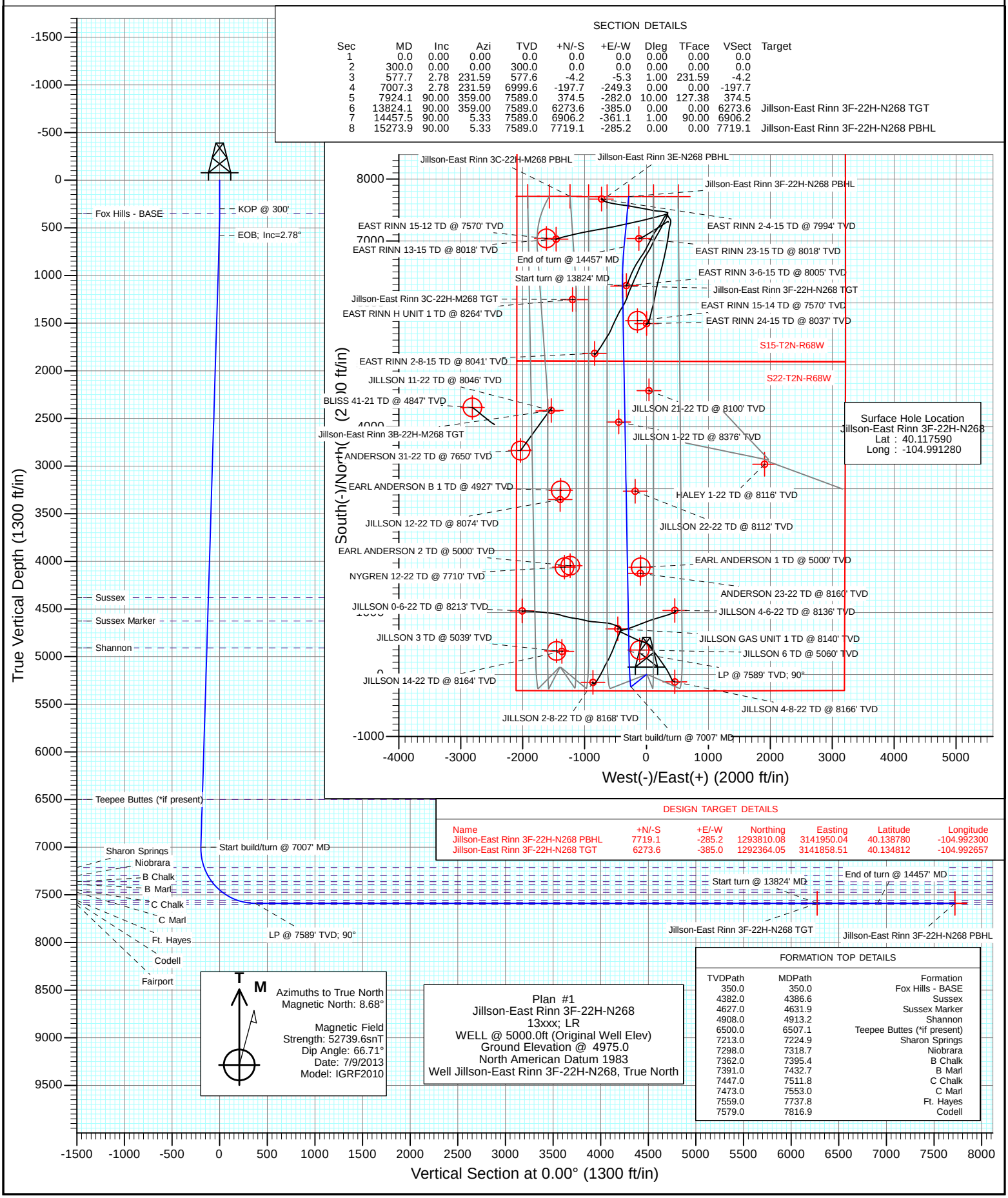
Project: DJ Wattenberg
Site: S22-T2N-R68W (Jillson-East Rinn)
Well: Jillson-East Rinn 3F-22H-N268
Wellbore: Hz
Design: Plan #1

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.0	
3	577.7	2.78	231.59	577.6	-4.2	-5.3	1.00	231.59	-4.2	
4	7007.3	2.78	231.59	6999.6	-197.7	-249.3	0.00	0.00	-197.7	
5	7924.1	90.00	359.00	7589.0	374.5	-282.0	10.00	127.38	374.5	
6	13824.1	90.00	359.00	7589.0	6273.6	-385.0	0.00	0.00	6273.6	Jillson-East Rinn 3F-22H-N268 TGT
7	14457.5	90.00	5.33	7589.0	6906.2	-361.1	1.00	90.00	6906.2	
8	15273.9	90.00	5.33	7589.0	7719.1	-285.2	0.00	0.00	7719.1	Jillson-East Rinn 3F-22H-N268 PBHL



DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Jillson-East Rinn 3F-22H-N268 PBHL	7719.1	-285.2	1293810.08	3141950.04	40.138780	-104.992300
Jillson-East Rinn 3F-22H-N268 TGT	6273.6	-385.0	1292364.05	3141858.51	40.134812	-104.992657

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
350.0	350.0	Fox Hills - BASE
4382.0	4386.6	Sussex
4627.0	4631.9	Sussex Marker
4908.0	4913.2	Shannon
6500.0	6507.1	Teepee Buttes (*if present)
7213.0	7224.9	Sharon Springs
7298.0	7318.7	Niobrara
7362.0	7395.4	B Chalk
7391.0	7432.7	B Marl
7447.0	7511.8	C Chalk
7473.0	7553.0	C Marl
7559.0	7737.8	Ft. Hayes
7579.0	7816.9	Codell

T M
Azimuths to True North
Magnetic North: 8.68°

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

Plan #1
Jillson-East Rinn 3F-22H-N268
13xxx; LR
WELL @ 5000.0ft (Original Well Elev)
Ground Elevation @ 4975.0
North American Datum 1983
Well Jillson-East Rinn 3F-22H-N268, True North

Planning Report

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3F-22H-N268
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site:	S22-T2N-R68W (Jillson-East Rinn)	**North Reference:**	True
Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Project DJ Wattenberg

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

Site 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 3F-22H-N268

Well Position	**+N/-S**	0.0 ft	**Northing:**	1,286,092.73 ft	**Latitude:**	40.117590
	+E/-W	0.0 ft	**Easting:**	3,142,279.50 ft	**Longitude:**	-104.991280
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,975.0 ft

Wellbore Hz

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/9/2013	8.68	66.71	52,740

Design Plan #1

Audit Notes:

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

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

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
577.7	2.78	231.59	577.6	-4.2	-5.3	1.00	1.00	0.00	231.59	
7,007.3	2.78	231.59	6,999.6	-197.7	-249.3	0.00	0.00	0.00	0.00	
7,924.1	90.00	359.00	7,589.0	374.5	-282.0	10.00	9.51	13.90	127.38	
13,824.1	90.00	359.00	7,589.0	6,273.6	-385.0	0.00	0.00	0.00	0.00	Jillson-East Rinn 3F-2
14,457.5	90.00	5.33	7,589.0	6,906.2	-361.1	1.00	0.00	1.00	90.00	
15,273.9	90.00	5.33	7,589.0	7,719.1	-285.2	0.00	0.00	0.00	0.00	Jillson-East Rinn 3F-2

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3F-22H-N268
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site:	S22-T2N-R68W (Jillson-East Rinn)	**North Reference:**	True
Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	KOP @ 300'
350.0	0.50	231.59	350.0	-0.1	-0.2	-0.1	1.00	1.00	Fox Hills - BASE
400.0	1.00	231.59	400.0	-0.5	-0.7	-0.5	1.00	1.00	
500.0	2.00	231.59	500.0	-2.2	-2.7	-2.2	1.00	1.00	
577.7	2.78	231.59	577.6	-4.2	-5.3	-4.2	1.00	1.00	EOB; Inc=2.78°
600.0	2.78	231.59	599.9	-4.9	-6.1	-4.9	0.00	0.00	
700.0	2.78	231.59	699.7	-7.9	-9.9	-7.9	0.00	0.00	
800.0	2.78	231.59	799.6	-10.9	-13.7	-10.9	0.00	0.00	
900.0	2.78	231.59	899.5	-13.9	-17.5	-13.9	0.00	0.00	
1,000.0	2.78	231.59	999.4	-16.9	-21.3	-16.9	0.00	0.00	
1,100.0	2.78	231.59	1,099.3	-19.9	-25.1	-19.9	0.00	0.00	
1,200.0	2.78	231.59	1,199.2	-22.9	-28.9	-22.9	0.00	0.00	
1,300.0	2.78	231.59	1,299.0	-25.9	-32.7	-25.9	0.00	0.00	
1,400.0	2.78	231.59	1,398.9	-28.9	-36.5	-28.9	0.00	0.00	
1,500.0	2.78	231.59	1,498.8	-31.9	-40.3	-31.9	0.00	0.00	
1,600.0	2.78	231.59	1,598.7	-34.9	-44.1	-34.9	0.00	0.00	
1,700.0	2.78	231.59	1,698.6	-38.0	-47.9	-38.0	0.00	0.00	
1,800.0	2.78	231.59	1,798.5	-41.0	-51.7	-41.0	0.00	0.00	
1,900.0	2.78	231.59	1,898.3	-44.0	-55.5	-44.0	0.00	0.00	
2,000.0	2.78	231.59	1,998.2	-47.0	-59.3	-47.0	0.00	0.00	
2,100.0	2.78	231.59	2,098.1	-50.0	-63.1	-50.0	0.00	0.00	
2,200.0	2.78	231.59	2,198.0	-53.0	-66.9	-53.0	0.00	0.00	
2,300.0	2.78	231.59	2,297.9	-56.0	-70.6	-56.0	0.00	0.00	
2,400.0	2.78	231.59	2,397.8	-59.0	-74.4	-59.0	0.00	0.00	
2,500.0	2.78	231.59	2,497.6	-62.0	-78.2	-62.0	0.00	0.00	
2,600.0	2.78	231.59	2,597.5	-65.0	-82.0	-65.0	0.00	0.00	
2,700.0	2.78	231.59	2,697.4	-68.1	-85.8	-68.1	0.00	0.00	
2,800.0	2.78	231.59	2,797.3	-71.1	-89.6	-71.1	0.00	0.00	
2,900.0	2.78	231.59	2,897.2	-74.1	-93.4	-74.1	0.00	0.00	
3,000.0	2.78	231.59	2,997.0	-77.1	-97.2	-77.1	0.00	0.00	
3,100.0	2.78	231.59	3,096.9	-80.1	-101.0	-80.1	0.00	0.00	
3,200.0	2.78	231.59	3,196.8	-83.1	-104.8	-83.1	0.00	0.00	
3,300.0	2.78	231.59	3,296.7	-86.1	-108.6	-86.1	0.00	0.00	
3,400.0	2.78	231.59	3,396.6	-89.1	-112.4	-89.1	0.00	0.00	
3,500.0	2.78	231.59	3,496.5	-92.1	-116.2	-92.1	0.00	0.00	
3,600.0	2.78	231.59	3,596.3	-95.1	-120.0	-95.1	0.00	0.00	
3,700.0	2.78	231.59	3,696.2	-98.2	-123.8	-98.2	0.00	0.00	
3,800.0	2.78	231.59	3,796.1	-101.2	-127.6	-101.2	0.00	0.00	
3,900.0	2.78	231.59	3,896.0	-104.2	-131.4	-104.2	0.00	0.00	
4,000.0	2.78	231.59	3,995.9	-107.2	-135.2	-107.2	0.00	0.00	
4,100.0	2.78	231.59	4,095.8	-110.2	-139.0	-110.2	0.00	0.00	
4,200.0	2.78	231.59	4,195.6	-113.2	-142.8	-113.2	0.00	0.00	
4,300.0	2.78	231.59	4,295.5	-116.2	-146.6	-116.2	0.00	0.00	
4,386.6	2.78	231.59	4,382.0	-118.8	-149.9	-118.8	0.00	0.00	Sussex
4,400.0	2.78	231.59	4,395.4	-119.2	-150.4	-119.2	0.00	0.00	
4,500.0	2.78	231.59	4,495.3	-122.2	-154.2	-122.2	0.00	0.00	
4,600.0	2.78	231.59	4,595.2	-125.2	-158.0	-125.2	0.00	0.00	
4,631.9	2.78	231.59	4,627.0	-126.2	-159.2	-126.2	0.00	0.00	Sussex Marker
4,700.0	2.78	231.59	4,695.1	-128.3	-161.8	-128.3	0.00	0.00	

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Project:	DJ Wattenberg	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site:	S22-T2N-R68W (Jillson-East Rinn)	**North Reference:**	True
Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,800.0	2.78	231.59	4,794.9	-131.3	-165.5	-131.3	0.00	0.00	
4,900.0	2.78	231.59	4,894.8	-134.3	-169.3	-134.3	0.00	0.00	
4,913.2	2.78	231.59	4,908.0	-134.7	-169.8	-134.7	0.00	0.00	Shannon
5,000.0	2.78	231.59	4,994.7	-137.3	-173.1	-137.3	0.00	0.00	
5,100.0	2.78	231.59	5,094.6	-140.3	-176.9	-140.3	0.00	0.00	
5,200.0	2.78	231.59	5,194.5	-143.3	-180.7	-143.3	0.00	0.00	
5,300.0	2.78	231.59	5,294.3	-146.3	-184.5	-146.3	0.00	0.00	
5,400.0	2.78	231.59	5,394.2	-149.3	-188.3	-149.3	0.00	0.00	
5,500.0	2.78	231.59	5,494.1	-152.3	-192.1	-152.3	0.00	0.00	
5,600.0	2.78	231.59	5,594.0	-155.3	-195.9	-155.3	0.00	0.00	
5,700.0	2.78	231.59	5,693.9	-158.4	-199.7	-158.4	0.00	0.00	
5,800.0	2.78	231.59	5,793.8	-161.4	-203.5	-161.4	0.00	0.00	
5,900.0	2.78	231.59	5,893.6	-164.4	-207.3	-164.4	0.00	0.00	
6,000.0	2.78	231.59	5,993.5	-167.4	-211.1	-167.4	0.00	0.00	
6,100.0	2.78	231.59	6,093.4	-170.4	-214.9	-170.4	0.00	0.00	
6,200.0	2.78	231.59	6,193.3	-173.4	-218.7	-173.4	0.00	0.00	
6,300.0	2.78	231.59	6,293.2	-176.4	-222.5	-176.4	0.00	0.00	
6,400.0	2.78	231.59	6,393.1	-179.4	-226.3	-179.4	0.00	0.00	
6,500.0	2.78	231.59	6,492.9	-182.4	-230.1	-182.4	0.00	0.00	
6,507.1	2.78	231.59	6,500.0	-182.6	-230.3	-182.6	0.00	0.00	Teepee Buttes (*if present)
6,600.0	2.78	231.59	6,592.8	-185.4	-233.9	-185.4	0.00	0.00	
6,700.0	2.78	231.59	6,692.7	-188.4	-237.7	-188.4	0.00	0.00	
6,800.0	2.78	231.59	6,792.6	-191.5	-241.5	-191.5	0.00	0.00	
6,900.0	2.78	231.59	6,892.5	-194.5	-245.3	-194.5	0.00	0.00	
7,000.0	2.78	231.59	6,992.4	-197.5	-249.1	-197.5	0.00	0.00	
7,007.3	2.78	231.59	6,999.6	-197.7	-249.3	-197.7	0.00	0.00	Start build/turn @ 7007' MD
7,100.0	7.90	342.88	7,092.0	-193.0	-253.0	-193.0	10.00	5.52	
7,200.0	17.72	352.08	7,189.5	-171.3	-257.1	-171.3	10.00	9.82	
7,224.9	20.19	352.99	7,213.0	-163.3	-258.2	-163.3	10.00	9.93	Sharon Springs
7,300.0	27.67	354.79	7,281.6	-133.0	-261.3	-133.0	10.00	9.95	
7,318.7	29.53	355.10	7,298.0	-124.1	-262.1	-124.1	10.00	9.97	Niobrara
7,395.4	37.18	356.09	7,362.0	-82.1	-265.3	-82.1	10.00	9.98	B Chalk
7,400.0	37.64	356.14	7,365.7	-79.3	-265.5	-79.3	10.00	9.98	
7,432.7	40.91	356.45	7,391.0	-58.6	-266.8	-58.6	10.00	9.98	B Marl
7,500.0	47.62	356.99	7,439.2	-11.8	-269.5	-11.8	10.00	9.98	
7,511.8	48.80	357.07	7,447.0	-3.0	-270.0	-3.0	10.00	9.99	C Chalk
7,553.0	52.91	357.33	7,473.0	28.9	-271.5	28.9	10.00	9.99	C Marl
7,600.0	57.61	357.60	7,499.8	67.5	-273.2	67.5	10.00	9.99	
7,700.0	67.60	358.09	7,545.7	156.1	-276.6	156.1	10.00	9.99	
7,737.8	71.38	358.26	7,559.0	191.5	-277.7	191.5	10.00	9.99	Ft. Hayes
7,800.0	77.60	358.51	7,575.6	251.4	-279.4	251.4	10.00	9.99	
7,816.9	79.28	358.58	7,579.0	267.9	-279.8	267.9	10.00	9.99	Codell
7,900.0	87.59	358.91	7,588.5	350.4	-281.6	350.4	10.00	9.99	
7,924.1	90.00	359.00	7,589.0	374.5	-282.0	374.5	10.00	9.99	LP @ 7589' TVD; 90°
8,000.0	90.00	359.00	7,589.0	450.4	-283.4	450.4	0.00	0.00	
8,100.0	90.00	359.00	7,589.0	550.4	-285.1	550.4	0.00	0.00	
8,200.0	90.00	359.00	7,589.0	650.3	-286.8	650.3	0.00	0.00	
8,300.0	90.00	359.00	7,589.0	750.3	-288.6	750.3	0.00	0.00	
8,400.0	90.00	359.00	7,589.0	850.3	-290.3	850.3	0.00	0.00	
8,500.0	90.00	359.00	7,589.0	950.3	-292.1	950.3	0.00	0.00	
8,600.0	90.00	359.00	7,589.0	1,050.3	-293.8	1,050.3	0.00	0.00	
8,700.0	90.00	359.00	7,589.0	1,150.3	-295.6	1,150.3	0.00	0.00	

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Project:	DJ Wattenberg	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site:	S22-T2N-R68W (Jillson-East Rinn)	**North Reference:**	True
Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
8,800.0	90.00	359.00	7,589.0	1,250.3	-297.3	1,250.3	0.00	0.00	
8,900.0	90.00	359.00	7,589.0	1,350.2	-299.1	1,350.2	0.00	0.00	
9,000.0	90.00	359.00	7,589.0	1,450.2	-300.8	1,450.2	0.00	0.00	
9,100.0	90.00	359.00	7,589.0	1,550.2	-302.6	1,550.2	0.00	0.00	
9,200.0	90.00	359.00	7,589.0	1,650.2	-304.3	1,650.2	0.00	0.00	
9,300.0	90.00	359.00	7,589.0	1,750.2	-306.0	1,750.2	0.00	0.00	
9,400.0	90.00	359.00	7,589.0	1,850.2	-307.8	1,850.2	0.00	0.00	
9,500.0	90.00	359.00	7,589.0	1,950.1	-309.5	1,950.1	0.00	0.00	
9,600.0	90.00	359.00	7,589.0	2,050.1	-311.3	2,050.1	0.00	0.00	
9,700.0	90.00	359.00	7,589.0	2,150.1	-313.0	2,150.1	0.00	0.00	
9,800.0	90.00	359.00	7,589.0	2,250.1	-314.8	2,250.1	0.00	0.00	
9,900.0	90.00	359.00	7,589.0	2,350.1	-316.5	2,350.1	0.00	0.00	
10,000.0	90.00	359.00	7,589.0	2,450.1	-318.3	2,450.1	0.00	0.00	
10,100.0	90.00	359.00	7,589.0	2,550.1	-320.0	2,550.1	0.00	0.00	
10,200.0	90.00	359.00	7,589.0	2,650.0	-321.8	2,650.0	0.00	0.00	
10,300.0	90.00	359.00	7,589.0	2,750.0	-323.5	2,750.0	0.00	0.00	
10,400.0	90.00	359.00	7,589.0	2,850.0	-325.2	2,850.0	0.00	0.00	
10,500.0	90.00	359.00	7,589.0	2,950.0	-327.0	2,950.0	0.00	0.00	
10,600.0	90.00	359.00	7,589.0	3,050.0	-328.7	3,050.0	0.00	0.00	
10,700.0	90.00	359.00	7,589.0	3,150.0	-330.5	3,150.0	0.00	0.00	
10,800.0	90.00	359.00	7,589.0	3,250.0	-332.2	3,250.0	0.00	0.00	
10,900.0	90.00	359.00	7,589.0	3,349.9	-334.0	3,349.9	0.00	0.00	
11,000.0	90.00	359.00	7,589.0	3,449.9	-335.7	3,449.9	0.00	0.00	
11,100.0	90.00	359.00	7,589.0	3,549.9	-337.5	3,549.9	0.00	0.00	
11,200.0	90.00	359.00	7,589.0	3,649.9	-339.2	3,649.9	0.00	0.00	
11,300.0	90.00	359.00	7,589.0	3,749.9	-340.9	3,749.9	0.00	0.00	
11,400.0	90.00	359.00	7,589.0	3,849.9	-342.7	3,849.9	0.00	0.00	
11,500.0	90.00	359.00	7,589.0	3,949.8	-344.4	3,949.8	0.00	0.00	
11,600.0	90.00	359.00	7,589.0	4,049.8	-346.2	4,049.8	0.00	0.00	
11,700.0	90.00	359.00	7,589.0	4,149.8	-347.9	4,149.8	0.00	0.00	
11,800.0	90.00	359.00	7,589.0	4,249.8	-349.7	4,249.8	0.00	0.00	
11,900.0	90.00	359.00	7,589.0	4,349.8	-351.4	4,349.8	0.00	0.00	
12,000.0	90.00	359.00	7,589.0	4,449.8	-353.2	4,449.8	0.00	0.00	
12,100.0	90.00	359.00	7,589.0	4,549.8	-354.9	4,549.8	0.00	0.00	
12,200.0	90.00	359.00	7,589.0	4,649.7	-356.7	4,649.7	0.00	0.00	
12,300.0	90.00	359.00	7,589.0	4,749.7	-358.4	4,749.7	0.00	0.00	
12,400.0	90.00	359.00	7,589.0	4,849.7	-360.1	4,849.7	0.00	0.00	
12,500.0	90.00	359.00	7,589.0	4,949.7	-361.9	4,949.7	0.00	0.00	
12,600.0	90.00	359.00	7,589.0	5,049.7	-363.6	5,049.7	0.00	0.00	
12,700.0	90.00	359.00	7,589.0	5,149.7	-365.4	5,149.7	0.00	0.00	
12,800.0	90.00	359.00	7,589.0	5,249.6	-367.1	5,249.6	0.00	0.00	
12,900.0	90.00	359.00	7,589.0	5,349.6	-368.9	5,349.6	0.00	0.00	
13,000.0	90.00	359.00	7,589.0	5,449.6	-370.6	5,449.6	0.00	0.00	
13,100.0	90.00	359.00	7,589.0	5,549.6	-372.4	5,549.6	0.00	0.00	
13,200.0	90.00	359.00	7,589.0	5,649.6	-374.1	5,649.6	0.00	0.00	
13,300.0	90.00	359.00	7,589.0	5,749.6	-375.9	5,749.6	0.00	0.00	
13,400.0	90.00	359.00	7,589.0	5,849.6	-377.6	5,849.6	0.00	0.00	
13,500.0	90.00	359.00	7,589.0	5,949.5	-379.3	5,949.5	0.00	0.00	
13,600.0	90.00	359.00	7,589.0	6,049.5	-381.1	6,049.5	0.00	0.00	
13,700.0	90.00	359.00	7,589.0	6,149.5	-382.8	6,149.5	0.00	0.00	
13,800.0	90.00	359.00	7,589.0	6,249.5	-384.6	6,249.5	0.00	0.00	
13,824.1	90.00	359.00	7,589.0	6,273.6	-385.0	6,273.6	0.00	0.00	Start turn @ 13824' MD - Jillson-East Rinn 3F-2

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3F-22H-N268
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site:	S22-T2N-R68W (Jillson-East Rinn)	**North Reference:**	True
Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
13,900.0	90.00	359.76	7,589.0	6,349.5	-385.8	6,349.5	1.00	0.00	
14,000.0	90.00	0.76	7,589.0	6,449.5	-385.4	6,449.5	1.00	0.00	
14,100.0	90.00	1.76	7,589.0	6,549.5	-383.2	6,549.5	1.00	0.00	
14,200.0	90.00	2.76	7,589.0	6,649.4	-379.2	6,649.4	1.00	0.00	
14,300.0	90.00	3.76	7,589.0	6,749.2	-373.5	6,749.2	1.00	0.00	
14,400.0	90.00	4.76	7,589.0	6,848.9	-366.1	6,848.9	1.00	0.00	
14,457.5	90.00	5.33	7,589.0	6,906.2	-361.1	6,906.2	1.00	0.00	End of turn @ 14457' MD
14,500.0	90.00	5.33	7,589.0	6,948.5	-357.1	6,948.5	0.00	0.00	
14,600.0	90.00	5.33	7,589.0	7,048.1	-347.8	7,048.1	0.00	0.00	
14,700.0	90.00	5.33	7,589.0	7,147.7	-338.5	7,147.7	0.00	0.00	
14,800.0	90.00	5.33	7,589.0	7,247.2	-329.2	7,247.2	0.00	0.00	
14,900.0	90.00	5.33	7,589.0	7,346.8	-319.9	7,346.8	0.00	0.00	
15,000.0	90.00	5.33	7,589.0	7,446.4	-310.6	7,446.4	0.00	0.00	
15,100.0	90.00	5.33	7,589.0	7,545.9	-301.3	7,545.9	0.00	0.00	
15,200.0	90.00	5.33	7,589.0	7,645.5	-292.0	7,645.5	0.00	0.00	
15,273.9	90.00	5.33	7,589.0	7,719.1	-285.2	7,719.1	0.00	0.00	TD at 15273.9 - Jillson-East Rinn 3F-22H-N268

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 3F-22H - plan hits target center - Point	0.00	0.00	7,589.0	7,719.1	-285.2	1,293,810.08	3,141,950.04	40.138780	-104.992300
Jillson-East Rinn 3F-22H - plan hits target center - Point	0.00	0.00	7,589.0	6,273.6	-385.0	1,292,364.05	3,141,858.51	40.134812	-104.992657

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
350.0	350.0	Fox Hills - BASE			
4,386.6	4,382.0	Sussex			
4,631.9	4,627.0	Sussex Marker			
4,913.2	4,908.0	Shannon			
6,507.1	6,500.0	Teepee Buttes (*if present)			
7,224.9	7,213.0	Sharon Springs			
7,318.7	7,298.0	Niobrara			
7,395.4	7,362.0	B Chalk			
7,432.7	7,391.0	B Marl			
7,511.8	7,447.0	C Chalk			
7,553.0	7,473.0	C Marl			
7,737.8	7,559.0	Ft. Hayes			
7,816.9	7,579.0	Codell			

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3F-22H-N268
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Project:	DJ Wattenberg	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site:	S22-T2N-R68W (Jillson-East Rinn)	**North Reference:**	True
Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
300.0	300.0	0.0	0.0	KOP @ 300'
577.7	577.6	-4.2	-5.3	EOB; Inc=2.78°
7,007.3	6,999.6	-197.7	-249.3	Start build/turn @ 7007' MD
7,924.1	7,589.0	374.5	-282.0	LP @ 7589' TVD; 90°
13,824.1	7,589.0	6,273.6	-385.0	Start turn @ 13824' MD
14,457.5	7,589.0	6,906.2	-361.1	End of turn @ 14457' MD
15,273.9	7,589.0	7,719.1	-285.2	TD at 15273.9

EnCana Oil & Gas (USA) Inc

DJ Wattenberg
S22-T2N-R68W (Jillson-East Rinn)
Jillson-East Rinn 3F-22H-N268
Hz
Plan #1

Anticollision Report

10 July, 2013

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Reference	Plan #1

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	**Error Model:**	Systematic Ellipse
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 500.0ft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**		

Survey Tool Program **Date** 7/10/2013

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	15,273.3	Plan #1 (Hz)	Geolink MWD	Geolink MWD

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
S22-T2N-R68W (Jillson-East Rinn)						
ANDERSON 23-22 (EXISTING) - ENCANA WELL - NO S	9,181.8	7,541.0	205.9	159.6	4.449	CC, ES
ANDERSON 23-22 (EXISTING) - ENCANA WELL - NO S	9,200.0	7,541.0	206.7	160.1	4.439	SF
ANDERSON 31-22 (EXISTING) - KERR-MCGEE WELL						Out of range
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						Out of range
EAST RINN 15-12 (EXISTING) AL - VESSELS WELL - N						Out of range
EAST RINN 15-14 (EXISTING) AL - VESSELS WELL - N	13,260.5	7,469.0	230.9	115.1	1.993	CC, ES, SF
EAST RINN 23-15 (EXISTING) - ENCANA WELL - SURV	14,617.6	7,518.5	227.8	88.4	1.634	CC, ES, SF
EAST RINN 24-15 (EXISTING) - ENCANA WELL - SURV	13,206.2	7,825.6	375.5	240.3	2.777	CC, ES, SF
EAST RINN 2-4-15 (EXISTING) - ENCANA WELL - SUR	15,194.7	7,627.8	432.1	283.3	2.904	CC
EAST RINN 2-4-15 (EXISTING) - ENCANA WELL - SUR	15,200.0	7,627.7	432.1	283.2	2.902	ES, SF
EAST RINN 2-8-15 (EXISTING) - ENCANA WELL - SUR	12,737.9	8,072.5	476.2	340.7	3.515	CC, ES, SF
EAST RINN 3-6-15 (EXISTING) - ENCANA WELL - SUR	13,830.1	7,667.4	60.7	-76.1	0.444	Level 1, CC, ES, SF
EAST RINN H UNIT 1 (EXISTING) - ENCANA WELL - N						Out of range
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
JILLSON 0-6-22 (EXISTING) - ENCANA WELL - SURVE						Out of range
JILLSON 11-22 (EXISTING) - ENCANA WELL - NO SUR						Out of range
JILLSON 1-22 (EXISTING) - ENCANA WELL - NO SURV	11,630.1	7,485.0	100.4	12.8	1.146	Level 2, CC, ES, SF
JILLSON 12-22 (EXISTING) - ENCANA WELL - NO SUR						Out of range
JILLSON 14-22 (EXISTING) - ENCANA WELL - NO SUR						Out of range
JILLSON 21-22 (EXISTING) - ENCANA WELL - NO SUR	12,128.2	7,488.0	395.7	299.5	4.113	CC, ES, SF
JILLSON 22-22 (EXISTING) - ENCANA WELL - NO SUR	10,509.1	7,521.0	145.4	77.0	2.126	CC, ES, SF
JILLSON 2-8-22 (EXISTING) - ENCANA WELL - SURVE						Out of range
JILLSON 3 (EXISTING) - FOUNDATION WELL - NO SU						Out of range
JILLSON 4-6-22 (EXISTING) - ENCANA WELL - SURVE						Out of range
JILLSON 4-8-22 (EXISTING) - ENCANA WELL - SURVE	3,236.2	3,346.7	461.7	441.0	22.319	CC, ES
JILLSON 4-8-22 (EXISTING) - ENCANA WELL - SURVE	3,800.0	3,892.0	483.2	459.9	20.786	SF
JILLSON 6 (EXISTING) - FOUNDATION WELL - NO SU	300.0	272.0	411.8	410.8	431.236	CC
JILLSON 6 (EXISTING) - FOUNDATION WELL - NO SU	400.0	372.0	412.1	410.8	315.920	ES
JILLSON 6 (EXISTING) - FOUNDATION WELL - NO SU	3,800.0	3,768.1	498.6	485.1	36.880	SF
JILLSON GAS UNIT 1 (EXISTING) - ENCANA WELL - N	8,291.5	7,551.0	173.3	140.4	5.267	CC, ES
JILLSON GAS UNIT 1 (EXISTING) - ENCANA WELL - N	8,300.0	7,551.0	173.5	140.5	5.256	SF
Jillson-East Rinn 3A-22H-M268 - Hz - Plan #1						Out of range
Jillson-East Rinn 3B-22H-M268 - Hz - Plan #1						Out of range
Jillson-East Rinn 3C-22H-M268 - Hz - Plan #1						Out of range
Jillson-East Rinn 3D-22H-M268 - Hz - Plan #1						Out of range
Jillson-East Rinn 3E-22H-N268 - Hz - Plan #1	200.0	200.0	8.4	7.8	13.735	CC, ES
Jillson-East Rinn 3E-22H-N268 - Hz - Plan #1	15,273.9	15,100.9	411.4	178.2	1.764	SF
Jillson-East Rinn 3G-22H-N268 - Hz - Plan #1	300.0	300.0	11.2	10.2	11.654	CC, ES
Jillson-East Rinn 3G-22H-N268 - Hz - Plan #1	15,273.9	15,076.2	454.9	213.2	1.882	SF
Jillson-East Rinn 3H-22H-N268 - Hz - Plan #1	300.0	300.0	22.4	21.4	23.308	CC, ES
Jillson-East Rinn 3H-22H-N268 - Hz - Plan #1	600.0	599.4	29.6	27.6	14.735	SF
NYGREN 12-22 (EXISTING) - KERR-MCGEE WELL - N						Out of range

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - ANDERSON 23-22 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 8160-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
8,800.0	7,589.0	7,541.0	7,541.0	27.5	13.2	90.00	1,635.6	-98.2	433.8	393.6	40.24	10.781	
8,900.0	7,589.0	7,541.0	7,541.0	29.0	13.2	90.00	1,635.6	-98.2	349.0	307.2	41.79	8.352	
9,000.0	7,589.0	7,541.0	7,541.0	30.6	13.2	90.00	1,635.6	-98.2	274.7	231.3	43.36	6.335	
9,100.0	7,589.0	7,541.0	7,541.0	32.2	13.2	90.00	1,635.6	-98.2	221.5	176.6	44.95	4.928	
9,181.8	7,589.0	7,541.0	7,541.0	33.5	13.2	90.00	1,635.6	-98.2	205.9	159.6	46.27	4.449	CC, ES
9,200.0	7,589.0	7,541.0	7,541.0	33.7	13.2	90.00	1,635.6	-98.2	206.7	160.1	46.56	4.439	SF
9,300.0	7,589.0	7,541.0	7,541.0	35.4	13.2	90.00	1,635.6	-98.2	237.4	189.2	48.18	4.926	
9,400.0	7,589.0	7,541.0	7,541.0	37.0	13.2	90.00	1,635.6	-98.2	300.0	250.1	49.82	6.021	
9,500.0	7,589.0	7,541.0	7,541.0	38.6	13.2	90.00	1,635.6	-98.2	379.0	327.5	51.46	7.364	
9,600.0	7,589.0	7,541.0	7,541.0	40.2	13.2	90.00	1,635.6	-98.2	466.1	413.0	53.12	8.775	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - EAST RINN 15-14 (EXISTING) AL - VESSELS WELL - NO SURVE

Offset Site Error: 0.0 ft

Survey Program: 7570-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
12,900.0	7,589.0	7,469.0	7,469.0	96.7	13.0	90.00	5,714.1	-144.3	428.1	318.5	109.58	3.907	
13,000.0	7,589.0	7,469.0	7,469.0	98.4	13.0	90.00	5,714.1	-144.3	348.1	236.8	111.32	3.127	
13,100.0	7,589.0	7,469.0	7,469.0	100.1	13.0	90.00	5,714.1	-144.3	281.2	168.2	113.06	2.487	
13,200.0	7,589.0	7,469.0	7,469.0	101.9	13.0	90.00	5,714.1	-144.3	238.7	123.9	114.80	2.079	
13,260.5	7,589.0	7,469.0	7,469.0	102.9	13.0	90.00	5,714.1	-144.3	230.9	115.1	115.85	1.993	CC, ES, SF
13,300.0	7,589.0	7,469.0	7,469.0	103.6	13.0	90.00	5,714.1	-144.3	234.3	117.7	116.54	2.010	
13,400.0	7,589.0	7,469.0	7,469.0	105.4	13.0	90.00	5,714.1	-144.3	269.8	151.5	118.28	2.281	
13,500.0	7,589.0	7,469.0	7,469.0	107.1	13.0	90.00	5,714.1	-144.3	332.7	212.7	120.02	2.772	
13,600.0	7,589.0	7,469.0	7,469.0	108.8	13.0	90.00	5,714.1	-144.3	410.6	288.8	121.76	3.372	
13,700.0	7,589.0	7,469.0	7,469.0	110.6	13.0	90.00	5,714.1	-144.3	496.5	373.0	123.51	4.020	

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 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - EAST RINN 23-15 (EXISTING) - ENCANA WELL - SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 735-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
14,200.0	7,589.0	7,525.3	7,482.3	119.3	16.2	91.98	7,044.3	-119.4	472.8	340.2	132.59	3.566	
14,300.0	7,589.0	7,523.7	7,480.7	121.0	16.2	91.65	7,044.3	-119.4	389.5	255.4	134.17	2.903	
14,400.0	7,589.0	7,522.1	7,479.1	122.7	16.2	91.27	7,044.4	-119.4	314.8	179.1	135.72	2.319	
14,500.0	7,589.0	7,520.5	7,477.5	124.5	16.2	90.87	7,044.4	-119.4	256.4	119.0	137.34	1.867	
14,600.0	7,589.0	7,518.8	7,475.8	126.2	16.2	90.45	7,044.4	-119.3	228.5	89.4	139.09	1.643	
14,617.6	7,589.0	7,518.5	7,475.5	126.5	16.2	90.38	7,044.4	-119.3	227.8	88.4	139.40	1.634	CC, ES, SF
14,700.0	7,589.0	7,517.1	7,474.1	127.9	16.2	90.03	7,044.4	-119.3	242.3	101.4	140.84	1.720	
14,800.0	7,589.0	7,515.4	7,472.4	129.7	16.2	89.60	7,044.5	-119.3	291.9	149.3	142.58	2.047	
14,900.0	7,589.0	7,513.7	7,470.7	131.4	16.2	89.17	7,044.5	-119.3	362.8	218.5	144.31	2.514	
15,000.0	7,589.0	7,512.0	7,469.0	133.1	16.2	88.73	7,044.5	-119.3	445.1	299.1	146.03	3.048	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - EAST RINN 24-15 (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
12,900.0	7,589.0	7,822.1	7,474.2	96.7	34.0	89.50	5,662.2	1.2	484.5	354.6	129.85	3.731	
13,000.0	7,589.0	7,823.2	7,475.4	98.4	34.0	89.67	5,662.3	1.2	428.3	296.7	131.60	3.255	
13,100.0	7,589.0	7,824.4	7,476.5	100.1	34.0	89.85	5,662.3	1.2	390.2	256.8	133.34	2.926	
13,200.0	7,589.0	7,825.5	7,477.7	101.9	34.0	90.02	5,662.3	1.2	375.5	240.4	135.08	2.780	
13,206.2	7,589.0	7,825.6	7,477.7	102.0	34.0	90.04	5,662.3	1.2	375.5	240.3	135.19	2.777	CC, ES, SF
13,300.0	7,589.0	7,826.7	7,478.8	103.6	34.0	90.20	5,662.3	1.2	387.0	250.2	136.82	2.829	
13,400.0	7,589.0	7,827.8	7,479.9	105.4	34.0	90.37	5,662.3	1.2	422.5	284.0	138.56	3.050	
13,500.0	7,589.0	7,828.9	7,481.1	107.1	34.0	90.54	5,662.3	1.2	476.8	336.5	140.30	3.398	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design 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
15,000.0	7,589.0	7,628.8	7,473.3	133.1	23.8	-89.45	7,680.4	-722.7	473.9	328.5	145.39	3.260	
15,100.0	7,589.0	7,628.3	7,472.7	134.9	23.8	-89.38	7,680.4	-722.7	442.3	295.2	147.14	3.006	
15,194.7	7,589.0	7,627.8	7,472.2	136.5	23.8	-89.31	7,680.4	-722.7	432.1	283.3	148.79	2.904	CC
15,200.0	7,589.0	7,627.7	7,472.2	136.6	23.8	-89.31	7,680.4	-722.7	432.1	283.2	148.88	2.902	ES, SF
15,273.9	7,589.0	7,627.3	7,471.8	137.9	23.8	-89.25	7,680.4	-722.7	439.3	289.1	150.18	2.925	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design 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		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
12,600.0	7,589.0	8,069.9	7,476.4	91.5	47.1	-89.88	5,179.2	-842.2	495.7	362.7	133.06	3.726	
12,700.0	7,589.0	8,071.8	7,478.3	93.2	47.1	-90.11	5,179.2	-842.2	477.7	342.9	134.80	3.544	
12,737.9	7,589.0	8,072.5	7,479.0	93.9	47.1	-90.19	5,179.3	-842.1	476.2	340.7	135.45	3.515	CC, ES, SF
12,800.0	7,589.0	8,073.7	7,480.2	94.9	47.1	-90.33	5,179.3	-842.1	480.2	343.7	136.53	3.517	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - EAST RINN 3-6-15 (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
13,400.0	7,589.0	7,664.4	7,474.4	105.4	26.9	87.16	6,280.4	-324.4	434.1	305.1	129.04	3.364	
13,500.0	7,589.0	7,665.1	7,475.1	107.1	26.9	87.80	6,280.4	-324.4	335.4	204.5	130.85	2.563	
13,600.0	7,589.0	7,666.0	7,476.0	108.8	26.9	88.66	6,280.4	-324.4	237.7	105.1	132.65	1.792	
13,700.0	7,589.0	7,666.5	7,476.5	110.6	26.9	89.10	6,280.4	-324.4	143.3	8.9	134.42	1.066	Level 2
13,800.0	7,589.0	7,667.2	7,477.1	112.3	26.9	89.76	6,280.4	-324.4	67.7	-68.5	136.18	0.497	Level 1
13,830.1	7,589.0	7,667.4	7,477.4	112.8	26.9	89.95	6,280.4	-324.4	60.7	-76.1	136.73	0.444	Level 1, CC, ES, SF
13,900.0	7,589.0	7,667.8	7,477.8	114.1	26.9	90.41	6,280.4	-324.4	92.4	-45.5	137.99	0.670	Level 1
14,000.0	7,589.0	7,668.5	7,478.5	115.8	26.9	91.02	6,280.4	-324.4	179.7	40.0	139.77	1.286	Level 3
14,100.0	7,589.0	7,669.2	7,479.2	117.5	26.9	91.55	6,280.4	-324.4	275.4	133.9	141.49	1.946	
14,200.0	7,589.0	7,669.9	7,479.9	119.3	26.9	91.97	6,280.4	-324.4	373.0	229.8	143.18	2.605	
14,300.0	7,589.0	7,670.6	7,480.6	121.0	26.9	92.28	6,280.4	-324.4	471.4	326.5	144.83	3.255	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - JILLSON 1-22 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 8376-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
11,200.0	7,589.0	7,485.0	7,485.0	67.3	13.1	-90.00	4,078.1	-447.1	441.6	361.4	80.18	5.508	
11,300.0	7,589.0	7,485.0	7,485.0	69.0	13.1	-90.00	4,078.1	-447.1	345.0	263.1	81.90	4.212	
11,400.0	7,589.0	7,485.0	7,485.0	70.7	13.1	-90.00	4,078.1	-447.1	251.0	167.4	83.63	3.002	
11,500.0	7,589.0	7,485.0	7,485.0	72.4	13.1	-90.00	4,078.1	-447.1	164.3	79.0	85.35	1.925	
11,600.0	7,589.0	7,485.0	7,485.0	74.2	13.1	-90.00	4,078.1	-447.1	104.8	17.8	87.08	1.204	Level 2
11,630.1	7,589.0	7,485.0	7,485.0	74.7	13.1	-90.00	4,078.1	-447.1	100.4	12.8	87.60	1.146	Level 2, CC, ES, SF
11,700.0	7,589.0	7,485.0	7,485.0	75.9	13.1	-90.00	4,078.1	-447.1	122.4	33.6	88.81	1.378	Level 3
11,800.0	7,589.0	7,485.0	7,485.0	77.6	13.1	-90.00	4,078.1	-447.1	197.4	106.9	90.53	2.180	
11,900.0	7,589.0	7,485.0	7,485.0	79.3	13.1	-90.00	4,078.1	-447.1	288.0	195.8	92.26	3.122	
12,000.0	7,589.0	7,485.0	7,485.0	81.1	13.1	-90.00	4,078.1	-447.1	383.3	289.3	93.99	4.078	
12,100.0	7,589.0	7,485.0	7,485.0	82.8	13.1	-90.00	4,078.1	-447.1	480.6	384.8	95.73	5.020	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - JILLSON 21-22 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 8100-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
11,900.0	7,589.0	7,488.0	7,488.0	79.3	13.1	90.00	4,584.8	40.3	456.8	364.5	92.27	4.951	
12,000.0	7,589.0	7,488.0	7,488.0	81.1	13.1	90.00	4,584.8	40.3	416.0	322.0	94.00	4.425	
12,100.0	7,589.0	7,488.0	7,488.0	82.8	13.1	90.00	4,584.8	40.3	396.7	301.0	95.73	4.144	
12,128.2	7,589.0	7,488.0	7,488.0	83.3	13.1	90.00	4,584.8	40.3	395.7	299.5	96.22	4.113	CC, ES, SF
12,200.0	7,589.0	7,488.0	7,488.0	84.5	13.1	90.00	4,584.8	40.3	402.2	304.7	97.46	4.127	
12,300.0	7,589.0	7,488.0	7,488.0	86.3	13.1	90.00	4,584.8	40.3	431.4	332.2	99.20	4.349	
12,400.0	7,589.0	7,488.0	7,488.0	88.0	13.1	90.00	4,584.8	40.3	480.1	379.2	100.93	4.757	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - JILLSON 22-22 (EXISTING) - ENCANA WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 8112-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,100.0	7,589.0	7,521.0	7,521.0	48.6	13.1	90.00	2,961.6	-181.8	434.1	372.7	61.46	7.064	
10,200.0	7,589.0	7,521.0	7,521.0	50.3	13.1	90.00	2,961.6	-181.8	341.6	278.4	63.15	5.409	
10,300.0	7,589.0	7,521.0	7,521.0	51.9	13.1	90.00	2,961.6	-181.8	254.7	189.8	64.85	3.927	
10,400.0	7,589.0	7,521.0	7,521.0	53.6	13.1	90.00	2,961.6	-181.8	181.8	115.2	66.55	2.731	
10,500.0	7,589.0	7,521.0	7,521.0	55.3	13.1	90.00	2,961.6	-181.8	145.7	77.4	68.25	2.135	
10,509.1	7,589.0	7,521.0	7,521.0	55.5	13.1	90.00	2,961.6	-181.8	145.4	77.0	68.40	2.126	CC, ES, SF
10,600.0	7,589.0	7,521.0	7,521.0	57.0	13.1	90.00	2,961.6	-181.8	171.5	101.5	69.95	2.451	
10,700.0	7,589.0	7,521.0	7,521.0	58.7	13.1	90.00	2,961.6	-181.8	240.0	168.3	71.66	3.349	
10,800.0	7,589.0	7,521.0	7,521.0	60.4	13.1	90.00	2,961.6	-181.8	325.2	251.9	73.38	4.433	
10,900.0	7,589.0	7,521.0	7,521.0	62.2	13.1	90.00	2,961.6	-181.8	417.1	342.0	75.09	5.555	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - JILLSON 4-8-22 (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
2,700.0	2,697.4	2,850.2	2,763.5	5.1	12.6	153.55	375.7	120.6	496.9	479.6	17.26	28.796	
2,800.0	2,797.3	2,945.0	2,853.2	5.3	13.1	156.89	350.3	137.5	484.7	466.7	17.96	26.980	
2,900.0	2,897.2	3,031.6	2,935.3	5.4	13.6	160.08	327.7	153.4	475.1	456.5	18.61	25.527	
3,000.0	2,997.0	3,128.1	3,027.0	5.6	14.1	163.67	303.7	171.3	468.6	449.3	19.29	24.294	
3,100.0	3,096.9	3,220.1	3,114.5	5.8	14.6	167.15	280.7	188.1	463.8	443.9	19.91	23.297	
3,200.0	3,196.8	3,312.7	3,202.9	6.0	15.1	170.60	258.6	204.8	461.8	441.3	20.49	22.536	
3,236.2	3,232.9	3,346.7	3,235.4	6.1	15.2	171.84	250.7	210.8	461.7	441.0	20.68	22.319	CC, ES
3,300.0	3,296.7	3,406.0	3,292.4	6.2	15.5	173.91	237.6	220.8	462.1	441.1	21.01	21.990	
3,400.0	3,396.6	3,499.7	3,382.5	6.4	16.0	177.08	217.7	236.5	464.6	443.1	21.51	21.603	
3,500.0	3,496.5	3,609.7	3,488.4	6.6	16.5	-179.24	193.3	253.8	467.4	445.4	22.02	21.229	
3,600.0	3,596.3	3,707.6	3,582.5	6.8	17.0	-175.96	170.2	268.0	470.1	447.6	22.46	20.927	
3,700.0	3,696.2	3,796.3	3,667.5	7.0	17.4	-172.94	149.1	281.8	475.1	452.3	22.86	20.787	
3,800.0	3,796.1	3,892.0	3,759.1	7.2	18.0	-169.71	126.7	298.1	483.2	459.9	23.24	20.786	SF
3,900.0	3,896.0	3,994.6	3,857.0	7.4	18.5	-166.22	100.9	314.9	491.5	467.9	23.59	20.834	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - JILLSON 6 (EXISTING) - FOUNDATION WELL - NO SURVEYS

Offset Site Error: 0.0 ft

Survey Program: 5060-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	-15.36	397.1	-109.1	412.7				
100.0	100.0	72.0	72.0	0.1	0.1	-15.36	397.1	-109.1	411.8	411.5	0.26	1,603.753	
200.0	200.0	172.0	172.0	0.3	0.3	-15.36	397.1	-109.1	411.8	411.2	0.61	679.705	
300.0	300.0	272.0	272.0	0.5	0.5	-15.36	397.1	-109.1	411.8	410.8	0.95	431.236	CC
400.0	400.0	372.0	372.0	0.7	0.6	113.16	397.1	-109.1	412.1	410.8	1.30	315.920	ES
500.0	500.0	472.0	472.0	0.8	0.8	113.48	397.1	-109.1	413.2	411.5	1.66	249.331	
600.0	599.9	571.9	571.9	1.0	1.0	114.02	397.1	-109.1	414.9	412.9	2.01	205.964	
700.0	699.7	671.7	671.7	1.2	1.2	114.63	397.1	-109.1	416.9	414.5	2.37	175.605	
800.0	799.6	771.6	771.6	1.4	1.3	115.23	397.1	-109.1	418.9	416.2	2.73	153.184	
900.0	899.5	871.5	871.5	1.6	1.5	115.82	397.1	-109.1	421.0	417.9	3.10	135.974	
1,000.0	999.4	971.4	971.4	1.8	1.7	116.41	397.1	-109.1	423.2	419.7	3.46	122.364	
1,100.0	1,099.3	1,071.3	1,071.3	2.0	1.9	117.00	397.1	-109.1	425.3	421.5	3.82	111.339	
1,200.0	1,199.2	1,171.2	1,171.2	2.2	2.0	117.58	397.1	-109.1	427.6	423.4	4.18	102.233	
1,300.0	1,299.0	1,271.0	1,271.0	2.4	2.2	118.15	397.1	-109.1	429.8	425.3	4.54	94.588	
1,400.0	1,398.9	1,370.9	1,370.9	2.5	2.4	118.71	397.1	-109.1	432.1	427.2	4.91	88.081	
1,500.0	1,498.8	1,470.8	1,470.8	2.7	2.6	119.27	397.1	-109.1	434.5	429.2	5.27	82.479	
1,600.0	1,598.7	1,570.7	1,570.7	2.9	2.7	119.83	397.1	-109.1	436.9	431.3	5.63	77.607	
1,700.0	1,698.6	1,670.6	1,670.6	3.1	2.9	120.37	397.1	-109.1	439.3	433.3	5.99	73.333	
1,800.0	1,798.5	1,770.5	1,770.5	3.3	3.1	120.92	397.1	-109.1	441.8	435.4	6.35	69.553	
1,900.0	1,898.3	1,870.3	1,870.3	3.5	3.3	121.45	397.1	-109.1	444.3	437.6	6.71	66.188	
2,000.0	1,998.2	1,970.2	1,970.2	3.7	3.4	121.98	397.1	-109.1	446.8	439.8	7.07	63.174	
2,100.0	2,098.1	2,070.1	2,070.1	3.9	3.6	122.50	397.1	-109.1	449.4	442.0	7.43	60.460	
2,200.0	2,198.0	2,170.0	2,170.0	4.1	3.8	123.02	397.1	-109.1	452.1	444.3	7.79	58.003	
2,300.0	2,297.9	2,269.9	2,269.9	4.3	4.0	123.53	397.1	-109.1	454.7	446.6	8.15	55.770	
2,400.0	2,397.8	2,369.8	2,369.8	4.5	4.1	124.04	397.1	-109.1	457.4	448.9	8.51	53.731	
2,500.0	2,497.6	2,469.6	2,469.6	4.7	4.3	124.54	397.1	-109.1	460.1	451.3	8.87	51.863	
2,600.0	2,597.5	2,569.5	2,569.5	4.9	4.5	125.03	397.1	-109.1	462.9	453.7	9.23	50.146	
2,700.0	2,697.4	2,669.4	2,669.4	5.1	4.7	125.52	397.1	-109.1	465.7	456.1	9.59	48.562	
2,800.0	2,797.3	2,769.3	2,769.3	5.3	4.8	126.00	397.1	-109.1	468.5	458.6	9.95	47.097	
2,900.0	2,897.2	2,869.2	2,869.2	5.4	5.0	126.48	397.1	-109.1	471.4	461.1	10.31	45.738	
3,000.0	2,997.0	2,969.0	2,969.0	5.6	5.2	126.95	397.1	-109.1	474.3	463.6	10.66	44.475	
3,100.0	3,096.9	3,068.9	3,068.9	5.8	5.4	127.41	397.1	-109.1	477.2	466.2	11.02	43.298	
3,200.0	3,196.8	3,168.8	3,168.8	6.0	5.5	127.87	397.1	-109.1	480.2	468.8	11.38	42.198	
3,300.0	3,296.7	3,268.7	3,268.7	6.2	5.7	128.32	397.1	-109.1	483.2	471.5	11.74	41.169	
3,400.0	3,396.6	3,368.6	3,368.6	6.4	5.9	128.77	397.1	-109.1	486.2	474.1	12.09	40.203	
3,500.0	3,496.5	3,468.5	3,468.5	6.6	6.1	129.21	397.1	-109.1	489.3	476.8	12.45	39.297	
3,600.0	3,596.3	3,568.3	3,568.3	6.8	6.2	129.65	397.1	-109.1	492.3	479.5	12.81	38.444	
3,700.0	3,696.2	3,668.2	3,668.2	7.0	6.4	130.08	397.1	-109.1	495.4	482.3	13.16	37.640	
3,800.0	3,796.1	3,768.1	3,768.1	7.2	6.6	130.51	397.1	-109.1	498.6	485.1	13.52	36.880	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 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - JILLSON GAS UNIT 1 (EXISTING) - ENCANA WELL - NO SURVE

Offset Site Error: 0.0 ft

Survey Program: 8140-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
7,900.0	7,588.5	7,550.5	7,550.5	16.0	13.2	-84.55	738.8	-461.7	428.1	399.7	28.36	15.094	
8,000.0	7,589.0	7,551.0	7,551.0	16.9	13.2	-90.00	738.8	-461.7	339.1	309.7	29.41	11.528	
8,100.0	7,589.0	7,551.0	7,551.0	18.0	13.2	-90.00	738.8	-461.7	258.3	227.7	30.52	8.462	
8,200.0	7,589.0	7,551.0	7,551.0	19.2	13.2	-90.00	738.8	-461.7	196.0	164.2	31.73	6.177	
8,291.5	7,589.0	7,551.0	7,551.0	20.3	13.2	-90.00	738.8	-461.7	173.3	140.4	32.90	5.267	CC, ES
8,300.0	7,589.0	7,551.0	7,551.0	20.4	13.2	-90.00	738.8	-461.7	173.5	140.5	33.01	5.256	SF
8,400.0	7,589.0	7,551.0	7,551.0	21.7	13.2	-90.00	738.8	-461.7	204.5	170.1	34.37	5.950	
8,500.0	7,589.0	7,551.0	7,551.0	23.1	13.2	-90.00	738.8	-461.7	271.2	235.4	35.78	7.578	
8,600.0	7,589.0	7,551.0	7,551.0	24.5	13.2	-90.00	738.8	-461.7	353.9	316.6	37.24	9.504	
8,700.0	7,589.0	7,551.0	7,551.0	26.0	13.2	-90.00	738.8	-461.7	443.8	405.0	38.73	11.459	

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 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3E-22H-N268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-89.97	0.0	-8.4	8.4				
100.0	100.0	100.0	100.0	0.1	0.1	-89.97	0.0	-8.4	8.4	8.1	0.26	32.048	
200.0	200.0	200.0	200.0	0.3	0.3	-89.97	0.0	-8.4	8.4	7.8	0.61	13.735	CC, ES
300.0	300.0	299.9	299.8	0.5	0.5	-91.94	-0.3	-9.2	9.2	8.2	0.96	9.591	
400.0	400.0	399.7	399.6	0.7	0.7	34.64	-1.3	-11.6	11.0	9.7	1.31	8.384	
500.0	500.0	499.5	499.3	0.8	0.8	35.40	-2.8	-15.7	13.0	11.3	1.66	7.814	
600.0	599.9	599.2	598.9	1.0	1.0	37.59	-5.0	-21.3	15.3	13.2	2.02	7.564	
700.0	699.7	698.9	698.2	1.2	1.3	38.23	-7.9	-28.6	18.8	16.4	2.38	7.892	
800.0	799.6	798.5	797.5	1.4	1.5	37.25	-11.3	-37.3	23.7	21.0	2.74	8.677	
900.0	899.5	898.4	896.9	1.6	1.7	36.42	-14.8	-46.4	29.0	25.9	3.10	9.371	
1,000.0	999.4	998.3	996.2	1.8	2.0	35.85	-18.3	-55.4	34.3	30.8	3.46	9.921	
1,100.0	1,099.3	1,098.1	1,095.6	2.0	2.2	35.43	-21.9	-64.4	39.6	35.7	3.82	10.367	
1,200.0	1,199.2	1,198.0	1,195.0	2.2	2.4	35.10	-25.4	-73.5	44.8	40.7	4.18	10.737	
1,300.0	1,299.0	1,297.8	1,294.4	2.4	2.7	34.85	-28.9	-82.5	50.1	45.6	4.54	11.048	
1,400.0	1,398.9	1,397.7	1,393.8	2.5	2.9	34.64	-32.4	-91.5	55.4	50.5	4.90	11.313	
1,500.0	1,498.8	1,497.6	1,493.2	2.7	3.1	34.47	-36.0	-100.6	60.7	55.4	5.26	11.542	
1,600.0	1,598.7	1,597.4	1,592.6	2.9	3.4	34.33	-39.5	-109.6	65.9	60.3	5.62	11.742	
1,700.0	1,698.6	1,697.3	1,692.0	3.1	3.6	34.21	-43.0	-118.6	71.2	65.3	5.98	11.917	
1,800.0	1,798.5	1,797.1	1,791.4	3.3	3.9	34.10	-46.5	-127.6	76.5	70.2	6.34	12.072	
1,900.0	1,898.3	1,897.0	1,890.7	3.5	4.1	34.01	-50.1	-136.7	81.8	75.1	6.70	12.211	
2,000.0	1,998.2	1,996.9	1,990.1	3.7	4.4	33.93	-53.6	-145.7	87.1	80.0	7.06	12.336	
2,100.0	2,098.1	2,096.7	2,089.5	3.9	4.6	33.86	-57.1	-154.7	92.4	84.9	7.42	12.448	
2,200.0	2,198.0	2,196.6	2,188.9	4.1	4.8	33.80	-60.6	-163.8	97.6	89.9	7.78	12.550	
2,300.0	2,297.9	2,296.4	2,288.3	4.3	5.1	33.74	-64.2	-172.8	102.9	94.8	8.14	12.643	
2,400.0	2,397.8	2,396.3	2,387.7	4.5	5.3	33.69	-67.7	-181.8	108.2	99.7	8.50	12.728	
2,500.0	2,497.6	2,496.2	2,487.1	4.7	5.6	33.64	-71.2	-190.9	113.5	104.6	8.86	12.806	
2,600.0	2,597.5	2,596.0	2,586.5	4.9	5.8	33.60	-74.7	-199.9	118.8	109.5	9.22	12.878	
2,700.0	2,697.4	2,695.9	2,685.9	5.1	6.0	33.56	-78.3	-208.9	124.0	114.5	9.58	12.945	
2,800.0	2,797.3	2,795.7	2,785.2	5.3	6.3	33.52	-81.8	-217.9	129.3	119.4	9.94	13.007	
2,900.0	2,897.2	2,895.6	2,884.6	5.4	6.5	33.49	-85.3	-227.0	134.6	124.3	10.30	13.064	
3,000.0	2,997.0	2,995.5	2,984.0	5.6	6.8	33.46	-88.8	-236.0	139.9	129.2	10.66	13.118	
3,100.0	3,096.9	3,095.3	3,083.4	5.8	7.0	33.43	-92.4	-245.0	145.2	134.1	11.02	13.168	
3,200.0	3,196.8	3,195.2	3,182.8	6.0	7.3	33.41	-95.9	-254.1	150.4	139.1	11.39	13.214	
3,300.0	3,296.7	3,295.1	3,282.2	6.2	7.5	33.38	-99.4	-263.1	155.7	144.0	11.75	13.258	
3,400.0	3,396.6	3,394.9	3,381.6	6.4	7.7	33.36	-102.9	-272.1	161.0	148.9	12.11	13.300	
3,500.0	3,496.5	3,494.8	3,481.0	6.6	8.0	33.34	-106.5	-281.1	166.3	153.8	12.47	13.339	
3,600.0	3,596.3	3,594.6	3,580.4	6.8	8.2	33.32	-110.0	-290.2	171.6	158.7	12.83	13.376	
3,700.0	3,696.2	3,694.5	3,679.7	7.0	8.5	33.30	-113.5	-299.2	176.9	163.7	13.19	13.410	
3,800.0	3,796.1	3,794.4	3,779.1	7.2	8.7	33.28	-117.0	-308.2	182.1	168.6	13.55	13.443	
3,900.0	3,896.0	3,894.2	3,878.5	7.4	9.0	33.26	-120.6	-317.3	187.4	173.5	13.91	13.474	
4,000.0	3,995.9	3,994.1	3,977.9	7.6	9.2	33.25	-124.1	-326.3	192.7	178.4	14.27	13.504	
4,100.0	4,095.8	4,093.9	4,077.3	7.8	9.4	33.23	-127.6	-335.3	198.0	183.4	14.63	13.532	
4,200.0	4,195.6	4,193.8	4,176.7	8.0	9.7	33.22	-131.1	-344.4	203.3	188.3	14.99	13.559	
4,300.0	4,295.5	4,293.7	4,276.1	8.2	9.9	33.21	-134.6	-353.4	208.5	193.2	15.35	13.585	
4,400.0	4,395.4	4,393.5	4,375.5	8.4	10.2	33.19	-138.2	-362.4	213.8	198.1	15.71	13.609	
4,500.0	4,495.3	4,493.4	4,474.9	8.5	10.4	33.18	-141.7	-371.4	219.1	203.0	16.07	13.632	
4,600.0	4,595.2	4,593.2	4,574.2	8.7	10.7	33.17	-145.2	-380.5	224.4	208.0	16.43	13.655	
4,700.0	4,695.1	4,693.1	4,673.6	8.9	10.9	33.16	-148.7	-389.5	229.7	212.9	16.79	13.676	
4,800.0	4,794.9	4,793.0	4,773.0	9.1	11.1	33.15	-152.3	-398.5	235.0	217.8	17.15	13.696	
4,900.0	4,894.8	4,892.8	4,872.4	9.3	11.4	33.14	-155.8	-407.6	240.2	222.7	17.52	13.716	
5,000.0	4,994.7	4,992.7	4,971.8	9.5	11.6	33.13	-159.3	-416.6	245.5	227.6	17.88	13.735	
5,100.0	5,094.6	5,092.5	5,071.2	9.7	11.9	33.12	-162.8	-425.6	250.8	232.6	18.24	13.753	

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 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3E-22H-N268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,194.5	5,192.4	5,170.6	9.9	12.1	33.11	-166.4	-434.7	256.1	237.5	18.60	13.770	
5,300.0	5,294.3	5,292.3	5,270.0	10.1	12.4	33.10	-169.9	-443.7	261.4	242.4	18.96	13.787	
5,400.0	5,394.2	5,392.1	5,369.4	10.3	12.6	33.09	-173.4	-452.7	266.6	247.3	19.32	13.803	
5,500.0	5,494.1	5,492.0	5,468.7	10.5	12.9	33.08	-176.9	-461.7	271.9	252.3	19.68	13.818	
5,600.0	5,594.0	5,591.8	5,568.1	10.7	13.1	33.08	-180.5	-470.8	277.2	257.2	20.04	13.833	
5,700.0	5,693.9	5,691.7	5,667.5	10.9	13.3	33.07	-184.0	-479.8	282.5	262.1	20.40	13.847	
5,800.0	5,793.8	5,791.6	5,766.9	11.1	13.6	33.06	-187.5	-488.8	287.8	267.0	20.76	13.861	
5,900.0	5,893.6	5,891.4	5,866.3	11.3	13.8	33.06	-191.0	-497.9	293.1	271.9	21.12	13.875	
6,000.0	5,993.5	5,991.3	5,965.7	11.5	14.1	33.05	-194.6	-506.9	298.3	276.9	21.48	13.888	
6,100.0	6,093.4	6,091.1	6,065.1	11.7	14.3	33.04	-198.1	-515.9	303.6	281.8	21.84	13.900	
6,200.0	6,193.3	6,191.0	6,164.5	11.8	14.6	33.04	-201.6	-525.0	308.9	286.7	22.20	13.912	
6,300.0	6,293.2	6,290.9	6,263.9	12.0	14.8	33.03	-205.1	-534.0	314.2	291.6	22.56	13.924	
6,400.0	6,393.1	6,390.7	6,363.2	12.2	15.0	33.03	-208.7	-543.0	319.5	296.5	22.93	13.935	
6,500.0	6,492.9	6,490.6	6,462.6	12.4	15.3	33.02	-212.2	-552.0	324.8	301.5	23.29	13.946	
6,600.0	6,592.8	6,590.4	6,562.0	12.6	15.5	33.01	-215.7	-561.1	330.0	306.4	23.65	13.957	
6,700.0	6,692.7	6,690.3	6,661.4	12.8	15.8	33.01	-219.2	-570.1	335.3	311.3	24.01	13.967	
6,800.0	6,792.6	6,790.2	6,760.8	13.0	16.0	33.00	-222.8	-579.1	340.6	316.2	24.37	13.977	
6,900.0	6,892.5	6,894.1	6,864.2	13.2	16.2	34.00	-220.4	-588.5	345.4	320.6	24.76	13.950	
7,000.0	6,992.4	6,994.1	6,961.7	13.4	16.4	37.75	-200.8	-597.4	349.7	324.4	25.25	13.848	
7,100.0	7,092.0	7,086.8	7,047.9	13.5	16.4	-68.03	-167.6	-605.2	355.9	330.2	25.73	13.830	
7,200.0	7,189.5	7,175.4	7,124.2	13.6	16.5	-72.06	-123.4	-612.1	364.2	338.2	26.00	14.006	
7,300.0	7,281.6	7,260.7	7,190.3	13.7	16.6	-70.10	-70.1	-618.2	373.6	347.6	26.01	14.365	
7,400.0	7,365.7	7,343.2	7,246.2	13.7	16.7	-67.35	-9.7	-623.2	383.5	357.7	25.82	14.856	
7,500.0	7,439.2	7,423.5	7,291.8	13.9	16.9	-64.69	56.2	-627.4	392.9	367.4	25.52	15.399	
7,600.0	7,499.8	7,500.0	7,326.3	14.1	17.2	-62.45	124.4	-630.5	401.2	375.9	25.32	15.849	
7,700.0	7,545.7	7,579.6	7,352.2	14.6	17.6	-60.58	199.5	-632.9	407.8	382.3	25.48	16.003	
7,800.0	7,575.6	7,656.1	7,367.1	15.2	18.0	-59.27	274.5	-634.2	412.2	386.0	26.20	15.732	
7,900.0	7,588.5	7,732.2	7,372.0	16.0	18.6	-58.47	350.4	-634.7	414.2	386.6	27.60	15.007	
8,000.0	7,589.0	7,832.2	7,372.0	16.9	19.4	-58.29	450.4	-634.7	412.9	383.5	29.37	14.059	
8,100.0	7,589.0	7,932.2	7,372.0	18.0	20.3	-58.16	550.4	-634.7	411.4	380.2	31.21	13.182	
8,200.0	7,589.0	8,032.2	7,372.0	19.2	21.3	-58.04	650.3	-634.7	410.0	376.7	33.21	12.343	
8,300.0	7,589.0	8,132.2	7,372.0	20.4	22.4	-57.91	750.3	-634.7	408.5	373.1	35.34	11.558	
8,400.0	7,589.0	8,232.1	7,372.0	21.7	23.6	-57.78	850.3	-634.7	407.0	369.4	37.58	10.831	
8,500.0	7,589.0	8,332.1	7,372.0	23.1	24.9	-57.64	950.3	-634.7	405.5	365.6	39.90	10.164	
8,600.0	7,589.0	8,432.1	7,372.0	24.5	26.2	-57.51	1,050.3	-634.7	404.0	361.8	42.29	9.555	
8,700.0	7,589.0	8,532.1	7,372.0	26.0	27.6	-57.38	1,150.3	-634.7	402.6	357.8	44.73	9.000	
8,800.0	7,589.0	8,632.1	7,372.0	27.5	29.0	-57.24	1,250.3	-634.7	401.1	353.9	47.22	8.494	
8,900.0	7,589.0	8,732.1	7,372.0	29.0	30.4	-57.11	1,350.2	-634.7	399.6	349.9	49.75	8.033	
9,000.0	7,589.0	8,832.0	7,372.0	30.6	31.9	-56.97	1,450.2	-634.7	398.2	345.9	52.31	7.612	
9,100.0	7,589.0	8,932.0	7,372.0	32.2	33.4	-56.84	1,550.2	-634.7	396.7	341.8	54.89	7.227	
9,200.0	7,589.0	9,032.0	7,372.0	33.7	34.9	-56.70	1,650.2	-634.7	395.3	337.8	57.50	6.874	
9,300.0	7,589.0	9,132.0	7,372.0	35.4	36.5	-56.56	1,750.2	-634.7	393.8	333.7	60.11	6.551	
9,400.0	7,589.0	9,232.0	7,372.0	37.0	38.1	-56.42	1,850.2	-634.7	392.3	329.6	62.74	6.253	
9,500.0	7,589.0	9,332.0	7,372.0	38.6	39.6	-56.28	1,950.1	-634.7	390.9	325.5	65.38	5.978	
9,600.0	7,589.0	9,432.0	7,372.0	40.2	41.2	-56.13	2,050.1	-634.7	389.4	321.4	68.03	5.725	
9,700.0	7,589.0	9,531.9	7,372.0	41.9	42.8	-55.99	2,150.1	-634.7	388.0	317.3	70.68	5.490	
9,800.0	7,589.0	9,631.9	7,372.0	43.6	44.5	-55.84	2,250.1	-634.7	386.5	313.2	73.33	5.271	
9,900.0	7,589.0	9,731.9	7,372.0	45.2	46.1	-55.70	2,350.1	-634.7	385.1	309.1	75.98	5.068	
10,000.0	7,589.0	9,831.9	7,372.0	46.9	47.7	-55.55	2,450.1	-634.7	383.7	305.0	78.63	4.879	
10,100.0	7,589.0	9,931.9	7,372.0	48.6	49.4	-55.40	2,550.1	-634.7	382.2	300.9	81.28	4.702	
10,200.0	7,589.0	10,031.9	7,372.0	50.3	51.0	-55.25	2,650.0	-634.7	380.8	296.9	83.93	4.537	
10,300.0	7,589.0	10,131.9	7,372.0	51.9	52.7	-55.10	2,750.0	-634.7	379.4	292.8	86.57	4.382	

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 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3E-22H-N268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,400.0	7,589.0	10,231.8	7,372.0	53.6	54.3	-54.95	2,850.0	-634.7	377.9	288.7	89.21	4.236	
10,500.0	7,589.0	10,331.8	7,372.0	55.3	56.0	-54.80	2,950.0	-634.7	376.5	284.7	91.84	4.099	
10,600.0	7,589.0	10,431.8	7,372.0	57.0	57.7	-54.65	3,050.0	-634.7	375.1	280.6	94.47	3.970	
10,700.0	7,589.0	10,531.8	7,372.0	58.7	59.4	-54.49	3,150.0	-634.7	373.7	276.6	97.09	3.849	
10,800.0	7,589.0	10,631.8	7,372.0	60.4	61.1	-54.34	3,250.0	-634.7	372.2	272.5	99.70	3.734	
10,900.0	7,589.0	10,731.8	7,372.0	62.2	62.7	-54.18	3,349.9	-634.7	370.8	268.5	102.30	3.625	
11,000.0	7,589.0	10,831.7	7,372.0	63.9	64.4	-54.02	3,449.9	-634.7	369.4	264.5	104.89	3.522	
11,100.0	7,589.0	10,931.7	7,372.0	65.6	66.1	-53.86	3,549.9	-634.7	368.0	260.5	107.47	3.424	
11,200.0	7,589.0	11,031.7	7,372.0	67.3	67.8	-53.70	3,649.9	-634.7	366.6	256.5	110.05	3.331	
11,300.0	7,589.0	11,131.7	7,372.0	69.0	69.5	-53.54	3,749.9	-634.7	365.2	252.6	112.61	3.243	
11,400.0	7,589.0	11,231.7	7,372.0	70.7	71.2	-53.37	3,849.9	-634.7	363.8	248.6	115.16	3.159	
11,500.0	7,589.0	11,331.7	7,372.0	72.4	72.9	-53.21	3,949.8	-634.7	362.4	244.7	117.70	3.079	
11,600.0	7,589.0	11,431.7	7,372.0	74.2	74.6	-53.04	4,049.8	-634.7	361.0	240.8	120.23	3.002	
11,700.0	7,589.0	11,531.6	7,372.0	75.9	76.3	-52.88	4,149.8	-634.7	359.6	236.8	122.74	2.930	
11,800.0	7,589.0	11,631.6	7,372.0	77.6	78.1	-52.71	4,249.8	-634.7	358.2	232.9	125.25	2.860	
11,900.0	7,589.0	11,731.6	7,372.0	79.3	79.8	-52.54	4,349.8	-634.7	356.8	229.1	127.74	2.793	
12,000.0	7,589.0	11,831.6	7,372.0	81.1	81.5	-52.37	4,449.8	-634.7	355.4	225.2	130.21	2.730	
12,100.0	7,589.0	11,931.6	7,372.0	82.8	83.2	-52.20	4,549.8	-634.7	354.0	221.4	132.67	2.669	
12,200.0	7,589.0	12,031.6	7,372.0	84.5	84.9	-52.02	4,649.7	-634.7	352.7	217.5	135.12	2.610	
12,300.0	7,589.0	12,131.5	7,372.0	86.3	86.6	-51.85	4,749.7	-634.7	351.3	213.7	137.55	2.554	
12,400.0	7,589.0	12,231.5	7,372.0	88.0	88.4	-51.67	4,849.7	-634.7	349.9	209.9	139.97	2.500	
12,500.0	7,589.0	12,331.5	7,372.0	89.7	90.1	-51.49	4,949.7	-634.7	348.6	206.2	142.37	2.448	
12,600.0	7,589.0	12,431.5	7,372.0	91.5	91.8	-51.31	5,049.7	-634.7	347.2	202.4	144.76	2.398	
12,700.0	7,589.0	12,531.5	7,372.0	93.2	93.5	-51.13	5,149.7	-634.7	345.8	198.7	147.13	2.350	
12,800.0	7,589.0	12,631.5	7,372.0	94.9	95.3	-50.95	5,249.6	-634.7	344.5	195.0	149.49	2.304	
12,900.0	7,589.0	12,731.5	7,372.0	96.7	97.0	-50.77	5,349.6	-634.7	343.1	191.3	151.82	2.260	
13,000.0	7,589.0	12,831.4	7,372.0	98.4	98.7	-50.58	5,449.6	-634.7	341.8	187.6	154.14	2.217	
13,100.0	7,589.0	12,931.4	7,372.0	100.1	100.4	-50.39	5,549.6	-634.7	340.4	184.0	156.44	2.176	
13,200.0	7,589.0	13,031.4	7,372.0	101.9	102.2	-50.21	5,649.6	-634.7	339.1	180.4	158.73	2.136	
13,300.0	7,589.0	13,131.4	7,372.0	103.6	103.9	-50.02	5,749.6	-634.7	337.7	176.7	160.99	2.098	
13,400.0	7,589.0	13,231.4	7,372.0	105.4	105.6	-49.83	5,849.6	-634.7	336.4	173.2	163.24	2.061	
13,500.0	7,589.0	13,331.4	7,372.0	107.1	107.4	-49.63	5,949.5	-634.7	335.1	169.6	165.47	2.025	
13,600.0	7,589.0	13,431.3	7,372.0	108.8	109.1	-49.44	6,049.5	-634.7	333.7	166.1	167.68	1.990	
13,700.0	7,589.0	13,531.3	7,372.0	110.6	110.8	-49.24	6,149.5	-634.7	332.4	162.6	169.87	1.957	
13,800.0	7,589.0	13,631.3	7,372.0	112.3	112.6	-49.05	6,249.5	-634.7	331.1	159.1	172.04	1.925	
13,900.0	7,589.0	13,731.3	7,372.0	114.1	114.3	-48.91	6,349.5	-634.7	330.2	156.0	174.20	1.895	
13,924.1	7,589.0	13,755.4	7,372.0	114.5	114.7	-48.90	6,373.6	-634.7	330.1	155.3	174.78	1.889	
14,000.0	7,589.0	13,831.3	7,372.0	115.8	116.0	-48.96	6,449.5	-634.7	330.5	153.8	176.74	1.870	
14,100.0	7,589.0	13,931.3	7,372.0	117.5	117.8	-49.20	6,549.5	-634.7	332.2	152.5	179.71	1.848	
14,200.0	7,589.0	14,031.2	7,372.0	119.3	119.5	-49.62	6,649.4	-634.7	335.2	152.0	183.11	1.830	
14,300.0	7,589.0	14,131.0	7,372.0	121.0	121.2	-50.21	6,749.2	-634.7	339.5	152.6	186.91	1.816	
14,400.0	7,589.0	14,230.8	7,372.0	122.7	123.0	-50.96	6,848.9	-634.7	345.3	154.2	191.07	1.807	
14,500.0	7,589.0	14,330.4	7,372.0	124.5	124.7	-51.86	6,948.5	-634.7	352.3	156.5	195.78	1.799	
14,600.0	7,589.0	14,429.9	7,372.0	126.2	126.4	-52.77	7,048.1	-634.7	359.7	158.8	200.84	1.791	
14,700.0	7,589.0	14,529.5	7,372.0	127.9	128.2	-53.65	7,147.7	-634.7	367.1	161.3	205.82	1.784	
14,800.0	7,589.0	14,629.1	7,372.0	129.7	129.9	-54.49	7,247.2	-634.7	374.7	163.9	210.73	1.778	
14,900.0	7,589.0	14,728.6	7,372.0	131.4	131.6	-55.30	7,346.8	-634.7	382.3	166.7	215.58	1.773	
15,000.0	7,589.0	14,828.2	7,372.0	133.1	133.4	-56.07	7,446.4	-634.7	390.0	169.6	220.37	1.770	
15,100.0	7,589.0	14,927.8	7,372.0	134.9	135.1	-56.82	7,545.9	-634.7	397.7	172.6	225.10	1.767	
15,200.0	7,589.0	15,027.3	7,372.0	136.6	136.8	-57.54	7,645.5	-634.7	405.5	175.8	229.77	1.765	
15,273.9	7,589.0	15,100.9	7,372.0	137.9	138.1	-58.05	7,719.1	-634.7	411.4	178.2	233.20	1.764	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 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3G-22H-N268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	11.2	11.2				
100.0	100.0	100.0	100.0	0.1	0.1	90.00	0.0	11.2	11.2	10.9	0.26	42.731	
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	11.2	11.2	10.6	0.61	18.313	
300.0	300.0	300.0	300.0	0.5	0.5	90.00	0.0	11.2	11.2	10.2	0.96	11.654	CC, ES
400.0	400.0	400.0	400.0	0.7	0.7	-144.20	0.0	11.2	11.9	10.6	1.31	9.077	
500.0	500.0	500.0	500.0	0.8	0.8	-150.43	0.0	11.2	14.1	12.4	1.66	8.494	
600.0	599.9	599.9	599.9	1.0	1.0	-157.23	0.0	11.2	18.0	16.0	2.01	8.950	
700.0	699.7	699.7	699.7	1.2	1.2	-162.00	0.0	11.2	22.5	20.2	2.36	9.552	
800.0	799.6	799.6	799.6	1.4	1.4	-165.16	0.0	11.2	27.2	24.5	2.71	10.039	
900.0	899.5	899.5	899.5	1.6	1.5	-167.39	0.0	11.2	31.9	28.8	3.06	10.433	
1,000.0	999.4	999.4	999.4	1.8	1.7	-169.05	0.0	11.2	36.6	33.2	3.40	10.758	
1,100.0	1,099.3	1,099.3	1,099.3	2.0	1.9	-170.32	0.0	11.2	41.4	37.6	3.75	11.029	
1,200.0	1,199.2	1,199.2	1,199.2	2.2	2.0	-171.33	0.0	11.2	46.2	42.1	4.10	11.257	
1,300.0	1,299.0	1,299.0	1,299.0	2.4	2.2	-172.15	0.0	11.2	51.0	46.5	4.45	11.452	
1,400.0	1,398.9	1,398.9	1,398.9	2.5	2.4	-172.83	0.0	11.2	55.8	51.0	4.80	11.621	
1,500.0	1,498.8	1,498.8	1,498.8	2.7	2.6	-173.40	0.0	11.2	60.6	55.4	5.15	11.768	
1,600.0	1,598.7	1,598.7	1,598.7	2.9	2.7	-173.89	0.0	11.2	65.4	59.9	5.50	11.898	
1,700.0	1,698.6	1,698.6	1,698.6	3.1	2.9	-174.31	0.0	11.2	70.2	64.4	5.84	12.013	
1,800.0	1,798.5	1,798.5	1,798.5	3.3	3.1	-174.68	0.0	11.2	75.0	68.8	6.19	12.115	
1,900.0	1,898.3	1,898.3	1,898.3	3.5	3.3	-175.00	0.0	11.2	79.9	73.3	6.54	12.207	
2,000.0	1,998.2	1,998.2	1,998.2	3.7	3.4	-175.29	0.0	11.2	84.7	77.8	6.89	12.289	
2,100.0	2,098.1	2,098.1	2,098.1	3.9	3.6	-175.54	0.0	11.2	89.5	82.3	7.24	12.364	
2,200.0	2,198.0	2,198.0	2,198.0	4.1	3.8	-175.77	0.0	11.2	94.3	86.8	7.59	12.433	
2,300.0	2,297.9	2,297.9	2,297.9	4.3	4.0	-175.98	0.0	11.2	99.2	91.2	7.94	12.495	
2,400.0	2,397.8	2,397.8	2,397.8	4.5	4.1	-176.16	0.0	11.2	104.0	95.7	8.29	12.553	
2,500.0	2,497.6	2,497.6	2,497.6	4.7	4.3	-176.33	0.0	11.2	108.8	100.2	8.63	12.606	
2,600.0	2,597.5	2,597.9	2,597.9	4.9	4.5	-176.08	-0.8	11.5	113.5	104.5	8.98	12.632	
2,700.0	2,697.4	2,698.2	2,698.2	5.1	4.7	-175.01	-3.2	12.5	117.8	108.5	9.34	12.617	
2,800.0	2,797.3	2,798.5	2,798.3	5.3	4.8	-173.20	-7.2	14.1	121.8	112.1	9.69	12.571	
2,900.0	2,897.2	2,898.4	2,898.1	5.4	5.0	-170.89	-12.5	16.2	125.8	115.7	10.05	12.516	
3,000.0	2,997.0	2,998.2	2,997.7	5.6	5.2	-168.66	-17.9	18.4	129.9	119.5	10.41	12.478	
3,100.0	3,096.9	3,098.0	3,097.3	5.8	5.4	-166.58	-23.4	20.6	134.2	123.5	10.78	12.457	
3,200.0	3,196.8	3,197.8	3,197.0	6.0	5.6	-164.63	-28.8	22.8	138.7	127.6	11.14	12.449	
3,300.0	3,296.7	3,297.6	3,296.6	6.2	5.8	-162.81	-34.2	25.0	143.4	131.8	11.51	12.452	
3,400.0	3,396.6	3,397.4	3,396.2	6.4	5.9	-161.09	-39.6	27.2	148.1	136.2	11.88	12.465	
3,500.0	3,496.5	3,497.1	3,495.8	6.6	6.1	-159.49	-45.0	29.4	153.0	140.8	12.26	12.485	
3,600.0	3,596.3	3,596.9	3,595.4	6.8	6.3	-157.99	-50.4	31.6	158.0	145.4	12.63	12.511	
3,700.0	3,696.2	3,696.7	3,695.1	7.0	6.5	-156.58	-55.9	33.8	163.1	150.1	13.01	12.543	
3,800.0	3,796.1	3,796.5	3,794.7	7.2	6.7	-155.26	-61.3	36.0	168.4	155.0	13.38	12.579	
3,900.0	3,896.0	3,896.3	3,894.3	7.4	6.9	-154.01	-66.7	38.2	173.6	159.9	13.76	12.618	
4,000.0	3,995.9	3,996.1	3,993.9	7.6	7.1	-152.85	-72.1	40.3	179.0	164.9	14.14	12.660	
4,100.0	4,095.8	4,095.9	4,093.5	7.8	7.3	-151.74	-77.5	42.5	184.4	169.9	14.52	12.704	
4,200.0	4,195.6	4,195.7	4,193.2	8.0	7.5	-150.71	-83.0	44.7	189.9	175.0	14.90	12.750	
4,300.0	4,295.5	4,295.5	4,292.8	8.2	7.6	-149.73	-88.4	46.9	195.5	180.2	15.28	12.797	
4,400.0	4,395.4	4,395.3	4,392.4	8.4	7.8	-148.80	-93.8	49.1	201.1	185.5	15.66	12.845	
4,500.0	4,495.3	4,495.1	4,492.0	8.5	8.0	-147.93	-99.2	51.3	206.8	190.7	16.04	12.893	
4,600.0	4,595.2	4,594.9	4,591.6	8.7	8.2	-147.10	-104.6	53.5	212.5	196.1	16.42	12.942	
4,700.0	4,695.1	4,694.6	4,691.3	8.9	8.4	-146.32	-110.0	55.7	218.2	201.4	16.80	12.991	
4,800.0	4,794.9	4,794.4	4,790.9	9.1	8.6	-145.57	-115.5	57.9	224.0	206.8	17.18	13.040	
4,900.0	4,894.8	4,894.2	4,890.5	9.3	8.8	-144.87	-120.9	60.1	229.8	212.3	17.56	13.088	
5,000.0	4,994.7	4,994.0	4,990.1	9.5	9.0	-144.20	-126.3	62.3	235.7	217.8	17.94	13.137	
5,100.0	5,094.6	5,093.8	5,089.7	9.7	9.2	-143.56	-131.7	64.4	241.6	223.3	18.32	13.185	

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

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3G-22H-N268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,194.5	5,193.6	5,189.4	9.9	9.4	-142.95	-137.1	66.6	247.5	228.8	18.70	13.233	
5,300.0	5,294.3	5,293.4	5,289.0	10.1	9.6	-142.37	-142.6	68.8	253.4	234.4	19.08	13.280	
5,400.0	5,394.2	5,393.2	5,388.6	10.3	9.8	-141.82	-148.0	71.0	259.4	239.9	19.47	13.326	
5,500.0	5,494.1	5,493.0	5,488.2	10.5	10.0	-141.29	-153.4	73.2	265.4	245.5	19.85	13.372	
5,600.0	5,594.0	5,592.8	5,587.8	10.7	10.2	-140.78	-158.8	75.4	271.4	251.2	20.23	13.418	
5,700.0	5,693.9	5,692.6	5,687.5	10.9	10.4	-140.30	-164.2	77.6	277.4	256.8	20.61	13.462	
5,800.0	5,793.8	5,792.3	5,787.1	11.1	10.6	-139.84	-169.6	79.8	283.5	262.5	20.99	13.506	
5,900.0	5,893.6	5,892.1	5,886.7	11.3	10.8	-139.40	-175.1	82.0	289.6	268.2	21.37	13.549	
6,000.0	5,993.5	5,991.9	5,986.3	11.5	11.0	-138.97	-180.5	84.2	295.6	273.9	21.75	13.592	
6,100.0	6,093.4	6,091.7	6,085.9	11.7	11.2	-138.56	-185.9	86.4	301.7	279.6	22.13	13.633	
6,200.0	6,193.3	6,191.5	6,185.6	11.8	11.4	-138.17	-191.3	88.5	307.9	285.3	22.51	13.674	
6,300.0	6,293.2	6,291.3	6,285.2	12.0	11.6	-137.79	-196.7	90.7	314.0	291.1	22.89	13.715	
6,400.0	6,393.1	6,391.1	6,384.8	12.2	11.8	-137.43	-202.2	92.9	320.1	296.8	23.27	13.754	
6,500.0	6,492.9	6,490.9	6,484.4	12.4	12.0	-137.08	-207.6	95.1	326.3	302.6	23.66	13.793	
6,600.0	6,592.8	6,590.7	6,584.0	12.6	12.2	-136.75	-213.0	97.3	332.4	308.4	24.04	13.831	
6,700.0	6,692.7	6,690.5	6,683.7	12.8	12.4	-136.43	-218.4	99.5	338.6	314.2	24.42	13.868	
6,800.0	6,792.6	6,791.2	6,784.2	13.0	12.6	-136.15	-223.7	101.7	344.8	320.0	24.79	13.906	
6,900.0	6,892.5	6,895.7	6,888.3	13.2	12.7	-137.86	-216.9	104.0	350.0	324.9	25.08	13.958	
7,000.0	6,992.4	6,993.5	6,983.2	13.4	12.7	-142.16	-193.5	106.1	355.3	330.0	25.24	14.078	
7,100.0	7,092.0	7,083.5	7,065.7	13.5	12.7	100.92	-158.0	107.9	363.5	338.2	25.29	14.376	
7,200.0	7,189.5	7,169.2	7,138.3	13.6	12.7	86.49	-112.7	109.5	374.8	349.5	25.30	14.815	
7,300.0	7,281.6	7,250.0	7,199.8	13.7	12.8	79.18	-60.4	110.8	387.9	362.6	25.31	15.329	
7,400.0	7,365.7	7,331.2	7,253.6	13.7	12.9	73.77	0.3	112.0	401.8	376.4	25.35	15.849	
7,500.0	7,439.2	7,408.8	7,296.6	13.9	13.1	69.62	64.9	113.0	415.3	389.9	25.43	16.334	
7,600.0	7,499.8	7,484.8	7,329.8	14.1	13.4	66.41	133.2	113.7	427.7	402.1	25.62	16.692	
7,700.0	7,545.7	7,559.6	7,353.4	14.6	13.9	64.01	204.2	114.2	438.2	412.2	26.00	16.852	
7,800.0	7,575.6	7,633.6	7,367.4	15.2	14.4	62.35	276.8	114.5	446.3	419.6	26.65	16.745	
7,900.0	7,588.5	7,707.4	7,372.0	16.0	15.0	61.40	350.4	114.6	451.5	423.9	27.62	16.349	
8,000.0	7,589.0	7,807.4	7,372.0	16.9	16.0	61.40	450.4	114.6	453.3	424.0	29.32	15.460	
8,100.0	7,589.0	7,907.4	7,372.0	18.0	17.1	61.50	550.4	114.6	454.8	423.5	31.29	14.536	
8,200.0	7,589.0	8,007.4	7,372.0	19.2	18.3	61.60	650.3	114.6	456.4	422.9	33.44	13.649	
8,300.0	7,589.0	8,107.4	7,372.0	20.4	19.6	61.71	750.3	114.6	457.9	422.2	35.73	12.816	
8,400.0	7,589.0	8,207.4	7,372.0	21.7	21.0	61.81	850.3	114.6	459.4	421.3	38.14	12.046	
8,500.0	7,589.0	8,307.3	7,372.0	23.1	22.4	61.91	950.3	114.6	461.0	420.3	40.65	11.339	
8,600.0	7,589.0	8,407.3	7,372.0	24.5	23.8	62.02	1,050.3	114.6	462.5	419.3	43.25	10.694	
8,700.0	7,589.0	8,507.3	7,372.0	26.0	25.3	62.12	1,150.3	114.6	464.1	418.1	45.92	10.106	
8,800.0	7,589.0	8,607.3	7,372.0	27.5	26.9	62.22	1,250.3	114.6	465.6	417.0	48.65	9.571	
8,900.0	7,589.0	8,707.3	7,372.0	29.0	28.4	62.32	1,350.2	114.6	467.2	415.7	51.43	9.084	
9,000.0	7,589.0	8,807.3	7,372.0	30.6	30.0	62.42	1,450.2	114.6	468.7	414.4	54.25	8.639	
9,100.0	7,589.0	8,907.3	7,372.0	32.2	31.6	62.52	1,550.2	114.6	470.2	413.1	57.11	8.233	
9,200.0	7,589.0	9,007.2	7,372.0	33.7	33.2	62.61	1,650.2	114.6	471.8	411.8	60.01	7.862	
9,300.0	7,589.0	9,107.2	7,372.0	35.4	34.8	62.71	1,750.2	114.6	473.3	410.4	62.94	7.521	
9,400.0	7,589.0	9,207.2	7,372.0	37.0	36.5	62.81	1,850.2	114.6	474.9	409.0	65.89	7.207	
9,500.0	7,589.0	9,307.2	7,372.0	38.6	38.1	62.90	1,950.1	114.6	476.5	407.6	68.87	6.918	
9,600.0	7,589.0	9,407.2	7,372.0	40.2	39.8	63.00	2,050.1	114.6	478.0	406.1	71.87	6.651	
9,700.0	7,589.0	9,507.2	7,372.0	41.9	41.4	63.09	2,150.1	114.6	479.6	404.7	74.89	6.404	
9,800.0	7,589.0	9,607.1	7,372.0	43.6	43.1	63.19	2,250.1	114.6	481.1	403.2	77.92	6.174	
9,900.0	7,589.0	9,707.1	7,372.0	45.2	44.8	63.28	2,350.1	114.6	482.7	401.7	80.97	5.961	
10,000.0	7,589.0	9,807.1	7,372.0	46.9	46.5	63.37	2,450.1	114.6	484.2	400.2	84.04	5.762	
10,100.0	7,589.0	9,907.1	7,372.0	48.6	48.1	63.47	2,550.1	114.6	485.8	398.7	87.12	5.576	
10,200.0	7,589.0	10,007.1	7,372.0	50.3	49.8	63.56	2,650.0	114.6	487.4	397.1	90.21	5.402	
10,300.0	7,589.0	10,107.1	7,372.0	51.9	51.5	63.65	2,750.0	114.6	488.9	395.6	93.32	5.239	

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 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3G-22H-N268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,400.0	7,589.0	10,207.1	7,372.0	53.6	53.2	63.74	2,850.0	114.6	490.5	394.1	96.43	5.086	
10,500.0	7,589.0	10,307.0	7,372.0	55.3	54.9	63.83	2,950.0	114.6	492.1	392.5	99.56	4.942	
10,600.0	7,589.0	10,407.0	7,372.0	57.0	56.6	63.92	3,050.0	114.6	493.6	390.9	102.70	4.807	
10,700.0	7,589.0	10,507.0	7,372.0	58.7	58.3	64.01	3,150.0	114.6	495.2	389.3	105.84	4.679	
10,800.0	7,589.0	10,607.0	7,372.0	60.4	60.1	64.09	3,250.0	114.6	496.8	387.8	109.00	4.558	
10,900.0	7,589.0	10,707.0	7,372.0	62.2	61.8	64.18	3,349.9	114.6	498.3	386.2	112.16	4.443	
11,000.0	7,589.0	10,807.0	7,372.0	63.9	63.5	64.27	3,449.9	114.6	499.9	384.6	115.33	4.335	
14,800.0	7,589.0	14,604.3	7,372.0	129.7	129.4	63.85	7,247.2	114.6	494.1	262.0	232.04	2.129	
14,900.0	7,589.0	14,703.8	7,372.0	131.4	131.2	63.37	7,346.8	114.6	485.7	251.5	234.22	2.074	
15,000.0	7,589.0	14,803.4	7,372.0	133.1	132.9	62.87	7,446.4	114.6	477.4	241.1	236.33	2.020	
15,100.0	7,589.0	14,903.0	7,372.0	134.9	134.6	62.35	7,545.9	114.6	469.2	230.8	238.36	1.968	
15,200.0	7,589.0	15,002.5	7,372.0	136.6	136.4	61.81	7,645.5	114.6	461.0	220.6	240.31	1.918	
15,273.9	7,589.0	15,076.2	7,372.0	137.9	137.7	61.40	7,719.1	114.6	454.9	213.2	241.68	1.882	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well Jillson-East Rinn 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Offset Design S22-T2N-R68W (Jillson-East Rinn) - Jillson-East Rinn 3H-22H-N268 - Hz - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-Geolink MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	90.02	0.0	22.4	22.4				
100.0	100.0	100.0	100.0	0.1	0.1	90.02	0.0	22.4	22.4	22.1	0.26	85.461	
200.0	200.0	200.0	200.0	0.3	0.3	90.02	0.0	22.4	22.4	21.8	0.61	36.626	
300.0	300.0	300.0	300.0	0.5	0.5	90.02	0.0	22.4	22.4	21.4	0.96	23.308	CC, ES
400.0	400.0	400.0	400.0	0.7	0.7	-142.91	0.0	22.4	23.1	21.8	1.31	17.617	
500.0	500.0	500.0	500.0	0.8	0.8	-146.49	0.0	22.4	25.2	23.5	1.66	15.189	
600.0	599.9	599.4	599.4	1.0	1.0	-150.20	-0.4	23.1	29.6	27.6	2.01	14.735	SF
700.0	699.7	698.8	698.7	1.2	1.2	-151.65	-1.5	25.5	35.9	33.6	2.36	15.228	
800.0	799.6	797.9	797.8	1.4	1.4	-151.29	-3.5	29.3	43.7	41.0	2.71	16.094	
900.0	899.5	896.8	896.5	1.6	1.6	-149.94	-6.1	34.7	52.8	49.8	3.07	17.200	
1,000.0	999.4	995.8	995.2	1.8	1.8	-148.18	-9.5	41.5	63.3	59.9	3.43	18.453	
1,100.0	1,099.3	1,095.2	1,094.2	2.0	2.0	-146.79	-13.0	48.6	74.2	70.4	3.79	19.542	
1,200.0	1,199.2	1,194.6	1,193.3	2.2	2.2	-145.75	-16.6	55.7	85.0	80.8	4.16	20.447	
1,300.0	1,299.0	1,294.0	1,292.4	2.4	2.4	-144.94	-20.1	62.8	95.9	91.4	4.52	21.209	
1,400.0	1,398.9	1,393.4	1,391.5	2.5	2.6	-144.30	-23.6	69.9	106.8	101.9	4.88	21.860	
1,500.0	1,498.8	1,492.8	1,490.6	2.7	2.8	-143.78	-27.2	77.0	117.7	112.4	5.25	22.422	
1,600.0	1,598.7	1,592.2	1,589.6	2.9	3.0	-143.34	-30.7	84.1	128.6	123.0	5.61	22.912	
1,700.0	1,698.6	1,691.6	1,688.7	3.1	3.2	-142.98	-34.2	91.2	139.5	133.5	5.98	23.342	
1,800.0	1,798.5	1,791.0	1,787.8	3.3	3.4	-142.67	-37.8	98.3	150.4	144.1	6.34	23.724	
1,900.0	1,898.3	1,890.4	1,886.9	3.5	3.7	-142.39	-41.3	105.4	161.3	154.6	6.70	24.064	
2,000.0	1,998.2	1,989.8	1,986.0	3.7	3.9	-142.16	-44.8	112.5	172.2	165.2	7.07	24.370	
2,100.0	2,098.1	2,089.2	2,085.1	3.9	4.1	-141.95	-48.4	119.6	183.2	175.7	7.43	24.645	
2,200.0	2,198.0	2,188.6	2,184.1	4.1	4.3	-141.77	-51.9	126.7	194.1	186.3	7.80	24.895	
2,300.0	2,297.9	2,288.0	2,283.2	4.3	4.5	-141.60	-55.4	133.9	205.0	196.9	8.16	25.123	
2,400.0	2,397.8	2,387.4	2,382.3	4.5	4.8	-141.45	-58.9	141.0	216.0	207.4	8.53	25.331	
2,500.0	2,497.6	2,486.8	2,481.4	4.7	5.0	-141.32	-62.5	148.1	226.9	218.0	8.89	25.523	
2,600.0	2,597.5	2,586.2	2,580.5	4.9	5.2	-141.20	-66.0	155.2	237.8	228.6	9.25	25.699	
2,700.0	2,697.4	2,685.6	2,679.5	5.1	5.4	-141.09	-69.5	162.3	248.8	239.1	9.62	25.862	
2,800.0	2,797.3	2,785.0	2,778.6	5.3	5.6	-140.99	-73.1	169.4	259.7	249.7	9.98	26.013	
2,900.0	2,897.2	2,884.4	2,877.7	5.4	5.9	-140.89	-76.6	176.5	270.6	260.3	10.35	26.154	
3,000.0	2,997.0	2,983.8	2,976.8	5.6	6.1	-140.81	-80.1	183.6	281.6	270.9	10.71	26.284	
3,100.0	3,096.9	3,083.1	3,075.9	5.8	6.3	-140.73	-83.7	190.7	292.5	281.4	11.08	26.407	
3,200.0	3,196.8	3,182.5	3,175.0	6.0	6.5	-140.65	-87.2	197.8	303.4	292.0	11.44	26.521	
3,300.0	3,296.7	3,281.9	3,274.0	6.2	6.7	-140.58	-90.7	204.9	314.4	302.6	11.81	26.629	
3,400.0	3,396.6	3,381.3	3,373.1	6.4	7.0	-140.52	-94.3	212.0	325.3	313.2	12.17	26.730	
3,500.0	3,496.5	3,480.7	3,472.2	6.6	7.2	-140.46	-97.8	219.1	336.3	323.7	12.54	26.825	
3,600.0	3,596.3	3,580.1	3,571.3	6.8	7.4	-140.40	-101.3	226.2	347.2	334.3	12.90	26.915	
3,700.0	3,696.2	3,679.5	3,670.4	7.0	7.6	-140.35	-104.9	233.4	358.1	344.9	13.26	27.000	
3,800.0	3,796.1	3,778.9	3,769.4	7.2	7.9	-140.30	-108.4	240.5	369.1	355.5	13.63	27.080	
3,900.0	3,896.0	3,878.3	3,868.5	7.4	8.1	-140.25	-111.9	247.6	380.0	366.0	13.99	27.156	
4,000.0	3,995.9	3,977.7	3,967.6	7.6	8.3	-140.21	-115.5	254.7	391.0	376.6	14.36	27.228	
4,100.0	4,095.8	4,077.1	4,066.7	7.8	8.5	-140.17	-119.0	261.8	401.9	387.2	14.72	27.297	
4,200.0	4,195.6	4,176.5	4,165.8	8.0	8.7	-140.13	-122.5	268.9	412.8	397.8	15.09	27.362	
4,300.0	4,295.5	4,275.9	4,264.9	8.2	9.0	-140.09	-126.1	276.0	423.8	408.3	15.45	27.425	
4,400.0	4,395.4	4,375.3	4,363.9	8.4	9.2	-140.06	-129.6	283.1	434.7	418.9	15.82	27.484	
4,500.0	4,495.3	4,474.7	4,463.0	8.5	9.4	-140.02	-133.1	290.2	445.7	429.5	16.18	27.541	
4,600.0	4,595.2	4,574.1	4,562.1	8.7	9.6	-139.99	-136.7	297.3	456.6	440.1	16.55	27.595	
4,700.0	4,695.1	4,673.5	4,661.2	8.9	9.8	-139.96	-140.2	304.4	467.6	450.6	16.91	27.647	
4,800.0	4,794.9	4,772.9	4,760.3	9.1	10.1	-139.93	-143.7	311.5	478.5	461.2	17.28	27.697	
4,900.0	4,894.8	4,872.3	4,859.3	9.3	10.3	-139.90	-147.3	318.6	489.4	471.8	17.64	27.744	

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 3F-22H-N268
Project:	DJ Wattenberg	**TVD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Reference Site:	S22-T2N-R68W (Jillson-East Rinn)	**MD Reference:**	WELL @ 5000.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	Jillson-East Rinn 3F-22H-N268	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Hz	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 5000.0ft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Jillson-East Rinn 3F-22H-N268
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.33°