.45	-244.7	-276.3	219.0	199.6	19.41	11.284	

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 Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3A-22H-M268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,092.5	5,105.8	5,092.0	10.0	10.9	76.56	-250.0	-281.9	223.2	203.4	19.81	11.268	
5,200.0	5,192.3	5,205.7	5,191.6	10.2	11.2	76.68	-255.3	-287.5	227.5	207.2	20.22	11.252	
5,300.0	5,292.1	5,305.6	5,291.2	10.4	11.4	76.78	-260.7	-293.1	231.7	211.1	20.62	11.236	
5,400.0	5,391.9	5,405.5	5,390.8	10.6	11.6	76.89	-266.0	-298.6	235.9	214.9	21.02	11.222	
5,500.0	5,491.8	5,505.4	5,490.4	10.8	11.8	76.99	-271.3	-304.2	240.1	218.7	21.43	11.208	
5,600.0	5,591.6	5,605.3	5,590.0	11.0	12.0	77.08	-276.7	-309.8	244.4	222.5	21.83	11.194	
5,700.0	5,691.4	5,705.2	5,689.6	11.2	12.3	77.18	-282.0	-315.4	248.6	226.4	22.23	11.181	
5,800.0	5,791.2	5,805.1	5,789.3	11.4	12.5	77.27	-287.3	-321.0	252.8	230.2	22.64	11.168	
5,900.0	5,891.1	5,905.0	5,888.9	11.6	12.7	77.35	-292.7	-326.6	257.1	234.0	23.04	11.156	
6,000.0	5,990.9	6,005.0	5,988.5	11.8	12.9	77.44	-298.0	-332.1	261.3	237.9	23.45	11.144	
6,100.0	6,090.7	6,104.9	6,088.1	12.0	13.1	77.52	-303.3	-337.7	265.5	241.7	23.85	11.133	
6,200.0	6,190.5	6,204.8	6,187.7	12.2	13.4	77.60	-308.7	-343.3	269.8	245.5	24.25	11.122	
6,300.0	6,290.4	6,304.7	6,287.3	12.4	13.6	77.67	-314.0	-348.9	274.0	249.3	24.66	11.112	
6,400.0	6,390.2	6,404.6	6,386.9	12.6	13.8	77.75	-319.3	-354.5	278.2	253.2	25.06	11.101	
6,500.0	6,490.0	6,504.5	6,486.5	12.8	14.0	77.82	-324.7	-360.0	282.5	257.0	25.47	11.091	
6,600.0	6,589.8	6,604.4	6,586.1	13.0	14.2	77.89	-330.0	-365.6	286.7	260.8	25.87	11.082	
6,700.0	6,689.7	6,704.3	6,685.8	13.2	14.5	77.96	-335.3	-371.2	290.9	264.7	26.27	11.073	
6,800.0	6,789.5	6,804.2	6,785.4	13.4	14.7	59.87	-340.7	-376.8	295.2	268.5	26.67	11.065	
6,900.0	6,889.1	6,903.3	6,884.2	13.5	14.9	-85.81	-345.4	-382.3	299.4	272.6	26.83	11.161	
7,000.0	6,986.2	7,003.4	6,983.7	13.4	15.0	-90.95	-337.6	-388.1	304.5	277.8	26.69	11.410	
7,100.0	7,077.6	7,106.4	7,083.0	13.3	15.0	-94.11	-311.6	-394.0	310.5	284.1	26.39	11.768	
7,200.0	7,160.6	7,212.6	7,178.9	13.1	14.9	-96.62	-266.6	-400.0	317.0	291.0	26.02	12.185	
7,300.0	7,232.8	7,321.9	7,267.1	13.0	14.8	-98.67	-202.6	-405.8	323.8	298.0	25.71	12.591	
7,400.0	7,291.8	7,434.4	7,343.5	13.0	14.8	-100.28	-120.6	-411.1	330.2	304.6	25.61	12.895	
7,500.0	7,336.0	7,549.5	7,403.7	13.2	14.9	-101.46	-22.7	-415.7	336.0	310.1	25.83	13.008	
7,600.0	7,364.0	7,666.9	7,443.7	13.5	15.2	-102.17	87.3	-419.4	340.6	314.1	26.49	12.859	
7,700.0	7,374.9	7,785.7	7,460.6	14.1	15.8	-102.42	204.7	-421.7	343.8	316.2	27.60	12.458	
7,800.0	7,375.0	7,889.3	7,461.0	14.9	16.5	-102.36	308.3	-423.0	345.8	316.7	29.10	11.880	
7,900.0	7,375.0	7,989.3	7,461.0	15.8	17.3	-102.29	408.3	-424.3	347.6	316.7	30.91	11.248	
8,000.0	7,375.0	8,089.3	7,461.0	16.8	18.3	-102.23	508.3	-425.5	349.5	316.5	32.97	10.601	
8,100.0	7,375.0	8,189.3	7,461.0	18.0	19.4	-102.16	608.2	-426.7	351.4	316.1	35.25	9.969	
8,200.0	7,375.0	8,289.2	7,461.0	19.3	20.5	-102.09	708.2	-427.9	353.3	315.6	37.70	9.370	
8,300.0	7,375.0	8,389.2	7,461.0	20.6	21.8	-102.03	808.2	-429.1	355.1	314.8	40.30	8.812	
8,400.0	7,375.0	8,489.2	7,461.0	22.0	23.1	-101.96	908.2	-430.4	357.0	314.0	43.02	8.299	
8,500.0	7,375.0	8,589.2	7,461.0	23.4	24.5	-101.90	1,008.1	-431.6	358.9	313.1	45.84	7.830	
8,600.0	7,375.0	8,689.2	7,461.0	24.9	25.9	-101.84	1,108.1	-432.8	360.8	312.0	48.74	7.403	
8,700.0	7,375.0	8,789.1	7,461.0	26.4	27.4	-101.78	1,208.1	-434.0	362.7	311.0	51.70	7.014	
8,800.0	7,375.0	8,889.1	7,461.0	27.9	28.8	-101.71	1,308.0	-435.2	364.5	309.8	54.72	6.661	
8,900.0	7,375.0	8,989.1	7,461.0	29.5	30.4	-101.65	1,408.0	-436.5	366.4	308.6	57.80	6.340	
9,000.0	7,375.0	9,089.1	7,461.0	31.1	31.9	-101.59	1,508.0	-437.7	368.3	307.4	60.91	6.047	
9,100.0	7,375.0	9,189.1	7,461.0	32.7	33.5	-101.53	1,608.0	-438.9	370.2	306.1	64.06	5.779	
9,200.0	7,375.0	9,289.1	7,461.0	34.3	35.0	-101.47	1,707.9	-440.1	372.1	304.8	67.23	5.534	
9,300.0	7,375.0	9,389.0	7,461.0	35.9	36.6	-101.39	1,807.9	-441.4	374.9	304.7	70.24	5.338	
9,400.0	7,375.0	9,488.9	7,461.0	37.6	38.3	-101.26	1,907.8	-442.6	379.5	306.1	73.43	5.168	
9,500.0	7,375.0	9,588.8	7,461.0	39.2	39.9	-101.12	2,007.7	-443.8	384.1	307.4	76.70	5.008	
9,600.0	7,375.0	9,688.7	7,461.0	40.9	41.5	-100.99	2,107.5	-445.0	388.7	308.8	79.98	4.860	
9,700.0	7,375.0	9,788.6	7,461.0	42.5	43.1	-100.86	2,207.4	-446.2	393.4	310.1	83.28	4.723	
9,800.0	7,375.0	9,888.5	7,461.0	44.2	44.8	-100.73	2,307.3	-447.5	398.0	311.4	86.60	4.596	
9,900.0	7,375.0	9,988.3	7,461.0	45.9	46.5	-100.60	2,407.2	-448.7	402.6	312.7	89.93	4.477	
10,000.0	7,375.0	10,088.2	7,461.0	47.6	48.1	-100.48	2,507.1	-449.9	407.2	314.0	93.27	4.366	
10,100.0	7,375.0	10,188.1	7,461.0	49.3	49.8	-100.36	2,606.9	-451.1	411.9	315.3	96.62	4.263	
10,200.0	7,375.0	10,288.0	7,461.0	50.9	51.5	-100.26	2,706.9	-452.3	415.7	315.5	100.20	4.149	

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 Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3A-22H-M268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,300.0	7,375.0	10,388.0	7,461.0	52.6	53.1	-100.22	2,806.8	-453.6	417.2	313.6	103.67	4.025	
10,400.0	7,375.0	10,488.0	7,461.0	54.3	54.8	-100.19	2,906.8	-454.8	418.4	311.4	107.03	3.910	
10,500.0	7,375.0	10,588.0	7,461.0	56.0	56.5	-100.17	3,006.8	-456.0	419.3	308.7	110.51	3.794	
10,600.0	7,375.0	10,688.0	7,461.0	57.8	58.2	-100.18	3,106.8	-457.2	418.7	304.8	113.88	3.676	
10,700.0	7,375.0	10,788.0	7,461.0	59.5	59.9	-100.20	3,206.8	-458.4	418.1	300.8	117.24	3.566	
10,800.0	7,375.0	10,888.0	7,461.0	61.2	61.6	-100.21	3,306.8	-459.7	417.5	296.9	120.61	3.461	
10,900.0	7,375.0	10,988.0	7,461.0	62.9	63.3	-100.22	3,406.8	-460.9	416.9	292.9	123.98	3.362	
11,000.0	7,375.0	11,088.0	7,461.0	64.6	65.0	-100.24	3,506.8	-462.1	416.3	288.9	127.36	3.269	
11,100.0	7,375.0	11,188.0	7,461.0	66.3	66.7	-100.25	3,606.8	-463.3	415.7	285.0	130.74	3.180	
11,200.0	7,375.0	11,288.0	7,461.0	68.1	68.4	-100.27	3,706.8	-464.6	415.1	281.0	134.12	3.095	
11,300.0	7,375.0	11,388.0	7,461.0	69.8	70.2	-100.28	3,806.7	-465.8	414.5	277.0	137.50	3.015	
11,400.0	7,375.0	11,488.0	7,461.0	71.5	71.9	-100.30	3,906.7	-467.0	413.9	273.0	140.89	2.938	
11,500.0	7,375.0	11,588.0	7,461.0	73.2	73.6	-100.31	4,006.7	-468.2	413.3	269.0	144.28	2.865	
11,600.0	7,375.0	11,688.0	7,461.0	75.0	75.3	-100.33	4,106.7	-469.4	412.7	265.1	147.67	2.795	
11,700.0	7,375.0	11,788.0	7,461.0	76.7	77.0	-100.34	4,206.7	-470.7	412.1	261.1	151.07	2.728	
11,800.0	7,375.0	11,888.0	7,461.0	78.4	78.8	-100.36	4,306.7	-471.9	411.5	257.1	154.46	2.664	
11,900.0	7,375.0	11,988.0	7,461.0	80.1	80.5	-100.37	4,406.7	-473.1	410.9	253.1	157.86	2.603	
12,000.0	7,375.0	12,088.0	7,461.0	81.9	82.2	-100.39	4,506.7	-474.3	410.4	249.1	161.26	2.545	
12,100.0	7,375.0	12,188.0	7,461.0	83.6	83.9	-100.40	4,606.7	-475.5	409.8	245.1	164.66	2.489	
12,200.0	7,375.0	12,288.0	7,461.0	85.3	85.7	-100.42	4,706.7	-476.8	409.2	241.1	168.06	2.435	
12,300.0	7,375.0	12,388.0	7,461.0	87.1	87.4	-100.44	4,806.6	-478.0	408.6	237.1	171.47	2.383	
12,400.0	7,375.0	12,488.0	7,461.0	88.8	89.1	-100.45	4,906.6	-479.2	408.0	233.1	174.87	2.333	
12,500.0	7,375.0	12,588.0	7,461.0	90.6	90.8	-100.47	5,006.6	-480.4	407.4	229.1	178.28	2.285	
12,600.0	7,375.0	12,688.0	7,461.0	92.3	92.6	-100.48	5,106.6	-481.7	406.8	225.1	181.68	2.239	
12,700.0	7,375.0	12,788.0	7,461.0	94.0	94.3	-100.50	5,206.6	-482.9	406.2	221.1	185.09	2.195	
12,800.0	7,375.0	12,888.0	7,461.0	95.8	96.0	-100.51	5,306.6	-484.1	405.6	217.1	188.50	2.152	
12,900.0	7,375.0	12,988.0	7,461.0	97.5	97.8	-100.53	5,406.6	-485.3	405.0	213.1	191.91	2.110	
13,000.0	7,375.0	13,088.0	7,461.0	99.2	99.5	-100.54	5,506.6	-486.5	404.4	209.1	195.32	2.071	
13,100.0	7,375.0	13,188.0	7,461.0	101.0	101.2	-100.56	5,606.6	-487.8	403.8	205.1	198.73	2.032	
13,200.0	7,375.0	13,288.0	7,461.0	102.7	103.0	-100.57	5,706.6	-489.0	403.2	201.1	202.14	1.995	
13,300.0	7,375.0	13,388.0	7,461.0	104.5	104.7	-100.59	5,806.6	-490.2	402.6	197.1	205.56	1.959	
13,400.0	7,375.0	13,488.0	7,461.0	106.2	106.5	-100.61	5,906.5	-491.4	402.0	193.1	208.97	1.924	
13,500.0	7,375.0	13,588.0	7,461.0	107.9	108.2	-100.62	6,006.5	-492.7	401.5	189.1	212.38	1.890	
13,600.0	7,375.0	13,688.0	7,461.0	109.7	109.9	-100.64	6,106.5	-493.9	400.9	185.1	215.79	1.858	
13,700.0	7,375.0	13,788.0	7,461.0	111.4	111.7	-100.65	6,206.5	-495.1	400.3	181.1	219.21	1.826	
13,800.0	7,375.0	13,888.0	7,461.0	113.2	113.4	-100.67	6,306.5	-496.3	399.7	177.1	222.62	1.795	
13,900.0	7,375.0	13,988.0	7,461.0	114.9	115.1	-100.69	6,406.5	-497.5	399.1	173.0	226.04	1.766	
14,000.0	7,375.0	14,088.0	7,461.0	116.7	116.9	-100.70	6,506.5	-498.8	398.5	169.0	229.45	1.737	
14,100.0	7,375.0	14,188.0	7,461.0	118.4	118.6	-100.72	6,606.5	-500.0	397.9	165.0	232.87	1.709	
14,200.0	7,375.0	14,288.0	7,461.0	120.1	120.4	-100.73	6,706.5	-501.2	397.3	161.0	236.28	1.681	
14,300.0	7,375.0	14,388.0	7,461.0	121.9	122.1	-100.75	6,806.5	-502.4	396.7	157.0	239.70	1.655	
14,400.0	7,375.0	14,488.0	7,461.0	123.6	123.8	-100.77	6,906.5	-503.6	396.1	153.0	243.11	1.629	
14,500.0	7,375.0	14,587.9	7,461.0	125.4	125.6	-100.78	7,006.4	-504.9	395.5	149.0	246.53	1.604	
14,600.0	7,375.0	14,687.9	7,461.0	127.1	127.3	-100.80	7,106.4	-506.1	394.9	145.0	249.94	1.580	
14,700.0	7,375.0	14,787.9	7,461.0	128.9	129.1	-100.82	7,206.4	-507.3	394.3	141.0	253.36	1.556	
14,800.0	7,375.0	14,887.9	7,461.0	130.6	130.8	-100.83	7,306.4	-508.5	393.7	137.0	256.78	1.533	
14,900.0	7,375.0	14,987.9	7,461.0	132.4	132.6	-100.85	7,406.4	-509.8	393.2	133.0	260.19	1.511	
15,000.0	7,375.0	15,087.9	7,461.0	134.1	134.3	-100.87	7,506.4	-511.0	392.6	129.0	263.61	1.489	Level 3
15,094.7	7,375.0	15,182.7	7,461.0	135.8	136.0	-100.88	7,601.1	-512.1	392.0	125.2	266.84	1.469	Level 3, SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3B-22H-M268 - Hz - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	12.0	12.0	0.0	0.0	-89.95	0.0	-10.1	10.1				
100.0	100.0	112.0	112.0	0.2	0.2	-89.95	0.0	-10.1	10.1	9.8	0.30	33.153	
200.0	200.0	212.0	212.0	0.3	0.3	-89.95	0.0	-10.1	10.1	9.4	0.65	15.424	
262.1	262.1	274.1	274.1	0.4	0.4	-89.95	0.0	-10.1	10.1	9.2	0.87	11.578	CC
300.0	300.0	312.0	312.0	0.5	0.5	-90.01	0.0	-10.1	10.1	9.1	1.00	10.056	ES
400.0	400.0	411.9	411.9	0.7	0.7	-94.91	-0.9	-10.7	10.7	9.3	1.35	7.913	
500.0	500.0	511.7	511.7	0.8	0.9	-105.17	-3.3	-12.2	12.6	10.9	1.70	7.408	
600.0	600.0	611.4	611.2	1.0	1.0	-116.09	-7.1	-14.6	16.3	14.2	2.05	7.933	
700.0	700.0	711.1	710.8	1.2	1.2	43.77	-12.3	-17.8	21.0	18.6	2.40	8.745	
800.0	800.0	811.1	810.5	1.4	1.4	41.88	-17.5	-21.2	24.8	22.1	2.76	9.008	
900.0	899.9	911.0	910.3	1.6	1.6	42.87	-22.8	-24.5	27.4	24.2	3.11	8.785	
1,000.0	999.7	1,011.0	1,010.1	1.7	1.8	45.66	-28.1	-27.8	28.9	25.4	3.48	8.298	
1,100.0	1,099.5	1,111.0	1,109.9	1.9	2.0	48.38	-33.4	-31.2	30.3	26.5	3.85	7.884	
1,200.0	1,199.3	1,211.0	1,209.6	2.1	2.2	50.83	-38.7	-34.5	31.9	27.7	4.22	7.548	
1,300.0	1,299.2	1,310.9	1,309.4	2.3	2.4	53.06	-44.0	-37.9	33.5	28.9	4.60	7.272	
1,400.0	1,399.0	1,410.9	1,409.2	2.5	2.6	55.08	-49.3	-41.2	35.1	30.1	4.99	7.042	
1,500.0	1,498.8	1,510.9	1,509.0	2.7	2.8	56.92	-54.5	-44.6	36.8	31.4	5.37	6.849	
1,600.0	1,598.6	1,610.9	1,608.8	2.9	3.1	58.59	-59.8	-47.9	38.5	32.8	5.76	6.684	
1,700.0	1,698.5	1,710.9	1,708.6	3.1	3.3	60.13	-65.1	-51.2	40.3	34.1	6.15	6.542	
1,800.0	1,798.3	1,810.8	1,808.3	3.3	3.5	61.53	-70.4	-54.6	42.0	35.5	6.55	6.420	
1,900.0	1,898.1	1,910.8	1,908.1	3.5	3.7	62.82	-75.7	-57.9	43.8	36.9	6.94	6.313	
2,000.0	1,997.9	2,010.8	2,007.9	3.7	3.9	64.01	-81.0	-61.3	45.7	38.3	7.34	6.219	
2,100.0	2,097.8	2,110.8	2,107.7	3.9	4.1	65.10	-86.3	-64.6	47.5	39.7	7.74	6.137	
2,200.0	2,197.6	2,210.8	2,207.5	4.1	4.3	66.12	-91.6	-68.0	49.3	41.2	8.14	6.063	
2,300.0	2,297.4	2,310.7	2,307.3	4.3	4.5	67.06	-96.9	-71.3	51.2	42.7	8.54	5.998	
2,400.0	2,397.2	2,410.7	2,407.0	4.5	4.7	67.93	-102.1	-74.6	53.1	44.1	8.94	5.939	
2,500.0	2,497.1	2,510.7	2,506.8	4.7	4.9	68.75	-107.4	-78.0	55.0	45.6	9.34	5.886	
2,600.0	2,596.9	2,610.7	2,606.6	4.9	5.1	69.51	-112.7	-81.3	56.9	47.1	9.74	5.838	
2,700.0	2,696.7	2,710.7	2,706.4	5.1	5.3	70.22	-118.0	-84.7	58.8	48.6	10.14	5.795	
2,800.0	2,796.5	2,810.6	2,806.2	5.3	5.5	70.88	-123.3	-88.0	60.7	50.1	10.55	5.755	
2,900.0	2,896.3	2,910.6	2,906.0	5.5	5.7	71.51	-128.6	-91.3	62.6	51.7	10.95	5.719	
3,000.0	2,996.2	3,010.6	3,005.7	5.7	5.9	72.10	-133.9	-94.7	64.5	53.2	11.35	5.686	
3,100.0	3,096.0	3,110.6	3,105.5	5.9	6.1	72.65	-139.2	-98.0	66.5	54.7	11.76	5.655	
3,200.0	3,195.8	3,210.5	3,205.3	6.1	6.3	73.17	-144.4	-101.4	68.4	56.3	12.16	5.627	
3,300.0	3,295.6	3,310.5	3,305.1	6.3	6.5	73.67	-149.7	-104.7	70.4	57.8	12.56	5.602	
3,400.0	3,395.5	3,410.5	3,404.9	6.5	6.7	74.13	-155.0	-108.1	72.3	59.4	12.97	5.578	
3,500.0	3,495.3	3,510.5	3,504.7	6.7	7.0	74.58	-160.3	-111.4	74.3	60.9	13.37	5.555	
3,600.0	3,595.1	3,610.5	3,604.4	6.9	7.2	75.00	-165.6	-114.7	76.3	62.5	13.78	5.535	
3,700.0	3,694.9	3,710.4	3,704.2	7.1	7.4	75.39	-170.9	-118.1	78.2	64.0	14.18	5.515	
3,800.0	3,794.8	3,810.4	3,804.0	7.3	7.6	75.77	-176.2	-121.4	80.2	65.6	14.59	5.497	
3,900.0	3,894.6	3,910.4	3,903.8	7.5	7.8	76.13	-181.5	-124.8	82.2	67.2	14.99	5.480	
4,000.0	3,994.4	4,010.4	4,003.6	7.7	8.0	76.48	-186.7	-128.1	84.1	68.7	15.40	5.465	
4,100.0	4,094.2	4,110.4	4,103.4	7.9	8.2	76.81	-192.0	-131.5	86.1	70.3	15.80	5.450	
4,200.0	4,194.1	4,210.3	4,203.1	8.1	8.4	77.12	-197.3	-134.8	88.1	71.9	16.21	5.436	
4,300.0	4,293.9	4,310.3	4,302.9	8.3	8.6	77.42	-202.6	-138.1	90.1	73.5	16.61	5.423	
4,400.0	4,393.7	4,410.3	4,402.7	8.6	8.8	77.70	-207.9	-141.5	92.1	75.1	17.02	5.410	
4,500.0	4,493.5	4,510.3	4,502.5	8.8	9.0	77.98	-213.2	-144.8	94.1	76.6	17.43	5.399	
4,600.0	4,593.4	4,610.3	4,602.3	9.0	9.2	78.24	-218.5	-148.2	96.1	78.2	17.83	5.388	
4,700.0	4,693.2	4,710.2	4,702.1	9.2	9.4	78.49	-223.8	-151.5	98.1	79.8	18.24	5.377	
4,800.0	4,793.0	4,810.2	4,801.8	9.4	9.6	78.74	-229.0	-154.9	100.1	81.4	18.64	5.367	
4,900.0	4,892.8	4,910.2	4,901.6	9.6	9.8	78.97	-234.3	-158.2	102.1	83.0	19.05	5.358	
5,000.0	4,992.6	5,010.2	5,001.4	9.8	10.0	79.19	-239.6	-161.5	104.0	84.6	19.45	5.349	

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 Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3B-22H-M268 - Hz - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,092.5	5,110.2	5,101.2	10.0	10.2	79.41	-244.9	-164.9	106.1	86.2	19.86	5.340	
5,200.0	5,192.3	5,210.1	5,201.0	10.2	10.4	79.62	-250.2	-168.2	108.1	87.8	20.26	5.332	
5,300.0	5,292.1	5,310.1	5,300.8	10.4	10.7	79.82	-255.5	-171.6	110.1	89.4	20.67	5.324	
5,400.0	5,391.9	5,410.1	5,400.5	10.6	10.9	80.01	-260.8	-174.9	112.1	91.0	21.08	5.317	
5,500.0	5,491.8	5,510.1	5,500.3	10.8	11.1	80.19	-266.1	-178.2	114.1	92.6	21.48	5.310	
5,600.0	5,591.6	5,610.0	5,600.1	11.0	11.3	80.37	-271.3	-181.6	116.1	94.2	21.89	5.303	
5,700.0	5,691.4	5,710.0	5,699.9	11.2	11.5	80.55	-276.6	-184.9	118.1	95.8	22.29	5.297	
5,800.0	5,791.2	5,810.0	5,799.7	11.4	11.7	80.71	-281.9	-188.3	120.1	97.4	22.70	5.290	
5,900.0	5,891.1	5,910.0	5,899.5	11.6	11.9	80.88	-287.2	-191.6	122.1	99.0	23.11	5.284	
6,000.0	5,990.9	6,010.0	5,999.2	11.8	12.1	81.03	-292.5	-195.0	124.1	100.6	23.51	5.279	
6,100.0	6,090.7	6,109.9	6,099.0	12.0	12.3	81.19	-297.8	-198.3	126.1	102.2	23.92	5.273	
6,200.0	6,190.5	6,209.9	6,198.8	12.2	12.5	81.33	-303.1	-201.6	128.1	103.8	24.32	5.268	
6,300.0	6,290.4	6,309.9	6,298.6	12.4	12.7	81.47	-308.4	-205.0	130.1	105.4	24.73	5.263	
6,400.0	6,390.2	6,409.9	6,398.4	12.6	12.9	81.61	-313.6	-208.3	132.2	107.0	25.14	5.258	
6,500.0	6,490.0	6,509.9	6,498.2	12.8	13.1	81.75	-318.9	-211.7	134.2	108.6	25.54	5.253	
6,600.0	6,589.8	6,609.8	6,597.9	13.0	13.3	81.88	-324.2	-215.0	136.2	110.2	25.95	5.249	
6,700.0	6,689.7	6,709.8	6,697.7	13.2	13.5	82.00	-329.5	-218.4	138.2	111.9	26.35	5.245	
6,800.0	6,789.5	6,809.8	6,797.5	13.4	13.7	63.85	-334.8	-221.7	140.2	113.4	26.75	5.241	
6,900.0	6,889.1	6,909.0	6,896.5	13.5	13.9	-84.74	-340.0	-225.0	141.7	114.8	26.85	5.276	
7,000.0	6,986.2	7,004.6	6,991.9	13.4	14.1	-97.76	-345.1	-228.2	146.4	119.9	26.50	5.524	
7,100.0	7,077.6	7,104.8	7,091.9	13.3	14.3	-110.80	-342.4	-231.6	160.0	134.3	25.69	6.227	
7,200.0	7,160.6	7,213.3	7,197.8	13.1	14.3	-121.24	-319.9	-235.5	180.4	155.7	24.62	7.327	
7,300.0	7,232.8	7,331.4	7,306.1	13.0	14.1	-129.15	-273.2	-239.7	204.1	180.7	23.43	8.711	
7,400.0	7,291.8	7,460.8	7,410.8	13.0	14.0	-134.88	-197.9	-244.0	227.9	205.6	22.31	10.212	
7,500.0	7,336.0	7,602.1	7,502.8	13.2	13.9	-138.73	-91.3	-248.3	248.6	227.1	21.50	11.561	
7,600.0	7,364.0	7,754.1	7,569.4	13.5	14.2	-140.91	44.9	-252.0	263.5	242.3	21.26	12.397	
7,700.0	7,374.9	7,913.4	7,598.4	14.1	14.9	-141.50	200.9	-254.6	270.8	249.0	21.79	12.423	
7,800.0	7,375.0	8,023.1	7,599.0	14.9	15.7	-141.21	310.6	-255.7	272.0	249.1	22.90	11.877	
7,900.0	7,375.0	8,123.1	7,599.0	15.8	16.6	-140.92	410.6	-256.8	273.1	249.0	24.17	11.302	
8,000.0	7,375.0	8,223.1	7,599.0	16.8	17.6	-140.64	510.6	-257.8	274.2	248.6	25.58	10.720	
8,100.0	7,375.0	8,323.1	7,599.0	18.0	18.7	-140.36	610.6	-258.9	275.3	248.2	27.13	10.148	
8,200.0	7,375.0	8,423.1	7,599.0	19.3	20.0	-140.08	710.6	-259.9	276.4	247.6	28.80	9.599	
8,300.0	7,375.0	8,523.1	7,599.0	20.6	21.2	-139.80	810.5	-261.0	277.6	247.0	30.58	9.078	
8,400.0	7,375.0	8,623.0	7,599.0	22.0	22.6	-139.53	910.5	-262.0	278.7	246.3	32.44	8.591	
8,500.0	7,375.0	8,723.0	7,599.0	23.4	24.0	-139.26	1,010.5	-263.1	279.8	245.4	34.39	8.137	
8,600.0	7,375.0	8,823.0	7,599.0	24.9	25.4	-138.99	1,110.5	-264.1	281.0	244.6	36.41	7.716	
8,700.0	7,375.0	8,923.0	7,599.0	26.4	26.9	-138.72	1,210.5	-265.2	282.1	243.6	38.50	7.327	
8,800.0	7,375.0	9,023.0	7,599.0	27.9	28.4	-138.45	1,310.4	-266.2	283.3	242.6	40.65	6.969	
8,900.0	7,375.0	9,123.0	7,599.0	29.5	30.0	-138.19	1,410.4	-267.3	284.4	241.6	42.85	6.637	
9,000.0	7,375.0	9,223.0	7,599.0	31.1	31.5	-137.93	1,510.4	-268.3	285.6	240.5	45.11	6.332	
9,100.0	7,375.0	9,322.9	7,599.0	32.7	33.1	-137.67	1,610.4	-269.4	286.8	239.4	47.41	6.050	
9,200.0	7,375.0	9,422.9	7,599.0	34.3	34.7	-137.41	1,710.4	-270.4	288.0	238.2	49.75	5.789	
9,300.0	7,375.0	9,522.9	7,599.0	35.9	36.3	-137.03	1,810.3	-271.5	289.8	237.7	52.10	5.562	
9,400.0	7,375.0	9,622.8	7,599.0	37.6	38.0	-136.40	1,910.2	-272.5	292.9	238.1	54.80	5.345	
9,500.0	7,375.0	9,722.7	7,599.0	39.2	39.6	-135.76	2,010.1	-273.5	296.1	238.5	57.58	5.141	
9,600.0	7,375.0	9,822.6	7,599.0	40.9	41.2	-135.14	2,110.0	-274.6	299.2	238.8	60.42	4.953	
9,700.0	7,375.0	9,922.5	7,599.0	42.5	42.9	-134.53	2,209.9	-275.6	302.5	239.1	63.31	4.778	
9,800.0	7,375.0	10,022.4	7,599.0	44.2	44.5	-133.94	2,309.8	-276.7	305.7	239.5	66.23	4.616	
9,900.0	7,375.0	10,122.3	7,599.0	45.9	46.2	-133.35	2,409.7	-277.7	309.0	239.8	69.21	4.465	
10,000.0	7,375.0	10,222.2	7,599.0	47.6	47.9	-132.78	2,509.6	-278.8	312.3	240.1	72.22	4.325	
10,100.0	7,375.0	10,322.1	7,599.0	49.3	49.6	-132.22	2,609.4	-279.8	315.7	240.4	75.26	4.194	
10,200.0	7,375.0	10,422.0	7,599.0	50.9	51.3	-131.76	2,709.4	-280.9	318.4	240.0	78.39	4.062	

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 Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3B-22H-M268 - Hz - Plan #3

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,300.0	7,375.0	10,522.0	7,599.0	52.6	52.9	-131.58	2,809.4	-281.9	319.4	238.3	81.18	3.935	
10,400.0	7,375.0	10,622.0	7,599.0	54.3	54.6	-131.46	2,909.3	-283.0	320.2	236.4	83.87	3.818	
10,500.0	7,375.0	10,722.0	7,599.0	56.0	56.3	-131.38	3,009.3	-284.0	320.7	234.1	86.58	3.704	
10,600.0	7,375.0	10,822.0	7,599.0	57.8	58.0	-131.47	3,109.3	-285.1	320.1	231.1	89.04	3.595	
10,700.0	7,375.0	10,922.0	7,599.0	59.5	59.7	-131.56	3,209.3	-286.1	319.6	228.1	91.49	3.493	
10,800.0	7,375.0	11,022.0	7,599.0	61.2	61.4	-131.65	3,309.3	-287.1	319.0	225.0	93.93	3.396	
10,900.0	7,375.0	11,122.0	7,599.0	62.9	63.2	-131.75	3,409.3	-288.2	318.4	222.0	96.38	3.304	
11,000.0	7,375.0	11,222.0	7,599.0	64.6	64.9	-131.84	3,509.3	-289.2	317.8	219.0	98.81	3.216	
11,100.0	7,375.0	11,322.0	7,599.0	66.3	66.6	-131.93	3,609.3	-290.3	317.2	216.0	101.24	3.133	
11,200.0	7,375.0	11,422.0	7,599.0	68.1	68.3	-132.03	3,709.3	-291.3	316.7	213.0	103.67	3.055	
11,300.0	7,375.0	11,522.0	7,599.0	69.8	70.0	-132.12	3,809.3	-292.4	316.1	210.0	106.09	2.979	
11,400.0	7,375.0	11,621.9	7,599.0	71.5	71.7	-132.22	3,909.3	-293.4	315.5	207.0	108.50	2.908	
11,500.0	7,375.0	11,721.9	7,599.0	73.2	73.5	-132.31	4,009.3	-294.5	314.9	204.0	110.91	2.839	
11,600.0	7,375.0	11,821.9	7,599.0	75.0	75.2	-132.41	4,109.2	-295.5	314.4	201.0	113.32	2.774	
11,700.0	7,375.0	11,921.9	7,599.0	76.7	76.9	-132.50	4,209.2	-296.6	313.8	198.1	115.71	2.712	
11,800.0	7,375.0	12,021.9	7,599.0	78.4	78.6	-132.60	4,309.2	-297.6	313.2	195.1	118.10	2.652	
11,900.0	7,375.0	12,121.9	7,599.0	80.1	80.4	-132.70	4,409.2	-298.7	312.6	192.1	120.49	2.595	
12,000.0	7,375.0	12,221.9	7,599.0	81.9	82.1	-132.79	4,509.2	-299.7	312.1	189.2	122.86	2.540	
12,100.0	7,375.0	12,321.9	7,599.0	83.6	83.8	-132.89	4,609.2	-300.8	311.5	186.3	125.23	2.487	
12,200.0	7,375.0	12,421.9	7,599.0	85.3	85.5	-132.99	4,709.2	-301.8	310.9	183.3	127.60	2.437	
12,300.0	7,375.0	12,521.9	7,599.0	87.1	87.3	-133.09	4,809.2	-302.9	310.4	180.4	129.95	2.388	
12,400.0	7,375.0	12,621.9	7,599.0	88.8	89.0	-133.18	4,909.2	-303.9	309.8	177.5	132.30	2.342	
12,500.0	7,375.0	12,721.9	7,599.0	90.6	90.7	-133.28	5,009.2	-304.9	309.2	174.6	134.64	2.297	
12,600.0	7,375.0	12,821.9	7,599.0	92.3	92.5	-133.38	5,109.2	-306.0	308.7	171.7	136.97	2.253	
12,700.0	7,375.0	12,921.9	7,599.0	94.0	94.2	-133.48	5,209.1	-307.0	308.1	168.8	139.29	2.212	
12,800.0	7,375.0	13,021.9	7,599.0	95.8	95.9	-133.58	5,309.1	-308.1	307.5	165.9	141.61	2.172	
12,900.0	7,375.0	13,121.9	7,599.0	97.5	97.7	-133.68	5,409.1	-309.1	307.0	163.0	143.91	2.133	
13,000.0	7,375.0	13,221.9	7,599.0	99.2	99.4	-133.78	5,509.1	-310.2	306.4	160.2	146.21	2.096	
13,100.0	7,375.0	13,321.9	7,599.0	101.0	101.1	-133.88	5,609.1	-311.2	305.8	157.3	148.50	2.060	
13,200.0	7,375.0	13,421.9	7,599.0	102.7	102.9	-133.98	5,709.1	-312.3	305.3	154.5	150.78	2.025	
13,300.0	7,375.0	13,521.9	7,599.0	104.5	104.6	-134.09	5,809.1	-313.3	304.7	151.7	153.05	1.991	
13,400.0	7,375.0	13,621.9	7,599.0	106.2	106.4	-134.19	5,909.1	-314.4	304.2	148.8	155.31	1.958	
13,500.0	7,375.0	13,721.9	7,599.0	107.9	108.1	-134.29	6,009.1	-315.4	303.6	146.0	157.57	1.927	
13,600.0	7,375.0	13,821.9	7,599.0	109.7	109.8	-134.39	6,109.1	-316.5	303.0	143.2	159.81	1.896	
13,700.0	7,375.0	13,921.9	7,599.0	111.4	111.6	-134.50	6,209.1	-317.5	302.5	140.4	162.05	1.867	
13,800.0	7,375.0	14,021.9	7,599.0	113.2	113.3	-134.60	6,309.1	-318.6	301.9	137.7	164.27	1.838	
13,900.0	7,375.0	14,121.9	7,599.0	114.9	115.1	-134.70	6,409.0	-319.6	301.4	134.9	166.49	1.810	
14,000.0	7,375.0	14,221.9	7,599.0	116.7	116.8	-134.81	6,509.0	-320.7	300.8	132.1	168.70	1.783	
14,100.0	7,375.0	14,321.9	7,599.0	118.4	118.5	-134.91	6,609.0	-321.7	300.3	129.4	170.89	1.757	
14,200.0	7,375.0	14,421.9	7,599.0	120.1	120.3	-135.02	6,709.0	-322.8	299.7	126.6	173.08	1.732	
14,300.0	7,375.0	14,521.9	7,599.0	121.9	122.0	-135.12	6,809.0	-323.8	299.2	123.9	175.26	1.707	
14,400.0	7,375.0	14,621.9	7,599.0	123.6	123.8	-135.23	6,909.0	-324.8	298.6	121.2	177.42	1.683	
14,500.0	7,375.0	14,721.9	7,599.0	125.4	125.5	-135.33	7,009.0	-325.9	298.1	118.5	179.58	1.660	
14,600.0	7,375.0	14,821.9	7,599.0	127.1	127.3	-135.44	7,109.0	-326.9	297.5	115.8	181.73	1.637	
14,700.0	7,375.0	14,921.8	7,599.0	128.9	129.0	-135.55	7,209.0	-328.0	297.0	113.1	183.86	1.615	
14,800.0	7,375.0	15,021.8	7,599.0	130.6	130.7	-135.66	7,309.0	-329.0	296.4	110.5	185.99	1.594	
14,900.0	7,375.0	15,121.8	7,599.0	132.4	132.5	-135.76	7,409.0	-330.1	295.9	107.8	188.10	1.573	
15,000.0	7,375.0	15,221.8	7,599.0	134.1	134.2	-135.87	7,509.0	-331.1	295.4	105.2	190.21	1.553	
15,094.7	7,375.0	15,316.6	7,599.0	135.8	135.9	-135.97	7,603.7	-332.1	294.8	102.7	192.19	1.534	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3D-22H-M268 - 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	9.0	9.0	0.0	0.0	89.93	0.0	10.1	10.1				
100.0	100.0	109.0	109.0	0.2	0.1	89.93	0.0	10.1	10.1	9.8	0.30	33.735	
200.0	200.0	209.0	209.0	0.3	0.3	89.93	0.0	10.1	10.1	9.4	0.65	15.549	
300.0	300.0	309.0	309.0	0.5	0.5	89.93	0.0	10.1	10.1	9.1	1.00	10.103	
400.0	400.0	409.0	409.0	0.7	0.7	89.93	0.0	10.1	10.1	8.7	1.35	7.482	
463.4	463.4	472.4	472.4	0.8	0.8	89.93	0.0	10.1	10.1	8.5	1.57	6.426	CC
500.0	500.0	509.0	509.0	0.8	0.8	89.97	0.0	10.1	10.1	8.4	1.69	5.941	
600.0	600.0	609.0	608.9	1.0	1.0	95.62	-1.0	10.2	10.3	8.2	2.04	5.034	ES
700.0	700.0	708.9	708.8	1.2	1.2	-88.42	-3.7	10.7	11.3	8.9	2.40	4.709	
800.0	800.0	808.7	808.6	1.4	1.4	-81.91	-8.2	11.5	13.2	10.4	2.75	4.783	
900.0	899.9	908.7	908.4	1.6	1.6	-80.72	-13.5	12.4	15.3	12.2	3.12	4.920	
1,000.0	999.7	1,008.7	1,008.2	1.7	1.8	-84.51	-18.8	13.3	17.3	13.8	3.50	4.959	
1,100.0	1,099.5	1,108.7	1,108.1	1.9	2.0	-87.93	-24.2	14.2	19.4	15.5	3.88	4.998	
1,200.0	1,199.3	1,208.6	1,207.9	2.1	2.1	-90.69	-29.5	15.1	21.5	17.2	4.26	5.038	
1,300.0	1,299.2	1,308.6	1,307.7	2.3	2.3	-92.96	-34.8	16.0	23.6	19.0	4.65	5.077	
1,400.0	1,399.0	1,408.6	1,407.6	2.5	2.5	-94.85	-40.1	16.9	25.8	20.7	5.04	5.115	
1,500.0	1,498.8	1,508.6	1,507.4	2.7	2.7	-96.44	-45.5	17.8	28.0	22.5	5.43	5.150	
1,600.0	1,598.6	1,608.5	1,607.2	2.9	2.9	-97.80	-50.8	18.7	30.2	24.4	5.82	5.182	
1,700.0	1,698.5	1,708.5	1,707.0	3.1	3.1	-98.97	-56.1	19.6	32.4	26.2	6.22	5.212	
1,800.0	1,798.3	1,808.5	1,806.9	3.3	3.3	-100.00	-61.4	20.5	34.6	28.0	6.61	5.240	
1,900.0	1,898.1	1,908.4	1,906.7	3.5	3.5	-100.90	-66.7	21.5	36.9	29.9	7.00	5.266	
2,000.0	1,997.9	2,008.4	2,006.5	3.7	3.7	-101.69	-72.1	22.4	39.1	31.7	7.40	5.290	
2,100.0	2,097.8	2,108.4	2,106.3	3.9	3.9	-102.40	-77.4	23.3	41.4	33.6	7.79	5.312	
2,200.0	2,197.6	2,208.4	2,206.2	4.1	4.1	-103.04	-82.7	24.2	43.7	35.5	8.19	5.332	
2,300.0	2,297.4	2,308.3	2,306.0	4.3	4.3	-103.61	-88.0	25.1	45.9	37.4	8.58	5.351	
2,400.0	2,397.2	2,408.3	2,405.8	4.5	4.5	-104.13	-93.4	26.0	48.2	39.2	8.98	5.369	
2,500.0	2,497.1	2,508.3	2,505.7	4.7	4.7	-104.60	-98.7	26.9	50.5	41.1	9.38	5.385	
2,600.0	2,596.9	2,608.3	2,605.5	4.9	4.9	-105.03	-104.0	27.8	52.8	43.0	9.77	5.401	
2,700.0	2,696.7	2,708.2	2,705.3	5.1	5.1	-105.42	-109.3	28.7	55.1	44.9	10.17	5.415	
2,800.0	2,796.5	2,808.2	2,805.1	5.3	5.3	-105.79	-114.7	29.6	57.3	46.8	10.56	5.429	
2,900.0	2,896.3	2,908.2	2,905.0	5.5	5.5	-106.12	-120.0	30.5	59.6	48.7	10.96	5.442	
3,000.0	2,996.2	3,008.2	3,004.8	5.7	5.7	-106.44	-125.3	31.4	61.9	50.6	11.35	5.454	
3,100.0	3,096.0	3,108.1	3,104.6	5.9	5.9	-106.72	-130.6	32.3	64.2	52.5	11.75	5.465	
3,200.0	3,195.8	3,208.1	3,204.4	6.1	6.1	-106.99	-136.0	33.3	66.5	54.4	12.15	5.475	
3,300.0	3,295.6	3,308.1	3,304.3	6.3	6.3	-107.24	-141.3	34.2	68.8	56.3	12.54	5.486	
3,400.0	3,395.5	3,408.0	3,404.1	6.5	6.5	-107.48	-146.6	35.1	71.1	58.2	12.94	5.495	
3,500.0	3,495.3	3,508.0	3,503.9	6.7	6.7	-107.70	-151.9	36.0	73.4	60.1	13.34	5.504	
3,600.0	3,595.1	3,608.0	3,603.8	6.9	6.9	-107.91	-157.2	36.9	75.7	62.0	13.73	5.513	
3,700.0	3,694.9	3,708.0	3,703.6	7.1	7.1	-108.10	-162.6	37.8	78.0	63.9	14.13	5.521	
3,800.0	3,794.8	3,807.9	3,803.4	7.3	7.3	-108.28	-167.9	38.7	80.3	65.8	14.52	5.529	
3,900.0	3,894.6	3,907.9	3,903.2	7.5	7.5	-108.46	-173.2	39.6	82.6	67.7	14.92	5.536	
4,000.0	3,994.4	4,007.9	4,003.1	7.7	7.7	-108.62	-178.5	40.5	84.9	69.6	15.32	5.543	
4,100.0	4,094.2	4,107.9	4,102.9	7.9	7.9	-108.78	-183.9	41.4	87.2	71.5	15.71	5.550	
4,200.0	4,194.1	4,207.8	4,202.7	8.1	8.1	-108.92	-189.2	42.3	89.5	73.4	16.11	5.556	
4,300.0	4,293.9	4,307.8	4,302.5	8.3	8.3	-109.06	-194.5	43.2	91.8	75.3	16.51	5.562	
4,400.0	4,393.7	4,407.8	4,402.4	8.6	8.4	-109.19	-199.8	44.1	94.1	77.2	16.90	5.568	
4,500.0	4,493.5	4,507.8	4,502.2	8.8	8.6	-109.32	-205.2	45.1	96.4	79.1	17.30	5.574	
4,600.0	4,593.4	4,607.7	4,602.0	9.0	8.8	-109.44	-210.5	46.0	98.7	81.0	17.70	5.579	
4,700.0	4,693.2	4,707.7	4,701.9	9.2	9.0	-109.56	-215.8	46.9	101.0	82.9	18.09	5.585	
4,800.0	4,793.0	4,807.7	4,801.7	9.4	9.2	-109.67	-221.1	47.8	103.3	84.9	18.49	5.590	
4,900.0	4,892.8	4,907.6	4,901.5	9.6	9.4	-109.77	-226.5	48.7	105.7	86.8	18.89	5.594	
5,000.0	4,992.6	5,007.6	5,001.3	9.8	9.6	-109.87	-231.8	49.6	108.0	88.7	19.28	5.599	

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 Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3D-22H-M268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,092.5	5,107.6	5,101.2	10.0	9.8	-109.97	-237.1	50.5	110.3	90.6	19.68	5.603	
5,200.0	5,192.3	5,207.6	5,201.0	10.2	10.0	-110.06	-242.4	51.4	112.6	92.5	20.08	5.608	
5,300.0	5,292.1	5,307.5	5,300.8	10.4	10.2	-110.15	-247.7	52.3	114.9	94.4	20.47	5.612	
5,400.0	5,391.9	5,407.5	5,400.6	10.6	10.4	-110.24	-253.1	53.2	117.2	96.3	20.87	5.616	
5,500.0	5,491.8	5,507.5	5,500.5	10.8	10.6	-110.32	-258.4	54.1	119.5	98.2	21.26	5.620	
5,600.0	5,591.6	5,607.5	5,600.3	11.0	10.8	-110.40	-263.7	55.0	121.8	100.1	21.66	5.623	
5,700.0	5,691.4	5,707.4	5,700.1	11.2	11.0	-110.47	-269.0	56.0	124.1	102.1	22.06	5.627	
5,800.0	5,791.2	5,807.4	5,800.0	11.4	11.2	-110.55	-274.4	56.9	126.4	104.0	22.45	5.630	
5,900.0	5,891.1	5,907.4	5,899.8	11.6	11.4	-110.62	-279.7	57.8	128.7	105.9	22.85	5.634	
6,000.0	5,990.9	6,007.4	5,999.6	11.8	11.6	-110.68	-285.0	58.7	131.0	107.8	23.25	5.637	
6,100.0	6,090.7	6,107.3	6,099.4	12.0	11.8	-110.75	-290.3	59.6	133.4	109.7	23.64	5.640	
6,200.0	6,190.5	6,207.3	6,199.3	12.2	12.0	-110.81	-295.7	60.5	135.7	111.6	24.04	5.643	
6,300.0	6,290.4	6,307.3	6,299.1	12.4	12.2	-110.87	-301.0	61.4	138.0	113.5	24.44	5.646	
6,400.0	6,390.2	6,407.2	6,398.9	12.6	12.4	-110.93	-306.3	62.3	140.3	115.5	24.83	5.649	
6,500.0	6,490.0	6,507.2	6,498.7	12.8	12.6	-110.99	-311.6	63.2	142.6	117.4	25.23	5.652	
6,600.0	6,589.8	6,607.2	6,598.6	13.0	12.8	-111.05	-317.0	64.1	144.9	119.3	25.63	5.655	
6,700.0	6,689.7	6,707.2	6,698.4	13.2	13.0	-111.10	-322.3	65.0	147.2	121.2	26.02	5.657	
6,800.0	6,789.5	6,807.1	6,798.2	13.4	13.2	-129.22	-327.6	65.9	149.5	123.1	26.42	5.658	
6,900.0	6,889.1	6,906.3	6,897.2	13.5	13.4	91.25	-332.9	66.8	150.5	123.8	26.74	5.628	
7,000.0	6,986.2	7,002.7	6,993.6	13.4	13.6	98.61	-337.5	67.7	153.6	126.7	26.86	5.718	
7,100.0	7,077.6	7,103.6	7,093.9	13.3	13.7	108.63	-329.6	68.6	162.9	136.4	26.47	6.154	
7,200.0	7,160.6	7,211.2	7,197.8	13.1	13.6	117.66	-301.9	69.6	177.4	151.8	25.59	6.933	
7,300.0	7,232.8	7,326.8	7,301.5	13.0	13.5	125.12	-251.2	70.5	194.8	170.4	24.40	7.984	
7,400.0	7,291.8	7,451.3	7,399.2	13.0	13.3	130.95	-174.6	71.4	212.6	189.4	23.17	9.176	
7,500.0	7,336.0	7,584.8	7,483.1	13.2	13.3	135.26	-71.1	72.2	228.4	206.2	22.22	10.278	
7,600.0	7,364.0	7,726.5	7,543.4	13.5	13.6	138.14	56.7	72.7	240.0	218.1	21.86	10.978	
7,700.0	7,374.9	7,873.9	7,571.0	14.1	14.3	139.66	201.1	73.0	245.8	223.5	22.33	11.006	
7,800.0	7,375.0	7,985.2	7,572.0	14.9	15.1	139.91	312.4	73.0	245.8	222.4	23.38	10.511	
7,900.0	7,375.0	8,085.2	7,572.0	15.8	16.0	140.03	412.4	73.0	245.3	220.7	24.57	9.984	
8,000.0	7,375.0	8,185.2	7,572.0	16.8	17.1	140.16	512.4	73.0	244.9	219.0	25.90	9.456	
8,100.0	7,375.0	8,285.2	7,572.0	18.0	18.2	140.28	612.4	73.0	244.4	217.1	27.33	8.942	
8,200.0	7,375.0	8,385.2	7,572.0	19.3	19.5	140.41	712.4	73.0	244.0	215.1	28.87	8.451	
8,300.0	7,375.0	8,485.2	7,572.0	20.6	20.8	140.53	812.4	73.0	243.5	213.0	30.48	7.990	
8,400.0	7,375.0	8,585.2	7,572.0	22.0	22.2	140.66	912.4	73.0	243.1	210.9	32.15	7.561	
8,500.0	7,375.0	8,685.2	7,572.0	23.4	23.6	140.79	1,012.4	73.0	242.6	208.8	33.88	7.163	
8,600.0	7,375.0	8,785.2	7,572.0	24.9	25.1	140.92	1,112.4	73.0	242.2	206.6	35.64	6.795	
8,700.0	7,375.0	8,885.2	7,572.0	26.4	26.6	141.04	1,212.4	73.0	241.8	204.3	37.44	6.457	
8,800.0	7,375.0	8,985.2	7,572.0	27.9	28.1	141.17	1,312.4	73.0	241.3	202.1	39.27	6.146	
8,900.0	7,375.0	9,085.2	7,572.0	29.5	29.6	141.30	1,412.4	73.0	240.9	199.8	41.12	5.859	
9,000.0	7,375.0	9,185.2	7,572.0	31.1	31.2	141.43	1,512.4	73.0	240.5	197.5	42.98	5.595	
9,100.0	7,375.0	9,285.2	7,572.0	32.7	32.8	141.56	1,612.4	73.0	240.0	195.2	44.86	5.351	
9,200.0	7,375.0	9,385.2	7,572.0	34.3	34.4	141.69	1,712.4	73.0	239.6	192.8	46.74	5.126	
9,300.0	7,375.0	9,485.2	7,572.0	35.9	36.1	142.03	1,812.4	73.0	238.5	190.0	48.49	4.920	
9,400.0	7,375.0	9,585.1	7,572.0	37.6	37.7	142.69	1,912.3	73.0	236.4	186.5	49.93	4.736	
9,500.0	7,375.0	9,685.0	7,572.0	39.2	39.3	143.37	2,012.3	73.0	234.3	183.0	51.30	4.568	
9,600.0	7,375.0	9,785.0	7,572.0	40.9	41.0	144.06	2,112.2	73.0	232.3	179.7	52.61	4.415	
9,700.0	7,375.0	9,884.9	7,572.0	42.5	42.6	144.76	2,212.1	73.0	230.2	176.4	53.86	4.275	
9,800.0	7,375.0	9,984.9	7,572.0	44.2	44.3	145.47	2,312.1	73.0	228.2	173.2	55.03	4.148	
9,900.0	7,375.0	10,084.8	7,572.0	45.9	46.0	146.20	2,412.0	73.0	226.3	170.2	56.12	4.032	
10,000.0	7,375.0	10,184.7	7,572.0	47.6	47.7	146.94	2,512.0	73.0	224.4	167.2	57.13	3.927	
10,100.0	7,375.0	10,284.7	7,572.0	49.3	49.4	147.70	2,611.9	73.0	222.5	164.4	58.06	3.832	
10,200.0	7,375.0	10,384.6	7,572.0	50.9	51.0	148.26	2,711.9	73.0	221.1	161.9	59.15	3.737	

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 Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3D-22H-M268 - 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
10,275.2	7,375.0	10,459.9	7,572.0	52.2	52.3	148.40	2,787.1	73.0	220.7	160.4	60.30	3.660	
10,300.0	7,375.0	10,484.6	7,572.0	52.6	52.7	148.34	2,811.9	73.0	220.9	160.1	60.82	3.632	
10,400.0	7,375.0	10,584.6	7,572.0	54.3	54.4	148.34	2,911.9	73.0	220.9	158.3	62.61	3.528	
10,431.2	7,375.0	10,615.8	7,572.0	54.9	55.0	148.32	2,943.0	73.0	220.9	157.7	63.18	3.497	
10,500.0	7,375.0	10,684.6	7,572.0	56.0	56.1	148.25	3,011.9	73.0	221.1	156.6	64.48	3.429	
10,600.0	7,375.0	10,784.6	7,572.0	57.8	57.9	147.86	3,111.8	73.0	222.0	155.2	66.86	3.321	
10,700.0	7,375.0	10,884.6	7,572.0	59.5	59.6	147.46	3,211.8	73.0	223.0	153.7	69.28	3.219	
10,800.0	7,375.0	10,984.6	7,572.0	61.2	61.3	147.07	3,311.8	73.0	224.0	152.3	71.74	3.123	
10,900.0	7,375.0	11,084.6	7,572.0	62.9	63.0	146.68	3,411.8	73.0	225.0	150.8	74.23	3.031	
11,000.0	7,375.0	11,184.6	7,572.0	64.6	64.7	146.29	3,511.8	73.0	226.0	149.3	76.76	2.944	
11,100.0	7,375.0	11,284.5	7,572.0	66.3	66.4	145.91	3,611.8	73.0	227.0	147.7	79.32	2.862	
11,200.0	7,375.0	11,384.5	7,572.0	68.1	68.1	145.53	3,711.7	73.0	228.1	146.1	81.92	2.784	
11,300.0	7,375.0	11,484.5	7,572.0	69.8	69.9	145.15	3,811.7	73.0	229.1	144.6	84.54	2.710	
11,400.0	7,375.0	11,584.5	7,572.0	71.5	71.6	144.78	3,911.7	73.0	230.1	142.9	87.20	2.639	
11,500.0	7,375.0	11,684.5	7,572.0	73.2	73.3	144.41	4,011.7	73.0	231.2	141.3	89.89	2.572	
11,600.0	7,375.0	11,784.5	7,572.0	75.0	75.0	144.04	4,111.7	73.0	232.3	139.7	92.60	2.508	
11,700.0	7,375.0	11,884.4	7,572.0	76.7	76.8	143.68	4,211.7	73.0	233.3	138.0	95.35	2.447	
11,800.0	7,375.0	11,984.4	7,572.0	78.4	78.5	143.32	4,311.6	73.0	234.4	136.3	98.12	2.389	
11,900.0	7,375.0	12,084.4	7,572.0	80.1	80.2	142.96	4,411.6	73.0	235.5	134.6	100.92	2.334	
12,000.0	7,375.0	12,184.4	7,572.0	81.9	81.9	142.61	4,511.6	73.0	236.6	132.9	103.75	2.281	
12,100.0	7,375.0	12,284.4	7,572.0	83.6	83.7	142.26	4,611.6	73.0	237.7	131.1	106.60	2.230	
12,200.0	7,375.0	12,384.4	7,572.0	85.3	85.4	141.92	4,711.6	73.0	238.9	129.4	109.47	2.182	
12,300.0	7,375.0	12,484.3	7,572.0	87.1	87.1	141.57	4,811.6	73.0	240.0	127.6	112.37	2.136	
12,400.0	7,375.0	12,584.3	7,572.0	88.8	88.9	141.23	4,911.5	73.0	241.1	125.8	115.29	2.091	
12,500.0	7,375.0	12,684.3	7,572.0	90.6	90.6	140.90	5,011.5	73.0	242.3	124.0	118.24	2.049	
12,600.0	7,375.0	12,784.3	7,572.0	92.3	92.3	140.56	5,111.5	73.0	243.4	122.2	121.21	2.008	
12,700.0	7,375.0	12,884.3	7,572.0	94.0	94.1	140.23	5,211.5	73.0	244.6	120.4	124.20	1.969	
12,800.0	7,375.0	12,984.3	7,572.0	95.8	95.8	139.91	5,311.5	73.0	245.8	118.6	127.21	1.932	
12,900.0	7,375.0	13,084.2	7,572.0	97.5	97.5	139.58	5,411.5	73.0	247.0	116.7	130.24	1.896	
13,000.0	7,375.0	13,184.2	7,572.0	99.2	99.3	139.26	5,511.4	73.0	248.1	114.9	133.29	1.862	
13,100.0	7,375.0	13,284.2	7,572.0	101.0	101.0	138.94	5,611.4	73.0	249.3	113.0	136.36	1.829	
13,200.0	7,375.0	13,384.2	7,572.0	102.7	102.8	138.63	5,711.4	73.0	250.5	111.1	139.45	1.797	
13,300.0	7,375.0	13,484.2	7,572.0	104.5	104.5	138.32	5,811.4	73.0	251.7	109.2	142.55	1.766	
13,400.0	7,375.0	13,584.2	7,572.0	106.2	106.2	138.01	5,911.4	73.0	253.0	107.3	145.68	1.736	
13,500.0	7,375.0	13,684.1	7,572.0	107.9	108.0	137.70	6,011.4	73.0	254.2	105.4	148.82	1.708	
13,600.0	7,375.0	13,784.1	7,572.0	109.7	109.7	137.40	6,111.3	73.0	255.4	103.4	151.97	1.681	
13,700.0	7,375.0	13,884.1	7,572.0	111.4	111.5	137.10	6,211.3	73.0	256.7	101.5	155.15	1.654	
13,800.0	7,375.0	13,984.1	7,572.0	113.2	113.2	136.80	6,311.3	73.0	257.9	99.6	158.34	1.629	
13,900.0	7,375.0	14,084.1	7,572.0	114.9	114.9	136.51	6,411.3	73.0	259.2	97.6	161.54	1.604	
14,000.0	7,375.0	14,184.1	7,572.0	116.7	116.7	136.22	6,511.3	73.0	260.4	95.7	164.76	1.581	
14,100.0	7,375.0	14,284.0	7,572.0	118.4	118.4	135.93	6,611.3	73.0	261.7	93.7	167.99	1.558	
14,200.0	7,375.0	14,384.0	7,572.0	120.1	120.2	135.64	6,711.2	73.0	263.0	91.7	171.24	1.536	
14,300.0	7,375.0	14,484.0	7,572.0	121.9	121.9	135.36	6,811.2	73.0	264.2	89.7	174.50	1.514	
14,400.0	7,375.0	14,584.0	7,572.0	123.6	123.7	135.08	6,911.2	73.0	265.5	87.7	177.78	1.494	Level 3
14,500.0	7,375.0	14,684.0	7,572.0	125.4	125.4	134.80	7,011.2	73.0	266.8	85.8	181.06	1.474	Level 3
14,600.0	7,375.0	14,784.0	7,572.0	127.1	127.2	134.53	7,111.2	73.0	268.1	83.8	184.36	1.454	Level 3
14,700.0	7,375.0	14,883.9	7,572.0	128.9	128.9	134.26	7,211.2	73.0	269.4	81.7	187.67	1.436	Level 3
14,800.0	7,375.0	14,983.9	7,572.0	130.6	130.6	133.99	7,311.1	73.0	270.7	79.7	190.99	1.417	Level 3
14,900.0	7,375.0	15,083.9	7,572.0	132.4	132.4	133.72	7,411.1	73.0	272.0	77.7	194.33	1.400	Level 3
15,000.0	7,375.0	15,183.9	7,572.0	134.1	134.1	133.46	7,511.1	73.0	273.4	75.7	197.67	1.383	Level 3
15,094.7	7,375.0	15,278.2	7,572.0	135.8	135.8	133.21	7,605.5	73.0	274.6	73.8	200.85	1.367	Level 3, SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3E-22H-M268 - 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
0.0	0.0	9.0	9.0	0.0	0.0	91.01	-0.4	19.9	19.9				
100.0	100.0	109.0	109.0	0.2	0.1	91.01	-0.4	19.9	19.9	19.6	0.30	66.542	
200.0	200.0	209.0	209.0	0.3	0.3	91.01	-0.4	19.9	19.9	19.2	0.65	30.670	
263.4	263.4	272.4	272.4	0.4	0.4	91.01	-0.4	19.9	19.9	19.0	0.87	22.861	CC
300.0	300.0	309.0	309.0	0.5	0.5	91.03	-0.4	19.9	19.9	18.9	1.00	19.932	ES
400.0	400.0	408.8	408.8	0.7	0.7	93.37	-1.2	20.4	20.5	19.1	1.35	15.210	
500.0	500.0	508.5	508.4	0.8	0.8	99.01	-3.5	22.0	22.3	20.6	1.70	13.116	
600.0	600.0	608.1	607.9	1.0	1.0	106.35	-7.2	24.5	25.6	23.5	2.05	12.454	
700.0	700.0	707.6	707.2	1.2	1.2	-81.11	-12.3	28.0	30.5	28.1	2.40	12.692	
800.0	800.0	807.4	806.9	1.4	1.4	-79.10	-18.0	31.9	35.9	33.1	2.76	12.991	
900.0	899.9	907.3	906.5	1.6	1.6	-80.00	-23.7	35.8	40.9	37.8	3.13	13.087	
1,000.0	999.7	1,007.2	1,006.1	1.7	1.8	-82.48	-29.4	39.6	45.8	42.3	3.50	13.068	
1,100.0	1,099.5	1,107.0	1,105.7	1.9	2.0	-84.67	-35.1	43.5	50.7	46.8	3.88	13.049	
1,200.0	1,199.3	1,206.9	1,205.4	2.1	2.3	-86.46	-40.7	47.4	55.7	51.4	4.27	13.035	
1,300.0	1,299.2	1,306.8	1,305.0	2.3	2.5	-87.96	-46.4	51.3	60.7	56.0	4.66	13.024	
1,400.0	1,399.0	1,406.6	1,404.6	2.5	2.7	-89.23	-52.1	55.1	65.7	60.7	5.05	13.017	
1,500.0	1,498.8	1,506.5	1,504.2	2.7	2.9	-90.32	-57.8	59.0	70.8	65.4	5.44	13.011	
1,600.0	1,598.6	1,606.3	1,603.9	2.9	3.1	-91.26	-63.5	62.9	75.9	70.1	5.84	13.006	
1,700.0	1,698.5	1,706.2	1,703.5	3.1	3.3	-92.09	-69.2	66.8	81.0	74.8	6.23	13.003	
1,800.0	1,798.3	1,806.1	1,803.1	3.3	3.5	-92.81	-74.9	70.7	86.2	79.5	6.63	13.000	
1,900.0	1,898.1	1,905.9	1,902.7	3.5	3.7	-93.46	-80.5	74.5	91.3	84.3	7.03	12.998	
2,000.0	1,997.9	2,005.8	2,002.4	3.7	3.9	-94.03	-86.2	78.4	96.5	89.1	7.42	12.997	
2,100.0	2,097.8	2,105.7	2,102.0	3.9	4.1	-94.55	-91.9	82.3	101.7	93.8	7.82	12.996	
2,200.0	2,197.6	2,205.5	2,201.6	4.1	4.4	-95.01	-97.6	86.2	106.8	98.6	8.22	12.995	
2,300.0	2,297.4	2,305.4	2,301.2	4.3	4.6	-95.44	-103.3	90.0	112.0	103.4	8.62	12.995	
2,400.0	2,397.2	2,405.2	2,400.9	4.5	4.8	-95.82	-109.0	93.9	117.2	108.2	9.02	12.994	
2,500.0	2,497.1	2,505.1	2,500.5	4.7	5.0	-96.18	-114.7	97.8	122.4	113.0	9.42	12.994	
2,600.0	2,596.9	2,605.0	2,600.1	4.9	5.2	-96.50	-120.3	101.7	127.6	117.8	9.82	12.994	
2,700.0	2,696.7	2,704.8	2,699.7	5.1	5.4	-96.80	-126.0	105.5	132.8	122.6	10.22	12.994	
2,800.0	2,796.5	2,804.7	2,799.4	5.3	5.6	-97.08	-131.7	109.4	138.0	127.4	10.62	12.994	
2,900.0	2,896.3	2,904.6	2,899.0	5.5	5.8	-97.33	-137.4	113.3	143.2	132.2	11.02	12.995	
3,000.0	2,996.2	3,004.4	2,998.6	5.7	6.0	-97.57	-143.1	117.2	148.4	137.0	11.42	12.995	
3,100.0	3,096.0	3,104.3	3,098.2	5.9	6.3	-97.79	-148.8	121.1	153.6	141.8	11.82	12.995	
3,200.0	3,195.8	3,204.1	3,197.9	6.1	6.5	-98.00	-154.5	124.9	158.8	146.6	12.22	12.996	
3,300.0	3,295.6	3,304.0	3,297.5	6.3	6.7	-98.19	-160.1	128.8	164.0	151.4	12.62	12.996	
3,400.0	3,395.5	3,403.9	3,397.1	6.5	6.9	-98.38	-165.8	132.7	169.3	156.2	13.02	12.996	
3,500.0	3,495.3	3,503.7	3,496.7	6.7	7.1	-98.55	-171.5	136.6	174.5	161.1	13.42	12.997	
3,600.0	3,595.1	3,603.6	3,596.4	6.9	7.3	-98.71	-177.2	140.4	179.7	165.9	13.83	12.997	
3,700.0	3,694.9	3,703.5	3,696.0	7.1	7.5	-98.86	-182.9	144.3	184.9	170.7	14.23	12.998	
3,800.0	3,794.8	3,803.3	3,795.6	7.3	7.7	-99.01	-188.6	148.2	190.1	175.5	14.63	12.998	
3,900.0	3,894.6	3,903.2	3,895.2	7.5	7.9	-99.14	-194.3	152.1	195.4	180.3	15.03	12.998	
4,000.0	3,994.4	4,003.0	3,994.9	7.7	8.2	-99.27	-200.0	155.9	200.6	185.2	15.43	12.999	
4,100.0	4,094.2	4,102.9	4,094.5	7.9	8.4	-99.40	-205.6	159.8	205.8	190.0	15.83	12.999	
4,200.0	4,194.1	4,202.8	4,194.1	8.1	8.6	-99.51	-211.3	163.7	211.0	194.8	16.23	13.000	
4,300.0	4,293.9	4,302.6	4,293.7	8.3	8.8	-99.62	-217.0	167.6	216.3	199.6	16.64	13.000	
4,400.0	4,393.7	4,402.5	4,393.4	8.6	9.0	-99.73	-222.7	171.4	221.5	204.5	17.04	13.001	
4,500.0	4,493.5	4,502.4	4,493.0	8.8	9.2	-99.83	-228.4	175.3	226.7	209.3	17.44	13.001	
4,600.0	4,593.4	4,602.2	4,592.6	9.0	9.4	-99.93	-234.1	179.2	232.0	214.1	17.84	13.002	
4,700.0	4,693.2	4,702.1	4,692.2	9.2	9.6	-100.02	-239.8	183.1	237.2	218.9	18.24	13.002	
4,800.0	4,793.0	4,801.9	4,791.9	9.4	9.8	-100.11	-245.4	187.0	242.4	223.8	18.64	13.002	
4,900.0	4,892.8	4,901.8	4,891.5	9.6	10.1	-100.19	-251.1	190.8	247.6	228.6	19.05	13.003	
5,000.0	4,992.6	5,001.7	4,991.1	9.8	10.3	-100.27	-256.8	194.7	252.9	233.4	19.45	13.003	

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 Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3E-22H-M268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,092.5	5,101.5	5,090.7	10.0	10.5	-100.35	-262.5	198.6	258.1	238.3	19.85	13.004	
5,200.0	5,192.3	5,201.4	5,190.4	10.2	10.7	-100.42	-268.2	202.5	263.3	243.1	20.25	13.004	
5,300.0	5,292.1	5,301.3	5,290.0	10.4	10.9	-100.49	-273.9	206.3	268.6	247.9	20.65	13.004	
5,400.0	5,391.9	5,401.1	5,389.6	10.6	11.1	-100.56	-279.6	210.2	273.8	252.8	21.06	13.005	
5,500.0	5,491.8	5,501.0	5,489.2	10.8	11.3	-100.63	-285.2	214.1	279.0	257.6	21.46	13.005	
5,600.0	5,591.6	5,600.8	5,588.9	11.0	11.5	-100.69	-290.9	218.0	284.3	262.4	21.86	13.005	
5,700.0	5,691.4	5,700.7	5,688.5	11.2	11.8	-100.76	-296.6	221.8	289.5	267.3	22.26	13.006	
5,800.0	5,791.2	5,800.6	5,788.1	11.4	12.0	-100.81	-302.3	225.7	294.8	272.1	22.66	13.006	
5,900.0	5,891.1	5,900.4	5,887.7	11.6	12.2	-100.87	-308.0	229.6	300.0	276.9	23.06	13.006	
6,000.0	5,990.9	6,000.3	5,987.4	11.8	12.4	-100.93	-313.7	233.5	305.2	281.8	23.47	13.007	
6,100.0	6,090.7	6,100.2	6,087.0	12.0	12.6	-100.98	-319.4	237.4	310.5	286.6	23.87	13.007	
6,200.0	6,190.5	6,200.0	6,186.6	12.2	12.8	-101.03	-325.0	241.2	315.7	291.4	24.27	13.007	
6,300.0	6,290.4	6,299.9	6,286.2	12.4	13.0	-101.08	-330.7	245.1	320.9	296.3	24.67	13.008	
6,400.0	6,390.2	6,399.7	6,385.9	12.6	13.2	-101.13	-336.4	249.0	326.2	301.1	25.07	13.008	
6,500.0	6,490.0	6,500.6	6,486.5	12.8	13.4	-102.45	-334.8	252.9	331.2	305.8	25.42	13.030	
6,600.0	6,589.8	6,596.3	6,580.3	13.0	13.4	-106.41	-317.1	256.5	337.1	311.4	25.68	13.128	
6,700.0	6,689.7	6,682.2	6,661.1	13.2	13.3	-111.98	-288.0	259.7	346.9	321.0	25.83	13.427	
6,800.0	6,789.5	6,756.8	6,727.0	13.4	13.2	-136.60	-253.2	262.3	364.3	338.4	25.91	14.061	
6,900.0	6,889.1	6,825.7	6,783.3	13.5	13.1	71.98	-213.7	264.4	387.9	362.1	25.79	15.043	
7,000.0	6,986.2	6,892.2	6,832.9	13.4	13.0	62.93	-169.5	266.4	414.0	388.6	25.42	16.285	
7,100.0	7,077.6	6,950.0	6,871.5	13.3	13.0	57.10	-126.6	267.9	440.3	415.4	24.84	17.723	
7,200.0	7,160.6	7,020.4	6,912.5	13.1	13.0	52.18	-69.4	269.5	464.6	440.6	24.03	19.338	
7,300.0	7,232.8	7,082.9	6,942.7	13.0	13.1	48.67	-14.7	270.7	486.0	462.8	23.17	20.974	
7,400.0	7,291.8	7,150.0	6,968.3	13.0	13.3	46.03	47.2	271.6	503.4	481.0	22.36	22.513	
7,500.0	7,336.0	7,200.0	6,982.7	13.2	13.4	44.43	95.1	272.2	516.0	494.2	21.83	23.637	
7,600.0	7,364.0	7,266.9	6,995.2	13.5	13.8	43.36	160.7	272.7	523.5	501.7	21.78	24.040	
7,700.0	7,374.9	7,327.6	6,999.8	14.1	14.2	43.04	221.3	272.9	525.7	503.4	22.29	23.580	
7,800.0	7,375.0	7,418.8	7,000.0	14.9	14.9	43.01	312.4	272.9	525.1	501.8	23.37	22.473	
7,900.0	7,375.0	7,518.7	7,000.0	15.8	15.8	42.95	412.4	272.9	524.6	500.0	24.66	21.278	
8,000.0	7,375.0	7,618.7	7,000.0	16.8	16.8	42.90	512.4	272.9	524.2	498.1	26.10	20.082	
8,100.0	7,375.0	7,718.7	7,000.0	18.0	18.0	42.84	612.4	272.9	523.7	496.0	27.68	18.923	
8,200.0	7,375.0	7,818.7	7,000.0	19.3	19.2	42.78	712.4	272.9	523.2	493.9	29.36	17.823	
8,300.0	7,375.0	7,918.7	7,000.0	20.6	20.6	42.73	812.4	272.9	522.8	491.6	31.13	16.794	
8,400.0	7,375.0	8,018.7	7,000.0	22.0	21.9	42.67	912.4	272.9	522.3	489.3	32.97	15.841	
8,500.0	7,375.0	8,118.7	7,000.0	23.4	23.4	42.62	1,012.4	272.9	521.8	486.9	34.87	14.963	
8,600.0	7,375.0	8,218.7	7,000.0	24.9	24.8	42.56	1,112.4	272.9	521.3	484.5	36.83	14.156	
8,700.0	7,375.0	8,318.7	7,000.0	26.4	26.4	42.50	1,212.4	272.9	520.9	482.0	38.82	13.416	
8,800.0	7,375.0	8,418.7	7,000.0	27.9	27.9	42.45	1,312.4	272.9	520.4	479.5	40.86	12.737	
8,900.0	7,375.0	8,518.7	7,000.0	29.5	29.5	42.39	1,412.4	272.9	519.9	477.0	42.92	12.115	
9,000.0	7,375.0	8,618.7	7,000.0	31.1	31.0	42.33	1,512.4	272.9	519.4	474.4	45.00	11.543	
9,100.0	7,375.0	8,718.7	7,000.0	32.7	32.6	42.27	1,612.4	272.9	519.0	471.9	47.10	11.018	
9,200.0	7,375.0	8,818.7	7,000.0	34.3	34.2	42.22	1,712.4	272.9	518.5	469.3	49.22	10.534	
9,300.0	7,375.0	8,918.7	7,000.0	35.9	35.9	42.07	1,812.4	272.9	517.4	466.1	51.29	10.087	
9,400.0	7,375.0	9,018.6	7,000.0	37.6	37.5	41.78	1,912.3	272.9	515.1	461.8	53.24	9.674	
9,500.0	7,375.0	9,118.6	7,000.0	39.2	39.2	41.49	2,012.3	272.9	512.7	457.6	55.18	9.292	
9,600.0	7,375.0	9,218.5	7,000.0	40.9	40.8	41.19	2,112.2	272.9	510.4	453.3	57.11	8.938	
9,700.0	7,375.0	9,318.5	7,000.0	42.5	42.5	40.90	2,212.1	272.9	508.1	449.1	59.02	8.610	
9,800.0	7,375.0	9,418.4	7,000.0	44.2	44.2	40.60	2,312.1	272.9	505.9	445.0	60.91	8.306	
9,900.0	7,375.0	9,518.3	7,000.0	45.9	45.8	40.30	2,412.0	272.9	503.6	440.8	62.77	8.023	
10,000.0	7,375.0	9,618.3	7,000.0	47.6	47.5	39.99	2,512.0	272.9	501.4	436.7	64.62	7.759	
10,100.0	7,375.0	9,718.2	7,000.0	49.3	49.2	39.69	2,611.9	272.9	499.1	432.7	66.44	7.513	
10,200.0	7,375.0	9,818.2	7,000.0	50.9	50.9	39.47	2,711.9	272.9	497.4	429.1	68.35	7.278	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3E-22H-M268 - 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
10,275.3	7,375.0	9,893.5	7,000.0	52.2	52.2	39.41	2,787.2	272.9	497.0	427.1	69.90	7.111	
10,300.0	7,375.0	9,918.2	7,000.0	52.6	52.6	39.44	2,811.9	272.9	497.2	426.7	70.46	7.056	
10,400.0	7,375.0	10,018.2	7,000.0	54.3	54.3	39.44	2,911.9	272.9	497.2	424.6	72.63	6.846	
10,431.1	7,375.0	10,049.3	7,000.0	54.9	54.8	39.44	2,943.0	272.9	497.3	424.0	73.30	6.784	
10,500.0	7,375.0	10,118.2	7,000.0	56.0	56.0	39.47	3,011.9	272.9	497.5	422.6	74.81	6.650	
10,600.0	7,375.0	10,218.2	7,000.0	57.8	57.7	39.63	3,111.8	272.9	498.6	421.4	77.20	6.459	
10,700.0	7,375.0	10,318.1	7,000.0	59.5	59.4	39.79	3,211.8	272.9	499.8	420.2	79.62	6.277	
10,800.0	7,375.0	10,418.1	7,000.0	61.2	61.1	39.95	3,311.8	272.9	501.0	418.9	82.05	6.106	
10,900.0	7,375.0	10,518.1	7,000.0	62.9	62.8	40.11	3,411.8	272.9	502.1	417.6	84.49	5.943	
11,000.0	7,375.0	10,618.1	7,000.0	64.6	64.6	40.27	3,511.8	272.9	503.3	416.3	86.96	5.788	
11,100.0	7,375.0	10,718.1	7,000.0	66.3	66.3	40.43	3,611.8	272.9	504.5	415.0	89.44	5.641	
11,200.0	7,375.0	10,818.1	7,000.0	68.1	68.0	40.59	3,711.7	272.9	505.7	413.7	91.93	5.500	
11,300.0	7,375.0	10,918.0	7,000.0	69.8	69.7	40.74	3,811.7	272.9	506.9	412.4	94.44	5.367	
11,400.0	7,375.0	11,018.0	7,000.0	71.5	71.4	40.90	3,911.7	272.9	508.1	411.1	96.97	5.239	
11,500.0	7,375.0	11,118.0	7,000.0	73.2	73.2	41.05	4,011.7	272.9	509.2	409.7	99.51	5.118	
11,600.0	7,375.0	11,218.0	7,000.0	75.0	74.9	41.21	4,111.7	272.9	510.5	408.4	102.06	5.001	
11,700.0	7,375.0	11,318.0	7,000.0	76.7	76.6	41.36	4,211.7	272.9	511.7	407.0	104.63	4.890	
11,800.0	7,375.0	11,418.0	7,000.0	78.4	78.4	41.51	4,311.6	272.9	512.9	405.6	107.21	4.784	
11,900.0	7,375.0	11,517.9	7,000.0	80.1	80.1	41.67	4,411.6	272.9	514.1	404.3	109.81	4.682	
12,000.0	7,375.0	11,617.9	7,000.0	81.9	81.8	41.82	4,511.6	272.9	515.3	402.9	112.42	4.584	
12,100.0	7,375.0	11,717.9	7,000.0	83.6	83.5	41.97	4,611.6	272.9	516.5	401.5	115.04	4.490	
12,200.0	7,375.0	11,817.9	7,000.0	85.3	85.3	42.12	4,711.6	272.9	517.7	400.1	117.67	4.400	
12,300.0	7,375.0	11,917.9	7,000.0	87.1	87.0	42.27	4,811.6	272.9	519.0	398.6	120.32	4.313	
12,400.0	7,375.0	12,017.9	7,000.0	88.8	88.7	42.42	4,911.5	272.9	520.2	397.2	122.98	4.230	
12,500.0	7,375.0	12,117.8	7,000.0	90.6	90.5	42.57	5,011.5	272.9	521.4	395.8	125.65	4.150	
12,600.0	7,375.0	12,217.8	7,000.0	92.3	92.2	42.71	5,111.5	272.9	522.7	394.3	128.34	4.073	
12,700.0	7,375.0	12,317.8	7,000.0	94.0	94.0	42.86	5,211.5	272.9	523.9	392.9	131.03	3.998	
12,800.0	7,375.0	12,417.8	7,000.0	95.8	95.7	43.00	5,311.5	272.9	525.1	391.4	133.74	3.927	
12,900.0	7,375.0	12,517.8	7,000.0	97.5	97.4	43.15	5,411.5	272.9	526.4	389.9	136.46	3.857	
13,000.0	7,375.0	12,617.8	7,000.0	99.2	99.2	43.29	5,511.4	272.9	527.6	388.4	139.19	3.791	
13,100.0	7,375.0	12,717.7	7,000.0	101.0	100.9	43.44	5,611.4	272.9	528.9	387.0	141.93	3.726	
13,200.0	7,375.0	12,817.7	7,000.0	102.7	102.6	43.58	5,711.4	272.9	530.1	385.5	144.68	3.664	
13,300.0	7,375.0	12,917.7	7,000.0	104.5	104.4	43.72	5,811.4	272.9	531.4	384.0	147.45	3.604	
13,400.0	7,375.0	13,017.7	7,000.0	106.2	106.1	43.87	5,911.4	272.9	532.7	382.4	150.22	3.546	
13,500.0	7,375.0	13,117.7	7,000.0	107.9	107.9	44.01	6,011.4	272.9	533.9	380.9	153.00	3.490	
13,600.0	7,375.0	13,217.7	7,000.0	109.7	109.6	44.15	6,111.3	272.9	535.2	379.4	155.80	3.435	
13,700.0	7,375.0	13,317.6	7,000.0	111.4	111.3	44.29	6,211.3	272.9	536.5	377.9	158.60	3.382	
13,800.0	7,375.0	13,417.6	7,000.0	113.2	113.1	44.43	6,311.3	272.9	537.8	376.3	161.42	3.331	
13,900.0	7,375.0	13,517.6	7,000.0	114.9	114.8	44.57	6,411.3	272.9	539.0	374.8	164.24	3.282	
14,000.0	7,375.0	13,617.6	7,000.0	116.7	116.6	44.70	6,511.3	272.9	540.3	373.2	167.08	3.234	
14,100.0	7,375.0	13,717.6	7,000.0	118.4	118.3	44.84	6,611.3	272.9	541.6	371.7	169.92	3.187	
14,200.0	7,375.0	13,817.6	7,000.0	120.1	120.1	44.98	6,711.2	272.9	542.9	370.1	172.78	3.142	
14,300.0	7,375.0	13,917.5	7,000.0	121.9	121.8	45.11	6,811.2	272.9	544.2	368.5	175.64	3.098	
14,400.0	7,375.0	14,017.5	7,000.0	123.6	123.5	45.25	6,911.2	272.9	545.5	367.0	178.51	3.056	
14,500.0	7,375.0	14,117.5	7,000.0	125.4	125.3	45.38	7,011.2	272.9	546.8	365.4	181.39	3.014	
14,600.0	7,375.0	14,217.5	7,000.0	127.1	127.0	45.52	7,111.2	272.9	548.1	363.8	184.29	2.974	
14,700.0	7,375.0	14,317.5	7,000.0	128.9	128.8	45.65	7,211.2	272.9	549.4	362.2	187.19	2.935	
14,800.0	7,375.0	14,417.5	7,000.0	130.6	130.5	45.78	7,311.1	272.9	550.7	360.6	190.09	2.897	
14,900.0	7,375.0	14,517.4	7,000.0	132.4	132.3	45.92	7,411.1	272.9	552.0	359.0	193.01	2.860	
15,000.0	7,375.0	14,617.4	7,000.0	134.1	134.0	46.05	7,511.1	272.9	553.3	357.4	195.94	2.824	
15,094.7	7,375.0	14,711.4	7,000.0	135.8	135.7	46.17	7,605.1	272.9	554.5	355.8	198.70	2.791	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3F-22H-M268 - 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	9.0	9.0	0.0	0.0	90.67	-0.4	29.9	29.9				
100.0	100.0	109.0	109.0	0.2	0.1	90.67	-0.4	29.9	29.9	29.6	0.30	100.273	
200.0	200.0	209.0	209.0	0.3	0.3	90.67	-0.4	29.9	29.9	29.3	0.65	46.218	
263.4	263.4	272.4	272.4	0.4	0.4	90.67	-0.4	29.9	29.9	29.1	0.87	34.449	CC
300.0	300.0	309.0	309.0	0.5	0.5	90.68	-0.4	29.9	29.9	28.9	1.00	30.036	ES
400.0	400.0	408.5	408.5	0.7	0.7	91.89	-1.0	30.7	30.7	29.4	1.35	22.841	
500.0	500.0	508.1	508.0	0.8	0.8	94.84	-2.8	32.8	32.9	31.3	1.70	19.423	
600.0	600.0	607.5	607.3	1.0	1.0	98.87	-5.7	36.2	36.7	34.7	2.05	17.911	
700.0	700.0	706.7	706.4	1.2	1.2	-91.18	-9.6	41.0	42.2	39.8	2.40	17.588	
800.0	800.0	805.7	805.1	1.4	1.4	-89.83	-14.7	47.0	49.3	46.5	2.76	17.887	
900.0	899.9	905.4	904.3	1.6	1.7	-90.10	-20.4	53.8	57.3	54.1	3.12	18.348	
1,000.0	999.7	1,005.0	1,003.6	1.7	1.9	-91.60	-26.1	60.6	65.3	61.8	3.50	18.670	
1,100.0	1,099.5	1,104.7	1,102.8	1.9	2.1	-92.91	-31.9	67.5	73.3	69.4	3.88	18.915	
1,200.0	1,199.3	1,204.3	1,202.1	2.1	2.3	-93.96	-37.6	74.3	81.4	77.1	4.26	19.105	
1,300.0	1,299.2	1,304.0	1,301.4	2.3	2.6	-94.81	-43.3	81.1	89.5	84.9	4.65	19.257	
1,400.0	1,399.0	1,403.7	1,400.6	2.5	2.8	-95.53	-49.1	87.9	97.6	92.6	5.04	19.380	
1,500.0	1,498.8	1,503.3	1,499.9	2.7	3.0	-96.13	-54.8	94.8	105.8	100.3	5.43	19.481	
1,600.0	1,598.6	1,603.0	1,599.2	2.9	3.2	-96.65	-60.5	101.6	113.9	108.1	5.82	19.565	
1,700.0	1,698.5	1,702.7	1,698.4	3.1	3.5	-97.10	-66.2	108.4	122.1	115.8	6.22	19.637	
1,800.0	1,798.3	1,802.3	1,797.7	3.3	3.7	-97.50	-72.0	115.2	130.2	123.6	6.61	19.697	
1,900.0	1,898.1	1,902.0	1,896.9	3.5	3.9	-97.84	-77.7	122.0	138.4	131.4	7.01	19.750	
2,000.0	1,997.9	2,001.7	1,996.2	3.7	4.2	-98.15	-83.4	128.9	146.6	139.1	7.40	19.796	
2,100.0	2,097.8	2,101.3	2,095.5	3.9	4.4	-98.43	-89.2	135.7	154.7	146.9	7.80	19.836	
2,200.0	2,197.6	2,201.0	2,194.7	4.1	4.6	-98.67	-94.9	142.5	162.9	154.7	8.20	19.871	
2,300.0	2,297.4	2,300.6	2,294.0	4.3	4.9	-98.90	-100.6	149.3	171.1	162.5	8.60	19.903	
2,400.0	2,397.2	2,400.3	2,393.3	4.5	5.1	-99.10	-106.3	156.2	179.3	170.3	8.99	19.931	
2,500.0	2,497.1	2,500.0	2,492.5	4.7	5.3	-99.29	-112.1	163.0	187.4	178.0	9.39	19.956	
2,600.0	2,596.9	2,599.6	2,591.8	4.9	5.6	-99.46	-117.8	169.8	195.6	185.8	9.79	19.979	
2,700.0	2,696.7	2,699.3	2,691.1	5.1	5.8	-99.61	-123.5	176.6	203.8	193.6	10.19	20.000	
2,800.0	2,796.5	2,799.0	2,790.3	5.3	6.0	-99.76	-129.2	183.5	212.0	201.4	10.59	20.018	
2,900.0	2,896.3	2,898.6	2,889.6	5.5	6.3	-99.89	-135.0	190.3	220.2	209.2	10.99	20.036	
3,000.0	2,996.2	2,998.3	2,988.8	5.7	6.5	-100.02	-140.7	197.1	228.4	217.0	11.39	20.052	
3,100.0	3,096.0	3,097.9	3,088.1	5.9	6.7	-100.13	-146.4	203.9	236.6	224.8	11.79	20.066	
3,200.0	3,195.8	3,197.6	3,187.4	6.1	7.0	-100.24	-152.2	210.7	244.8	232.6	12.19	20.080	
3,300.0	3,295.6	3,297.3	3,286.6	6.3	7.2	-100.34	-157.9	217.6	253.0	240.4	12.59	20.092	
3,400.0	3,395.5	3,396.9	3,385.9	6.5	7.4	-100.44	-163.6	224.4	261.1	248.2	12.99	20.104	
3,500.0	3,495.3	3,496.6	3,485.2	6.7	7.7	-100.53	-169.3	231.2	269.3	256.0	13.39	20.114	
3,600.0	3,595.1	3,596.3	3,584.4	6.9	7.9	-100.61	-175.1	238.0	277.5	263.7	13.79	20.124	
3,700.0	3,694.9	3,695.9	3,683.7	7.1	8.1	-100.69	-180.8	244.9	285.7	271.5	14.19	20.134	
3,800.0	3,794.8	3,795.6	3,783.0	7.3	8.4	-100.76	-186.5	251.7	293.9	279.3	14.59	20.143	
3,900.0	3,894.6	3,895.2	3,882.2	7.5	8.6	-100.83	-192.3	258.5	302.1	287.1	14.99	20.151	
4,000.0	3,994.4	3,994.9	3,981.5	7.7	8.8	-100.90	-198.0	265.3	310.3	294.9	15.39	20.159	
4,100.0	4,094.2	4,094.6	4,080.8	7.9	9.1	-100.96	-203.7	272.1	318.5	302.7	15.79	20.166	
4,200.0	4,194.1	4,194.2	4,180.0	8.1	9.3	-101.02	-209.4	279.0	326.7	310.5	16.20	20.173	
4,300.0	4,293.9	4,293.9	4,279.3	8.3	9.5	-101.08	-215.2	285.8	334.9	318.3	16.60	20.179	
4,400.0	4,393.7	4,393.6	4,378.5	8.6	9.7	-101.13	-220.9	292.6	343.1	326.1	17.00	20.186	
4,500.0	4,493.5	4,493.2	4,477.8	8.8	10.0	-101.19	-226.6	299.4	351.3	333.9	17.40	20.192	
4,600.0	4,593.4	4,592.9	4,577.1	9.0	10.2	-101.24	-232.3	306.3	359.5	341.7	17.80	20.197	
4,700.0	4,693.2	4,692.5	4,676.3	9.2	10.4	-101.28	-238.1	313.1	367.7	349.5	18.20	20.202	
4,800.0	4,793.0	4,792.2	4,775.6	9.4	10.7	-101.33	-243.8	319.9	375.9	357.3	18.60	20.207	
4,900.0	4,892.8	4,891.9	4,874.9	9.6	10.9	-101.37	-249.5	326.7	384.1	365.1	19.00	20.212	
5,000.0	4,992.6	4,991.5	4,974.1	9.8	11.1	-101.41	-255.3	333.5	392.3	372.9	19.41	20.217	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3F-22H-M268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,092.5	5,091.2	5,073.4	10.0	11.4	-101.45	-261.0	340.4	400.5	380.7	19.81	20.221	
5,200.0	5,192.3	5,190.9	5,172.7	10.2	11.6	-101.49	-266.7	347.2	408.7	388.5	20.21	20.225	
5,300.0	5,292.1	5,290.5	5,271.9	10.4	11.8	-101.53	-272.4	354.0	416.9	396.3	20.61	20.229	
5,400.0	5,391.9	5,390.2	5,371.2	10.6	12.1	-101.56	-278.2	360.8	425.1	404.1	21.01	20.233	
5,500.0	5,491.8	5,489.9	5,470.4	10.8	12.3	-101.60	-283.9	367.7	433.3	411.9	21.41	20.237	
5,600.0	5,591.6	5,589.5	5,569.7	11.0	12.5	-101.63	-289.6	374.5	441.5	419.7	21.81	20.240	
5,700.0	5,691.4	5,689.2	5,669.0	11.2	12.8	-101.66	-295.4	381.3	449.7	427.5	22.21	20.244	
5,800.0	5,791.2	5,788.8	5,768.2	11.4	13.0	-101.69	-301.1	388.1	457.9	435.3	22.62	20.247	
5,900.0	5,891.1	5,888.5	5,867.5	11.6	13.2	-101.72	-306.8	394.9	466.1	443.1	23.02	20.250	
6,000.0	5,990.9	5,988.2	5,966.8	11.8	13.5	-101.75	-312.5	401.8	474.3	450.9	23.42	20.253	
6,100.0	6,090.7	6,087.8	6,066.0	12.0	13.7	-101.78	-318.3	408.6	482.5	458.7	23.82	20.256	
6,200.0	6,190.5	6,187.5	6,165.3	12.2	13.9	-101.80	-324.0	415.4	490.7	466.5	24.22	20.259	
6,300.0	6,290.4	6,287.2	6,264.6	12.4	14.2	-101.83	-329.7	422.2	498.9	474.3	24.62	20.261	
6,400.0	6,390.2	6,386.8	6,363.8	12.6	14.4	-101.85	-335.4	429.1	507.1	482.1	25.03	20.264	
6,500.0	6,490.0	6,487.4	6,464.1	12.8	14.6	-102.34	-337.1	436.0	515.3	489.9	25.40	20.289	
6,600.0	6,589.8	6,584.4	6,559.7	13.0	14.7	-104.51	-322.9	442.5	523.6	497.9	25.70	20.373	
6,700.0	6,689.7	6,672.6	6,643.4	13.2	14.6	-107.91	-296.1	448.3	534.0	508.0	25.95	20.581	
6,800.0	6,789.5	6,750.0	6,712.8	13.4	14.6	-130.35	-262.3	453.0	548.7	522.6	26.14	20.991	
6,900.0	6,889.1	6,821.1	6,772.0	13.5	14.5	80.32	-223.2	457.1	567.5	541.3	26.19	21.668	
7,000.0	6,986.2	6,889.8	6,824.1	13.4	14.5	72.82	-178.7	460.7	588.1	562.1	26.01	22.613	
7,100.0	7,077.6	6,950.0	6,865.2	13.3	14.4	67.96	-134.8	463.5	608.9	583.3	25.61	23.771	
7,200.0	7,160.6	7,021.9	6,907.9	13.1	14.5	63.80	-77.1	466.5	628.4	603.4	25.01	25.124	
7,300.0	7,232.8	7,086.2	6,939.7	13.0	14.5	60.69	-21.3	468.6	645.7	621.3	24.38	26.488	
7,400.0	7,291.8	7,150.0	6,965.0	13.0	14.7	58.35	37.3	470.4	659.8	636.0	23.84	27.671	
7,500.0	7,336.0	7,212.6	6,983.3	13.2	14.9	56.72	97.1	471.6	670.2	646.6	23.61	28.383	
7,600.0	7,364.0	7,275.2	6,994.9	13.5	15.2	55.77	158.6	472.4	676.4	652.5	23.84	28.368	
7,700.0	7,374.9	7,337.7	6,999.8	14.1	15.5	55.49	220.8	472.8	678.1	653.4	24.64	27.524	
7,800.0	7,375.0	7,429.3	7,000.0	14.9	16.2	55.47	312.4	472.8	677.4	651.5	25.92	26.141	
7,900.0	7,375.0	7,529.3	7,000.0	15.8	17.0	55.44	412.4	472.8	676.9	649.4	27.46	24.651	
8,000.0	7,375.0	7,629.3	7,000.0	16.8	18.0	55.40	512.4	472.8	676.3	647.1	29.20	23.157	
8,100.0	7,375.0	7,729.3	7,000.0	18.0	19.1	55.37	612.4	472.8	675.7	644.6	31.12	21.712	
8,200.0	7,375.0	7,829.3	7,000.0	19.3	20.3	55.33	712.4	472.8	675.1	642.0	33.18	20.349	
8,300.0	7,375.0	7,929.3	7,000.0	20.6	21.5	55.30	812.4	472.8	674.6	639.2	35.35	19.083	
8,400.0	7,375.0	8,029.3	7,000.0	22.0	22.9	55.27	912.4	472.8	674.0	636.4	37.61	17.918	
8,500.0	7,375.0	8,129.3	7,000.0	23.4	24.2	55.23	1,012.4	472.8	673.4	633.5	39.96	16.853	
8,600.0	7,375.0	8,229.3	7,000.0	24.9	25.7	55.20	1,112.4	472.8	672.8	630.5	42.37	15.882	
8,700.0	7,375.0	8,329.3	7,000.0	26.4	27.1	55.17	1,212.4	472.8	672.3	627.4	44.83	14.997	
8,800.0	7,375.0	8,429.3	7,000.0	27.9	28.6	55.13	1,312.4	472.8	671.7	624.4	47.33	14.191	
8,900.0	7,375.0	8,529.3	7,000.0	29.5	30.1	55.10	1,412.4	472.8	671.1	621.3	49.88	13.456	
9,000.0	7,375.0	8,629.3	7,000.0	31.1	31.7	55.06	1,512.4	472.8	670.6	618.1	52.45	12.784	
9,100.0	7,375.0	8,729.3	7,000.0	32.7	33.3	55.03	1,612.4	472.8	670.0	614.9	55.05	12.170	
9,200.0	7,375.0	8,829.3	7,000.0	34.3	34.8	55.00	1,712.4	472.8	669.4	611.7	57.68	11.606	
9,300.0	7,375.0	8,929.3	7,000.0	35.9	36.4	54.90	1,812.4	472.8	668.0	607.7	60.35	11.068	
9,400.0	7,375.0	9,029.2	7,000.0	37.6	38.1	54.73	1,912.3	472.8	665.2	602.3	62.93	10.570	
9,500.0	7,375.0	9,129.1	7,000.0	39.2	39.7	54.55	2,012.3	472.8	662.4	596.9	65.51	10.111	
9,600.0	7,375.0	9,229.1	7,000.0	40.9	41.3	54.38	2,112.2	472.8	659.5	591.4	68.08	9.687	
9,700.0	7,375.0	9,329.0	7,000.0	42.5	43.0	54.20	2,212.1	472.8	656.7	586.0	70.65	9.295	
9,800.0	7,375.0	9,429.0	7,000.0	44.2	44.6	54.02	2,312.1	472.8	653.9	580.6	73.22	8.930	
9,900.0	7,375.0	9,528.9	7,000.0	45.9	46.3	53.84	2,412.0	472.8	651.0	575.2	75.79	8.590	
10,000.0	7,375.0	9,628.8	7,000.0	47.6	47.9	53.66	2,512.0	472.8	648.2	569.9	78.35	8.273	
10,100.0	7,375.0	9,728.8	7,000.0	49.3	49.6	53.47	2,611.9	472.8	645.4	564.5	80.90	7.978	
10,200.0	7,375.0	9,828.7	7,000.0	50.9	51.3	53.35	2,711.9	472.8	643.3	559.8	83.45	7.709	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3F-22H-M268 - 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
10,275.3	7,375.0	9,904.1	7,000.0	52.2	52.6	53.32	2,787.2	472.8	642.8	557.3	85.43	7.524	
10,300.0	7,375.0	9,928.7	7,000.0	52.6	53.0	53.33	2,811.9	472.8	643.0	556.9	86.11	7.467	
10,400.0	7,375.0	10,028.7	7,000.0	54.3	54.7	53.33	2,911.9	472.8	643.0	554.2	88.84	7.238	
10,431.1	7,375.0	10,059.8	7,000.0	54.9	55.2	53.33	2,943.0	472.8	643.1	553.4	89.67	7.171	
10,500.0	7,375.0	10,128.7	7,000.0	56.0	56.4	53.35	3,011.9	472.8	643.3	551.8	91.51	7.030	
10,600.0	7,375.0	10,228.7	7,000.0	57.8	58.1	53.44	3,111.8	472.8	644.8	550.4	94.35	6.834	
10,700.0	7,375.0	10,328.7	7,000.0	59.5	59.8	53.54	3,211.8	472.8	646.2	549.0	97.21	6.648	
10,800.0	7,375.0	10,428.7	7,000.0	61.2	61.5	53.64	3,311.8	472.8	647.7	547.6	100.07	6.472	
10,900.0	7,375.0	10,528.7	7,000.0	62.9	63.2	53.73	3,411.8	472.8	649.2	546.2	102.95	6.306	
11,000.0	7,375.0	10,628.6	7,000.0	64.6	64.9	53.83	3,511.8	472.8	650.7	544.8	105.84	6.148	
11,100.0	7,375.0	10,728.6	7,000.0	66.3	66.6	53.92	3,611.8	472.8	652.1	543.4	108.74	5.997	
11,200.0	7,375.0	10,828.6	7,000.0	68.1	68.3	54.02	3,711.7	472.8	653.6	542.0	111.64	5.854	
11,300.0	7,375.0	10,928.6	7,000.0	69.8	70.0	54.11	3,811.7	472.8	655.1	540.5	114.56	5.718	
11,400.0	7,375.0	11,028.6	7,000.0	71.5	71.7	54.20	3,911.7	472.8	656.6	539.1	117.48	5.589	
11,500.0	7,375.0	11,128.6	7,000.0	73.2	73.5	54.30	4,011.7	472.8	658.0	537.6	120.42	5.465	
11,600.0	7,375.0	11,228.5	7,000.0	75.0	75.2	54.39	4,111.7	472.8	659.5	536.2	123.36	5.347	
11,700.0	7,375.0	11,328.5	7,000.0	76.7	76.9	54.48	4,211.7	472.8	661.0	534.7	126.30	5.234	
11,800.0	7,375.0	11,428.5	7,000.0	78.4	78.6	54.57	4,311.6	472.8	662.5	533.2	129.26	5.125	
11,900.0	7,375.0	11,528.5	7,000.0	80.1	80.3	54.66	4,411.6	472.8	664.0	531.8	132.22	5.022	
12,000.0	7,375.0	11,628.5	7,000.0	81.9	82.1	54.75	4,511.6	472.8	665.5	530.3	135.19	4.923	
12,100.0	7,375.0	11,728.5	7,000.0	83.6	83.8	54.84	4,611.6	472.8	667.0	528.8	138.17	4.827	
12,200.0	7,375.0	11,828.4	7,000.0	85.3	85.5	54.93	4,711.6	472.8	668.5	527.3	141.15	4.736	
12,300.0	7,375.0	11,928.4	7,000.0	87.1	87.2	55.02	4,811.6	472.8	670.0	525.8	144.14	4.648	
12,400.0	7,375.0	12,028.4	7,000.0	88.8	89.0	55.11	4,911.5	472.8	671.5	524.3	147.14	4.563	
12,500.0	7,375.0	12,128.4	7,000.0	90.6	90.7	55.20	5,011.5	472.8	673.0	522.8	150.14	4.482	
12,600.0	7,375.0	12,228.4	7,000.0	92.3	92.4	55.29	5,111.5	472.8	674.5	521.3	153.15	4.404	
12,700.0	7,375.0	12,328.4	7,000.0	94.0	94.2	55.38	5,211.5	472.8	676.0	519.8	156.17	4.328	
12,800.0	7,375.0	12,428.3	7,000.0	95.8	95.9	55.47	5,311.5	472.8	677.5	518.3	159.19	4.256	
12,900.0	7,375.0	12,528.3	7,000.0	97.5	97.6	55.55	5,411.5	472.8	679.0	516.7	162.22	4.185	
13,000.0	7,375.0	12,628.3	7,000.0	99.2	99.4	55.64	5,511.4	472.8	680.5	515.2	165.25	4.118	
13,100.0	7,375.0	12,728.3	7,000.0	101.0	101.1	55.73	5,611.4	472.8	682.0	513.7	168.29	4.052	
13,200.0	7,375.0	12,828.3	7,000.0	102.7	102.8	55.81	5,711.4	472.8	683.5	512.1	171.34	3.989	
13,300.0	7,375.0	12,928.3	7,000.0	104.5	104.6	55.90	5,811.4	472.8	685.0	510.6	174.39	3.928	
13,400.0	7,375.0	13,028.2	7,000.0	106.2	106.3	55.98	5,911.4	472.8	686.5	509.1	177.45	3.869	
13,500.0	7,375.0	13,128.2	7,000.0	107.9	108.1	56.07	6,011.4	472.8	688.0	507.5	180.51	3.812	
13,600.0	7,375.0	13,228.2	7,000.0	109.7	109.8	56.15	6,111.3	472.8	689.5	506.0	183.58	3.756	
13,700.0	7,375.0	13,328.2	7,000.0	111.4	111.5	56.24	6,211.3	472.8	691.0	504.4	186.65	3.702	
13,800.0	7,375.0	13,428.2	7,000.0	113.2	113.3	56.32	6,311.3	472.8	692.6	502.8	189.73	3.650	
13,900.0	7,375.0	13,528.2	7,000.0	114.9	115.0	56.41	6,411.3	472.8	694.1	501.3	192.81	3.600	
14,000.0	7,375.0	13,628.1	7,000.0	116.7	116.8	56.49	6,511.3	472.8	695.6	499.7	195.90	3.551	
14,100.0	7,375.0	13,728.1	7,000.0	118.4	118.5	56.57	6,611.3	472.8	697.1	498.1	198.99	3.503	
14,200.0	7,375.0	13,828.1	7,000.0	120.1	120.2	56.65	6,711.2	472.8	698.7	496.6	202.09	3.457	
14,300.0	7,375.0	13,928.1	7,000.0	121.9	122.0	56.74	6,811.2	472.8	700.2	495.0	205.19	3.412	
14,400.0	7,375.0	14,028.1	7,000.0	123.6	123.7	56.82	6,911.2	472.8	701.7	493.4	208.30	3.369	
14,500.0	7,375.0	14,128.1	7,000.0	125.4	125.5	56.90	7,011.2	472.8	703.2	491.8	211.41	3.326	
14,600.0	7,375.0	14,228.0	7,000.0	127.1	127.2	56.98	7,111.2	472.8	704.8	490.2	214.53	3.285	
14,700.0	7,375.0	14,328.0	7,000.0	128.9	128.9	57.06	7,211.2	472.8	706.3	488.6	217.65	3.245	
14,800.0	7,375.0	14,428.0	7,000.0	130.6	130.7	57.14	7,311.1	472.8	707.8	487.0	220.78	3.206	
14,900.0	7,375.0	14,528.0	7,000.0	132.4	132.4	57.22	7,411.1	472.8	709.4	485.5	223.91	3.168	
15,000.0	7,375.0	14,628.0	7,000.0	134.1	134.2	57.30	7,511.1	472.8	710.9	483.9	227.04	3.131	
15,094.7	7,375.0	14,721.6	7,000.0	135.8	135.8	57.38	7,604.7	472.8	712.3	482.4	230.00	3.097	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3G-22H-N268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
6,300.0	6,290.4	6,497.0	6,460.1	12.4	14.7	-104.05	-313.3	914.6	999.3	975.1	24.12	41.432	
6,400.0	6,390.2	6,596.3	6,558.3	12.6	14.9	-104.07	-318.8	901.2	987.1	962.6	24.51	40.272	
6,500.0	6,490.0	6,695.5	6,656.5	12.8	15.2	-104.09	-324.3	887.8	974.9	950.0	24.90	39.148	
6,600.0	6,589.8	6,794.8	6,754.7	13.0	15.5	-104.12	-329.8	874.3	962.7	937.4	25.30	38.059	
6,700.0	6,689.7	6,894.0	6,852.8	13.2	15.8	-104.14	-335.3	860.9	950.6	924.9	25.69	37.003	
6,800.0	6,789.5	6,992.4	6,950.2	13.4	16.1	-122.22	-338.1	847.6	938.4	912.3	26.05	36.018	
6,900.0	6,889.1	7,089.3	7,045.4	13.5	16.3	94.68	-325.8	834.6	926.2	900.0	26.25	35.281	
7,000.0	6,986.2	7,185.4	7,136.3	13.4	16.5	92.92	-297.9	822.1	914.3	888.1	26.27	34.810	
7,100.0	7,077.6	7,280.7	7,220.8	13.3	16.6	92.99	-255.5	810.6	903.0	876.8	26.15	34.527	
7,200.0	7,160.6	7,375.6	7,296.7	13.1	16.7	93.44	-199.8	800.2	892.5	866.5	26.01	34.317	
7,300.0	7,232.8	7,470.1	7,362.3	13.0	16.9	93.98	-132.5	791.2	883.3	857.4	25.96	34.032	
7,400.0	7,291.8	7,564.4	7,416.0	13.0	17.1	94.52	-55.4	783.9	875.6	849.5	26.13	33.514	
7,500.0	7,336.0	7,658.7	7,456.4	13.2	17.5	94.99	29.4	778.3	869.6	842.9	26.64	32.646	
7,600.0	7,364.0	7,753.1	7,482.6	13.5	18.0	95.37	119.9	774.8	865.5	837.9	27.57	31.397	
7,700.0	7,374.9	7,847.6	7,493.6	14.1	18.6	95.62	213.7	773.2	863.4	834.5	28.92	29.854	
7,800.0	7,375.0	7,946.4	7,494.0	14.9	19.4	95.65	312.5	773.2	862.7	832.1	30.63	28.166	
7,900.0	7,375.0	8,046.4	7,494.0	15.8	20.3	95.66	412.5	773.2	862.0	829.4	32.61	26.436	
8,000.0	7,375.0	8,146.4	7,494.0	16.8	21.2	95.66	512.5	773.2	861.3	826.5	34.82	24.732	
8,100.0	7,375.0	8,246.4	7,494.0	18.0	22.3	95.67	612.5	773.2	860.6	823.4	37.24	23.110	
8,200.0	7,375.0	8,346.4	7,494.0	19.3	23.5	95.67	712.5	773.2	859.9	820.1	39.81	21.598	
8,300.0	7,375.0	8,446.4	7,494.0	20.6	24.8	95.68	812.5	773.2	859.2	816.7	42.52	20.207	
8,400.0	7,375.0	8,546.4	7,494.0	22.0	26.1	95.68	912.5	773.1	858.5	813.2	45.33	18.938	
8,500.0	7,375.0	8,646.4	7,494.0	23.4	27.4	95.69	1,012.5	773.1	857.8	809.6	48.23	17.784	
8,600.0	7,375.0	8,746.4	7,494.0	24.9	28.8	95.69	1,112.5	773.1	857.1	805.9	51.21	16.736	
8,700.0	7,375.0	8,846.4	7,494.0	26.4	30.2	95.70	1,212.5	773.1	856.4	802.1	54.25	15.786	
8,800.0	7,375.0	8,946.4	7,494.0	27.9	31.7	95.70	1,312.5	773.1	855.7	798.3	57.34	14.924	
8,900.0	7,375.0	9,046.4	7,494.0	29.5	33.2	95.71	1,412.5	773.1	855.0	794.5	60.47	14.139	
9,000.0	7,375.0	9,146.4	7,494.0	31.1	34.7	95.71	1,512.5	773.1	854.3	790.6	63.64	13.423	
9,100.0	7,375.0	9,246.4	7,494.0	32.7	36.2	95.72	1,612.5	773.1	853.6	786.7	66.84	12.770	
9,200.0	7,375.0	9,346.4	7,494.0	34.3	37.8	95.72	1,712.4	773.1	852.9	782.8	70.07	12.171	
9,300.0	7,375.0	9,446.3	7,494.0	35.9	39.4	95.73	1,812.4	773.1	851.2	778.1	73.05	11.652	
9,400.0	7,375.0	9,546.3	7,494.0	37.6	41.0	95.76	1,912.4	773.1	847.8	771.5	76.26	11.117	
9,500.0	7,375.0	9,646.2	7,494.0	39.2	42.6	95.78	2,012.3	773.1	844.3	764.7	79.54	10.614	
9,600.0	7,375.0	9,746.2	7,494.0	40.9	44.2	95.81	2,112.2	773.1	840.8	758.0	82.85	10.149	
9,700.0	7,375.0	9,846.1	7,494.0	42.5	45.8	95.83	2,212.2	773.1	837.3	751.2	86.16	9.718	
9,800.0	7,375.0	9,946.0	7,494.0	44.2	47.4	95.85	2,312.1	773.1	833.9	744.4	89.49	9.318	
9,900.0	7,375.0	10,046.0	7,494.0	45.9	49.1	95.88	2,412.1	773.1	830.4	737.5	92.83	8.945	
10,000.0	7,375.0	10,145.9	7,494.0	47.6	50.7	95.90	2,512.0	773.1	826.9	730.7	96.18	8.597	
10,100.0	7,375.0	10,245.9	7,494.0	49.3	52.4	95.93	2,611.9	773.1	823.4	723.9	99.54	8.272	
10,200.0	7,375.0	10,345.8	7,494.0	50.9	54.0	95.94	2,711.9	773.0	820.8	717.6	103.19	7.954	
10,276.3	7,375.0	10,422.1	7,494.0	52.2	55.3	95.95	2,788.2	773.0	820.1	714.3	105.89	7.745 CC	
10,300.0	7,375.0	10,445.8	7,494.0	52.6	55.7	95.95	2,811.9	773.0	820.4	713.7	106.73	7.687	
10,400.0	7,375.0	10,545.8	7,494.0	54.3	57.4	95.95	2,911.9	773.0	820.4	710.3	110.11	7.451	
10,431.7	7,375.0	10,577.5	7,494.0	54.9	57.9	95.95	2,943.6	773.0	820.5	709.3	111.25	7.376	
10,500.0	7,375.0	10,645.8	7,494.0	56.0	59.0	95.94	3,011.9	773.0	820.8	707.1	113.68	7.220	
10,600.0	7,375.0	10,745.8	7,494.0	57.8	60.7	95.93	3,111.9	773.0	822.6	705.5	117.10	7.025	
10,700.0	7,375.0	10,845.8	7,494.0	59.5	62.4	95.92	3,211.9	773.0	824.4	703.9	120.50	6.841	
10,800.0	7,375.0	10,945.8	7,494.0	61.2	64.1	95.91	3,311.9	773.0	826.2	702.3	123.92	6.668	
10,900.0	7,375.0	11,045.7	7,494.0	62.9	65.8	95.89	3,411.8	773.0	828.0	700.7	127.33	6.503	
11,000.0	7,375.0	11,145.7	7,494.0	64.6	67.5	95.88	3,511.8	773.0	829.8	699.1	130.76	6.347	
11,100.0	7,375.0	11,245.7	7,494.0	66.3	69.2	95.87	3,611.8	773.0	831.7	697.5	134.18	6.198	
11,200.0	7,375.0	11,345.7	7,494.0	68.1	70.9	95.85	3,711.8	773.0	833.5	695.9	137.61	6.057	

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 Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3G-22H-N268 - Hz - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
11,300.0	7,375.0	11,445.7	7,494.0	69.8	72.6	95.84	3,811.8	773.0	835.3	694.2	141.04	5.922	
11,400.0	7,375.0	11,545.7	7,494.0	71.5	74.3	95.83	3,911.8	773.0	837.1	692.6	144.48	5.794	
11,500.0	7,375.0	11,645.6	7,494.0	73.2	76.0	95.82	4,011.7	773.0	838.9	691.0	147.91	5.672	
11,600.0	7,375.0	11,745.6	7,494.0	75.0	77.7	95.80	4,111.7	773.0	840.7	689.4	151.35	5.555	
11,700.0	7,375.0	11,845.6	7,494.0	76.7	79.4	95.79	4,211.7	773.0	842.5	687.7	154.80	5.443	
11,800.0	7,375.0	11,945.6	7,494.0	78.4	81.1	95.78	4,311.7	773.0	844.3	686.1	158.24	5.336	
11,900.0	7,375.0	12,045.6	7,494.0	80.1	82.9	95.77	4,411.7	773.0	846.1	684.4	161.69	5.233	
12,000.0	7,375.0	12,145.6	7,494.0	81.9	84.6	95.75	4,511.7	772.9	847.9	682.8	165.14	5.135	
12,100.0	7,375.0	12,245.5	7,494.0	83.6	86.3	95.74	4,611.6	772.9	849.8	681.2	168.59	5.040	
12,200.0	7,375.0	12,345.5	7,494.0	85.3	88.0	95.73	4,711.6	772.9	851.6	679.5	172.04	4.950	
12,300.0	7,375.0	12,445.5	7,494.0	87.1	89.7	95.72	4,811.6	772.9	853.4	677.9	175.50	4.863	
12,400.0	7,375.0	12,545.5	7,494.0	88.8	91.5	95.71	4,911.6	772.9	855.2	676.2	178.96	4.779	
12,500.0	7,375.0	12,645.5	7,494.0	90.6	93.2	95.69	5,011.6	772.9	857.0	674.6	182.41	4.698	
12,600.0	7,375.0	12,745.5	7,494.0	92.3	94.9	95.68	5,111.6	772.9	858.8	672.9	185.87	4.620	
12,700.0	7,375.0	12,845.5	7,494.0	94.0	96.6	95.67	5,211.5	772.9	860.6	671.3	189.34	4.545	
12,800.0	7,375.0	12,945.4	7,494.0	95.8	98.4	95.66	5,311.5	772.9	862.4	669.6	192.80	4.473	
12,900.0	7,375.0	13,045.4	7,494.0	97.5	100.1	95.65	5,411.5	772.9	864.2	668.0	196.26	4.404	
13,000.0	7,375.0	13,145.4	7,494.0	99.2	101.8	95.63	5,511.5	772.9	866.1	666.3	199.73	4.336	
13,100.0	7,375.0	13,245.4	7,494.0	101.0	103.6	95.62	5,611.5	772.9	867.9	664.7	203.19	4.271	
13,200.0	7,375.0	13,345.4	7,494.0	102.7	105.3	95.61	5,711.5	772.9	869.7	663.0	206.66	4.208	
13,300.0	7,375.0	13,445.4	7,494.0	104.5	107.0	95.60	5,811.4	772.9	871.5	661.4	210.13	4.147	
13,400.0	7,375.0	13,545.3	7,494.0	106.2	108.7	95.59	5,911.4	772.9	873.3	659.7	213.60	4.089	
13,500.0	7,375.0	13,645.3	7,494.0	107.9	110.5	95.57	6,011.4	772.9	875.1	658.0	217.07	4.031	
13,600.0	7,375.0	13,745.3	7,494.0	109.7	112.2	95.56	6,111.4	772.9	876.9	656.4	220.54	3.976	
13,700.0	7,375.0	13,845.3	7,494.0	111.4	113.9	95.55	6,211.4	772.8	878.7	654.7	224.01	3.923	
13,800.0	7,375.0	13,945.3	7,494.0	113.2	115.7	95.54	6,311.4	772.8	880.5	653.1	227.48	3.871	
13,900.0	7,375.0	14,045.3	7,494.0	114.9	117.4	95.53	6,411.3	772.8	882.3	651.4	230.96	3.820	
14,000.0	7,375.0	14,145.2	7,494.0	116.7	119.1	95.52	6,511.3	772.8	884.2	649.7	234.43	3.772	
14,100.0	7,375.0	14,245.2	7,494.0	118.4	120.9	95.51	6,611.3	772.8	886.0	648.1	237.91	3.724	
14,200.0	7,375.0	14,345.2	7,494.0	120.1	122.6	95.50	6,711.3	772.8	887.8	646.4	241.38	3.678	
14,300.0	7,375.0	14,445.2	7,494.0	121.9	124.4	95.48	6,811.3	772.8	889.6	644.7	244.86	3.633	
14,400.0	7,375.0	14,545.2	7,494.0	123.6	126.1	95.47	6,911.3	772.8	891.4	643.1	248.34	3.590	
14,500.0	7,375.0	14,645.2	7,494.0	125.4	127.8	95.46	7,011.2	772.8	893.2	641.4	251.81	3.547	
14,600.0	7,375.0	14,745.1	7,494.0	127.1	129.6	95.45	7,111.2	772.8	895.0	639.7	255.29	3.506	
14,700.0	7,375.0	14,845.1	7,494.0	128.9	131.3	95.44	7,211.2	772.8	896.8	638.1	258.77	3.466	
14,800.0	7,375.0	14,945.1	7,494.0	130.6	133.0	95.43	7,311.2	772.8	898.6	636.4	262.25	3.427	
14,900.0	7,375.0	15,045.1	7,494.0	132.4	134.8	95.42	7,411.2	772.8	900.5	634.7	265.73	3.389	
15,000.0	7,375.0	15,145.1	7,494.0	134.1	136.5	95.41	7,511.2	772.8	902.3	633.1	269.21	3.352	
15,094.7	7,375.0	15,238.3	7,494.0	135.8	138.2	95.40	7,604.4	772.8	904.0	631.5	272.48	3.318	ES, SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - NYGREN 12-22 (EXISTING) - KERR-MCGEE WELL - NO SURVE

Offset Site Error: 0.0 ft

Survey Program: 7710-Geolink MWD

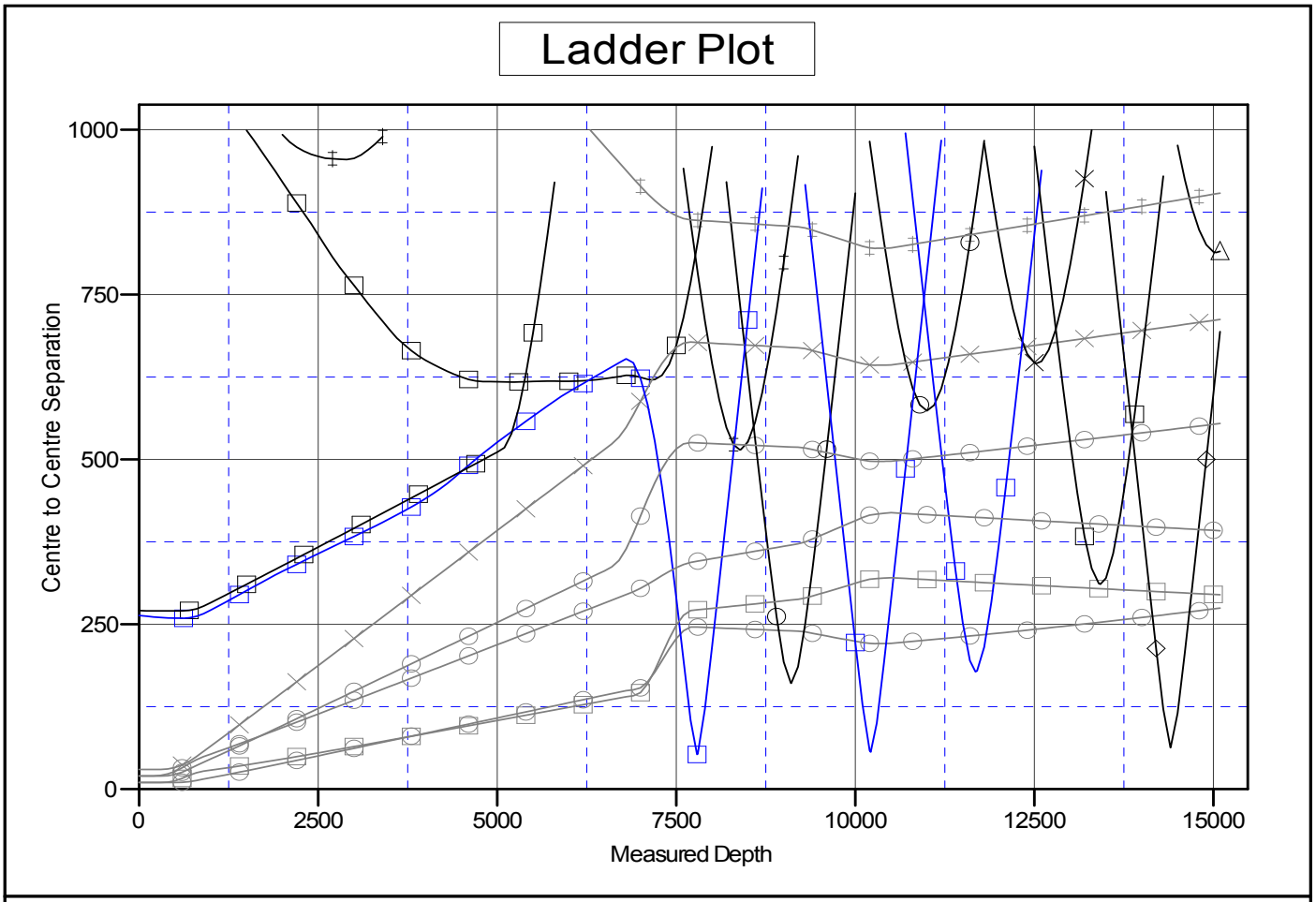
Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
8,200.0	7,375.0	7,329.0	7,329.0	19.3	12.8	90.00	1,618.1	84.5	921.0	889.0	31.99	28.789	
8,300.0	7,375.0	7,329.0	7,329.0	20.6	12.8	90.00	1,618.1	84.5	822.7	789.4	33.32	24.691	
8,400.0	7,375.0	7,329.0	7,329.0	22.0	12.8	90.00	1,618.1	84.5	724.9	690.2	34.71	20.884	
8,500.0	7,375.0	7,329.0	7,329.0	23.4	12.8	90.00	1,618.1	84.5	627.8	591.6	36.15	17.366	
8,600.0	7,375.0	7,329.0	7,329.0	24.9	12.8	90.00	1,618.1	84.5	531.7	494.1	37.63	14.131	
8,700.0	7,375.0	7,329.0	7,329.0	26.4	12.8	90.00	1,618.1	84.5	437.4	398.3	39.14	11.176	
8,800.0	7,375.0	7,329.0	7,329.0	27.9	12.8	90.00	1,618.1	84.5	346.4	305.7	40.68	8.514	
8,900.0	7,375.0	7,329.0	7,329.0	29.5	12.8	90.00	1,618.1	84.5	261.9	219.7	42.25	6.200	
9,000.0	7,375.0	7,329.0	7,329.0	31.1	12.8	90.00	1,618.1	84.5	192.9	149.1	43.83	4.402	
9,100.0	7,375.0	7,329.0	7,329.0	32.7	12.8	90.00	1,618.1	84.5	160.8	115.4	45.43	3.539	
9,106.9	7,375.0	7,329.0	7,329.0	32.8	12.8	90.00	1,618.1	84.5	160.6	115.1	45.55	3.527	CC, ES, SF
9,200.0	7,375.0	7,329.0	7,329.0	34.3	12.8	90.00	1,618.1	84.5	185.7	138.6	47.05	3.947	
9,300.0	7,375.0	7,329.0	7,329.0	35.9	12.8	90.00	1,618.1	84.5	250.6	201.9	48.64	5.151	
9,400.0	7,375.0	7,329.0	7,329.0	37.6	12.8	90.00	1,618.1	84.5	332.4	282.2	50.27	6.613	
9,500.0	7,375.0	7,329.0	7,329.0	39.2	12.8	90.00	1,618.1	84.5	422.2	370.3	51.93	8.131	
9,600.0	7,375.0	7,329.0	7,329.0	40.9	12.8	90.00	1,618.1	84.5	515.7	462.1	53.59	9.624	
9,700.0	7,375.0	7,329.0	7,329.0	42.5	12.8	90.00	1,618.1	84.5	611.3	556.0	55.25	11.064	
9,800.0	7,375.0	7,329.0	7,329.0	44.2	12.8	90.00	1,618.1	84.5	708.1	651.2	56.93	12.439	
9,900.0	7,375.0	7,329.0	7,329.0	45.9	12.8	90.00	1,618.1	84.5	805.7	747.1	58.61	13.747	
10,000.0	7,375.0	7,329.0	7,329.0	47.6	12.8	90.00	1,618.1	84.5	903.8	843.5	60.29	14.990	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3C-22H-M268
Project:	DJ Wattenberg	**TVD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	13' KB @ 4966.0ft (Ensign 124)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3C-22H-M268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to 13' KB @ 4966.0ft (Ensign 124)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Jillson-East Rinn 3C-22H-M268
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.33°



L E G E N D

z, Plan #1 V0
ANA WELL, SURVEYS V0
ERR-MCGEE WELL, NO SURVEYS V0
RR-MCGEE WELL, NO SURVEYS V0
ANA WELL, SURVEYS V0
z, Plan #1 V0

JILLSON 14-22 (EXISTING), ENCANA WELL, GYRO V0
EAST RINN 13-15 (EXISTING), ENCANA WELL, SURVEYS V0
EAST RINN 2-8-15 (EXISTING), ENCANA WELL, SURVEYS V0
JILLSON 12-22 (EXISTING), ENCANA WELL, GYRO V0
JILLSON 11-22 (EXISTING), ENCANA WELL, GYRO V0
Jillson-East Rinn 3E-22H-M268, Hz, Plan #1 V0

EAST RINN 2-4-15 (EXISTING), EI
EAST RINN H UNIT 1 (EXISTING),
JILLSON 3 (EXISTING), FOUNDA
Jillson-East Rinn 3B-22H-M268, Hz
Jillson-East Rinn 3G-22H-N268, Hz
Jillson-East Rinn 3A-22H-M268, Hz