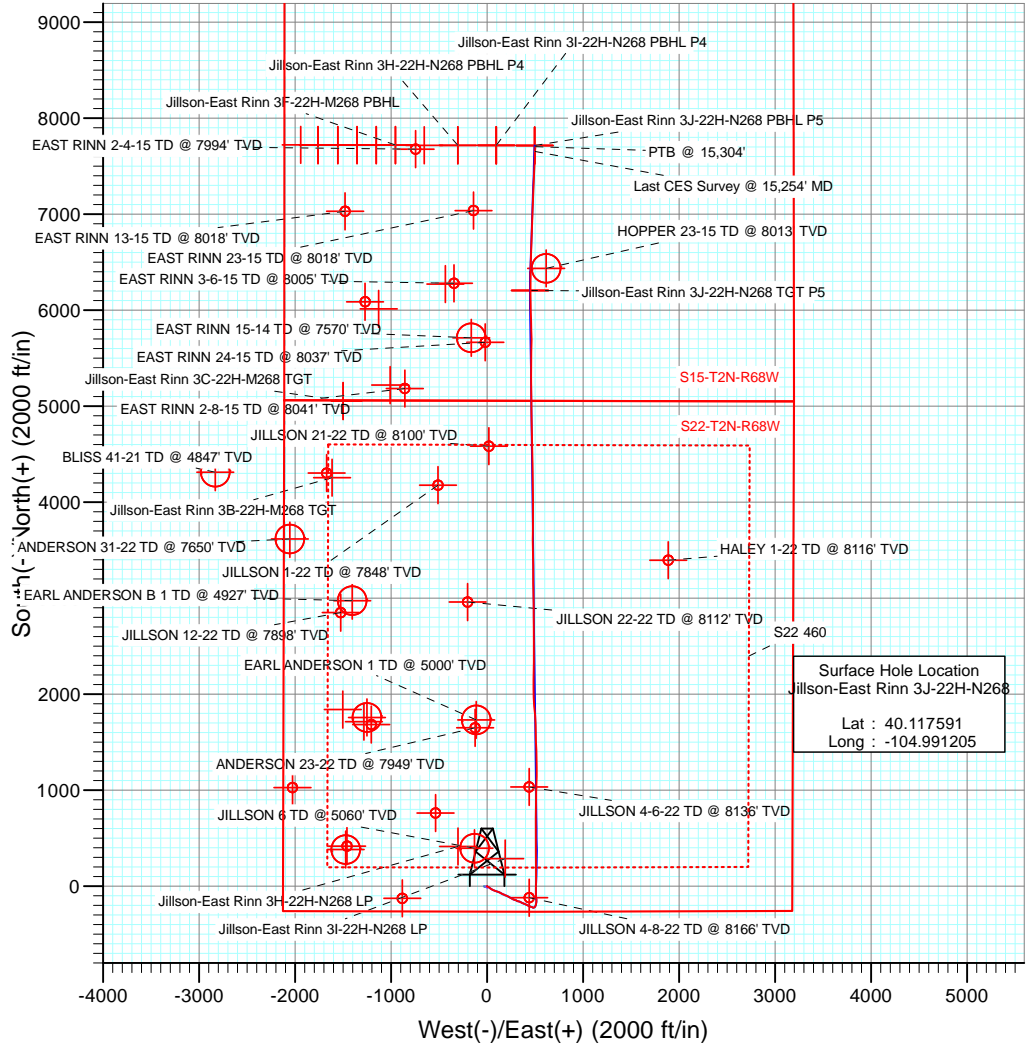
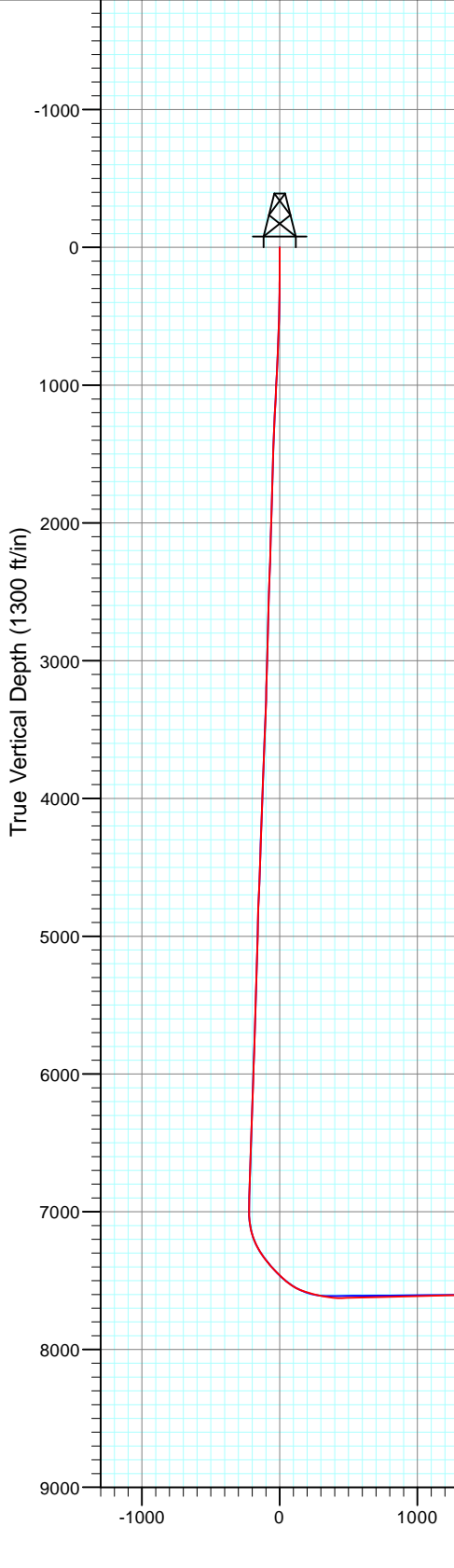




Project: DJ Wattenberg  
 Site: S22-T2N-R68W (Jillson-East Rinn)  
 Well: Jillson-East Rinn 3J-22H-N268  
 Wellbore: Hz  
 Design: FINAL



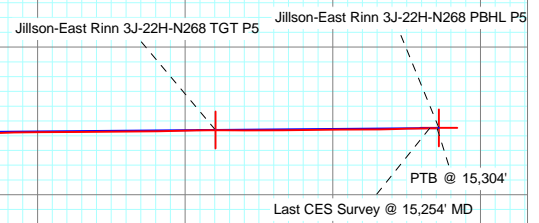
FINAL  
 Jillson-East Rinn 3J-22H-N268  
 145183/21237; LR  
 KB @ 5000.0ft  
 Ground Elevation @ 4975.0  
 North American Datum 1983  
 Well Jillson-East Rinn 3J-22H-N268, True North



DESIGN TARGET DETAILS

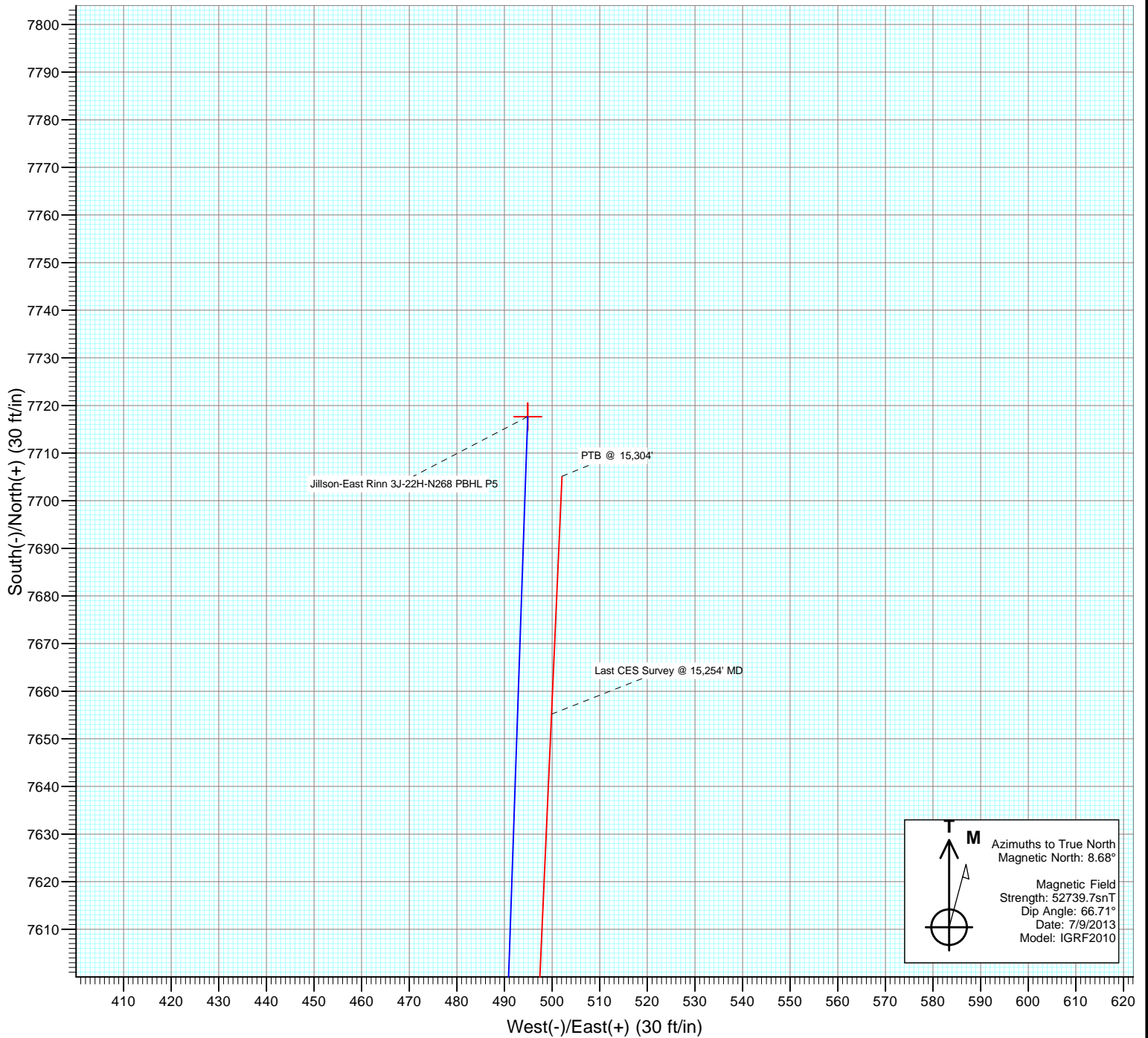
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Jillson-East Rinn 3J-22H-N268 PBHL P5	7717.7	494.9	1293813.59	3142751.04	40.138777	-104.989435
Jillson-East Rinn 3J-22H-N268 TGT P5	6206.1	446.7	1292301.79	3142711.55	40.134628	-104.989607

Azimuths to True North  
 Magnetic North: 8.68°  
 Magnetic Field  
 Strength: 52739.7snT  
 Dip Angle: 66.71°  
 Date: 7/9/2013  
 Model: IGRF2010





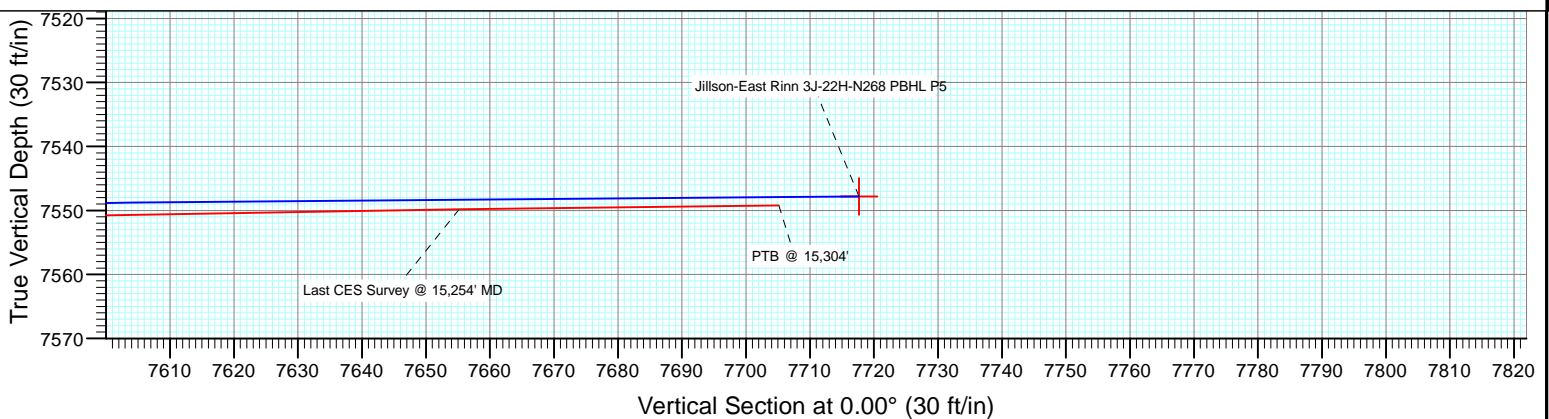
Project: DJ Wattenberg  
Site: S22-T2N-R68W (Jillson-East Rinn)  
Well: Jillson-East Rinn 3J-22H-N268  
Wellbore: Hz  
Design: FINAL



**M**

Azimuths to True North  
Magnetic North: 8.68°

Magnetic Field  
Strength: 52739.7snT  
Dip Angle: 66.71°  
Date: 7/9/2013  
Model: IGRF2010



## Survey Report

<b>Company:</b> EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b> Well Jillson-East Rinn 3J-22H-N268
<b>Project:</b> DJ Wattenberg	<b>TVD Reference:</b> KB @ 5000.0ft
<b>Site:</b> S22-T2N-R68W (Jillson-East Rinn)	<b>MD Reference:</b> KB @ 5000.0ft
<b>Well:</b> Jillson-East Rinn 3J-22H-N268	<b>North Reference:</b> True
<b>Wellbore:</b> Hz	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Design:</b> FINAL	<b>Database:</b> USA EDM 5000 Multi Users DB

<b>Project</b> DJ Wattenberg		
<b>Map System:</b> US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b> North American Datum 1983		
<b>Map Zone:</b> Colorado Northern Zone		

<b>Site</b> S22-T2N-R68W (Jillson-East Rinn)				
<b>Site Position:</b>	<b>Northing:</b>	1,289,542.88 ft	<b>Latitude:</b>	40.127030
<b>From:</b> Lat/Long	<b>Easting:</b>	3,144,231.14 ft	<b>Longitude:</b>	-104.984230
<b>Position Uncertainty:</b> 0.0 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b>	0.33 °

<b>Well</b> Jillson-East Rinn 3J-22H-N268				
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>	1,286,093.22 ft
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>	3,142,300.47 ft
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	ft
			<b>Ground Level:</b>	4,975.0 ft

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

<b>Design</b> FINAL				
<b>Audit Notes:</b>				
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b> 0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	0.00

<b>Survey Program</b>		<b>Date</b> 6/30/2014
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>
143.0	15,304.0	Survey #1 (Hz)
		<b>Tool Name</b> Geolink MWD
		<b>Description</b> Geolink MWD

<b>Survey</b>									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
143.0	0.50	295.30	143.0	0.3	-0.6	0.3	0.35	0.35	
204.0	0.40	156.70	204.0	0.2	-0.7	0.2	1.38	-0.16	
265.0	0.50	149.00	265.0	-0.2	-0.5	-0.2	0.19	0.16	
326.0	1.40	125.10	326.0	-0.9	0.2	-0.9	1.58	1.48	
387.0	1.90	125.90	387.0	-1.9	1.7	-1.9	0.82	0.82	
448.0	2.90	117.30	447.9	-3.2	3.9	-3.2	1.74	1.64	
509.0	4.20	110.80	508.8	-4.7	7.3	-4.7	2.23	2.13	
574.0	4.40	111.40	573.6	-6.5	11.9	-6.5	0.32	0.31	
601.0	4.20	117.50	600.5	-7.3	13.7	-7.3	1.85	-0.74	
693.0	4.30	124.00	692.3	-10.8	19.6	-10.8	0.53	0.11	
784.0	4.20	126.00	783.0	-14.7	25.1	-14.7	0.20	-0.11	
830.0	4.10	123.80	828.9	-16.6	27.8	-16.6	0.41	-0.22	

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Jillson-East Rinn 3J-22H-N268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5000.0ft
<b>Site:</b>	S22-T2N-R68W (Jillson-East Rinn)	<b>MD Reference:</b>	KB @ 5000.0ft
<b>Well:</b>	Jillson-East Rinn 3J-22H-N268	<b>North Reference:</b>	True
<b>Wellbore:</b>	Hz	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	FINAL	<b>Database:</b>	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
917.0	4.50	128.50	915.7	-20.4	33.1	-20.4	0.61	0.46	
1,008.0	4.40	130.10	1,006.4	-24.9	38.5	-24.9	0.18	-0.11	
1,100.0	5.40	124.10	1,098.1	-29.6	44.8	-29.6	1.22	1.09	
1,192.0	6.30	121.80	1,189.6	-34.7	52.7	-34.7	1.01	0.98	
1,284.0	6.40	111.70	1,281.0	-39.2	61.7	-39.2	1.22	0.11	
1,375.0	6.00	111.80	1,371.5	-42.9	70.9	-42.9	0.44	-0.44	
1,467.0	5.20	105.90	1,463.0	-45.8	79.4	-45.8	1.07	-0.87	
1,558.0	5.10	111.70	1,553.7	-48.4	87.1	-48.4	0.58	-0.11	
1,650.0	5.00	103.20	1,645.3	-50.9	94.8	-50.9	0.82	-0.11	
1,741.0	5.50	114.50	1,735.9	-53.6	102.6	-53.6	1.26	0.55	
1,832.0	5.00	108.80	1,826.6	-56.7	110.3	-56.7	0.79	-0.55	
1,923.0	4.40	113.10	1,917.3	-59.3	117.3	-59.3	0.76	-0.66	
2,015.0	4.40	106.20	2,009.0	-61.7	123.9	-61.7	0.58	0.00	
2,106.0	3.60	114.00	2,099.8	-63.8	129.9	-63.8	1.06	-0.88	
2,198.0	3.80	125.30	2,191.6	-66.7	135.0	-66.7	0.82	0.22	
2,289.0	3.60	116.30	2,282.4	-69.8	140.0	-69.8	0.67	-0.22	
2,381.0	4.70	120.10	2,374.1	-72.9	145.9	-72.9	1.23	1.20	
2,471.0	4.40	118.50	2,463.9	-76.4	152.1	-76.4	0.36	-0.33	
2,562.0	4.00	117.90	2,554.6	-79.6	158.0	-79.6	0.44	-0.44	
2,654.0	3.60	111.40	2,646.4	-82.1	163.5	-82.1	0.64	-0.43	
2,746.0	3.40	105.40	2,738.2	-83.9	168.8	-83.9	0.45	-0.22	
2,837.0	4.50	118.50	2,829.0	-86.3	174.6	-86.3	1.56	1.21	
2,929.0	4.00	116.90	2,920.8	-89.5	180.6	-89.5	0.56	-0.54	
3,021.0	4.20	110.00	3,012.5	-92.1	186.6	-92.1	0.58	0.22	
3,113.0	4.00	110.90	3,104.3	-94.4	192.8	-94.4	0.23	-0.22	
3,204.0	3.80	108.40	3,195.1	-96.5	198.6	-96.5	0.29	-0.22	
3,296.0	4.40	109.30	3,286.9	-98.6	204.8	-98.6	0.66	0.65	
3,391.0	5.10	118.30	3,381.5	-101.8	212.0	-101.8	1.07	0.74	
3,486.0	5.10	122.10	3,476.2	-106.1	219.3	-106.1	0.36	0.00	
3,581.0	4.40	117.90	3,570.8	-110.0	226.1	-110.0	0.82	-0.74	
3,676.0	4.80	118.80	3,665.5	-113.6	232.8	-113.6	0.43	0.42	
3,771.0	4.00	113.90	3,760.2	-116.9	239.3	-116.9	0.93	-0.84	
3,866.0	4.50	123.90	3,855.0	-120.3	245.4	-120.3	0.94	0.53	
3,961.0	3.60	122.10	3,949.7	-124.0	251.1	-124.0	0.96	-0.95	
4,056.0	4.30	113.80	4,044.5	-127.0	256.8	-127.0	0.95	0.74	
4,151.0	4.80	117.60	4,139.2	-130.3	263.6	-130.3	0.61	0.53	
4,247.0	5.80	119.10	4,234.8	-134.5	271.4	-134.5	1.05	1.04	
4,342.0	4.80	112.70	4,329.4	-138.4	279.3	-138.4	1.22	-1.05	
4,437.0	5.10	105.90	4,424.0	-141.1	287.0	-141.1	0.69	0.32	
4,532.0	5.10	113.10	4,518.7	-143.9	295.0	-143.9	0.67	0.00	
4,627.0	5.30	114.80	4,613.3	-147.4	302.8	-147.4	0.27	0.21	
4,722.0	5.20	121.00	4,707.9	-151.4	310.5	-151.4	0.61	-0.11	
4,817.0	5.40	105.90	4,802.5	-154.9	318.5	-154.9	1.48	0.21	
4,912.0	5.20	108.50	4,897.1	-157.5	326.9	-157.5	0.33	-0.21	
5,008.0	5.10	103.90	4,992.7	-159.9	335.1	-159.9	0.44	-0.10	
5,103.0	5.00	103.20	5,087.3	-161.8	343.3	-161.8	0.12	-0.11	
5,198.0	4.50	121.20	5,182.0	-164.7	350.5	-164.7	1.65	-0.53	
5,293.0	4.10	119.00	5,276.7	-168.3	356.6	-168.3	0.46	-0.42	
5,388.0	3.60	120.50	5,371.5	-171.4	362.2	-171.4	0.54	-0.53	
5,484.0	4.20	114.60	5,467.3	-174.4	368.0	-174.4	0.75	0.62	
5,579.0	3.70	112.00	5,562.1	-177.0	374.0	-177.0	0.56	-0.53	
5,674.0	3.70	112.90	5,656.9	-179.4	379.6	-179.4	0.06	0.00	
5,768.0	4.90	106.00	5,750.6	-181.7	386.3	-181.7	1.39	1.28	

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Jillson-East Rinn 3J-22H-N268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5000.0ft
<b>Site:</b>	S22-T2N-R68W (Jillson-East Rinn)	<b>MD Reference:</b>	KB @ 5000.0ft
<b>Well:</b>	Jillson-East Rinn 3J-22H-N268	<b>North Reference:</b>	True
<b>Wellbore:</b>	Hz	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	FINAL	<b>Database:</b>	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
5,863.0	5.80	117.50	5,845.2	-185.0	394.5	-185.0	1.47	0.95	
5,958.0	5.00	115.30	5,939.8	-189.0	402.5	-189.0	0.87	-0.84	
6,054.0	4.50	112.20	6,035.4	-192.2	409.7	-192.2	0.59	-0.52	
6,149.0	4.00	119.50	6,130.2	-195.2	416.1	-195.2	0.77	-0.53	
6,244.0	5.00	114.60	6,224.9	-198.6	422.7	-198.6	1.13	1.05	
6,339.0	4.30	112.90	6,319.6	-201.7	429.8	-201.7	0.75	-0.74	
6,434.0	4.00	118.90	6,414.3	-204.7	435.9	-204.7	0.56	-0.32	
6,529.0	6.20	111.00	6,508.9	-208.1	443.6	-208.1	2.43	2.32	
6,625.0	5.70	110.60	6,604.4	-211.7	452.9	-211.7	0.52	-0.52	
6,720.0	5.20	108.40	6,699.0	-214.7	461.4	-214.7	0.57	-0.53	
6,815.0	4.80	111.50	6,793.6	-217.5	469.2	-217.5	0.51	-0.42	
6,910.0	4.10	111.70	6,888.3	-220.2	476.1	-220.2	0.74	-0.74	
7,005.0	4.10	101.10	6,983.1	-222.1	482.6	-222.1	0.80	0.00	
7,052.0	6.70	69.60	7,029.9	-221.5	486.8	-221.5	8.19	5.53	
7,100.0	10.30	56.60	7,077.4	-218.1	493.0	-218.1	8.46	7.50	
7,148.0	15.90	35.50	7,124.1	-210.4	500.4	-210.4	15.16	11.67	
7,195.0	19.30	21.70	7,168.9	-197.9	507.0	-197.9	11.41	7.23	
7,243.0	22.10	12.10	7,213.8	-181.7	511.8	-181.7	9.15	5.83	
7,291.0	27.10	359.90	7,257.5	-161.9	513.7	-161.9	14.80	10.42	
7,338.0	34.00	354.70	7,298.0	-138.1	512.5	-138.1	15.71	14.68	
7,386.0	37.90	356.20	7,336.8	-110.0	510.3	-110.0	8.33	8.12	
7,433.0	39.30	358.10	7,373.5	-80.8	508.8	-80.8	3.90	2.98	
7,481.0	40.20	0.70	7,410.4	-50.1	508.5	-50.1	3.94	1.87	
7,529.0	45.30	0.20	7,445.7	-17.5	508.7	-17.5	10.65	10.62	
7,576.0	47.80	1.90	7,478.0	16.6	509.4	16.6	5.93	5.32	
7,601.0	50.00	2.50	7,494.4	35.4	510.1	35.4	8.98	8.80	
7,651.0	53.40	1.60	7,525.4	74.7	511.5	74.7	6.94	6.80	
7,674.0	56.40	0.40	7,538.7	93.5	511.8	93.5	13.72	13.04	
7,721.0	65.40	358.50	7,561.5	134.5	511.4	134.5	19.47	19.15	
7,769.0	73.10	358.20	7,578.5	179.3	510.1	179.3	16.05	16.04	
7,816.0	73.90	358.90	7,591.8	224.4	509.0	224.4	2.22	1.70	
7,864.0	75.80	359.90	7,604.4	270.7	508.5	270.7	4.44	3.96	
7,910.0	79.60	358.60	7,614.2	315.6	507.9	315.6	8.71	8.26	
7,984.0	85.20	0.30	7,624.0	388.9	507.2	388.9	7.90	7.57	
8,016.0	87.60	0.30	7,626.0	420.9	507.4	420.9	7.50	7.50	
8,048.0	90.90	0.90	7,626.4	452.8	507.7	452.8	10.48	10.31	
8,080.0	90.90	0.40	7,625.9	484.8	508.1	484.8	1.56	0.00	
8,175.0	92.00	0.10	7,623.5	579.8	508.5	579.8	1.20	1.16	
8,270.0	91.50	0.20	7,620.6	674.8	508.7	674.8	0.54	-0.53	
8,365.0	91.00	359.00	7,618.5	769.7	508.1	769.7	1.37	-0.53	
8,460.0	92.20	1.50	7,615.9	864.7	508.5	864.7	2.92	1.26	
8,556.0	91.60	2.10	7,612.7	960.6	511.5	960.6	0.88	-0.62	
8,647.0	90.90	2.00	7,610.7	1,051.5	514.7	1,051.5	0.78	-0.77	
8,738.0	91.60	0.30	7,608.7	1,142.5	516.6	1,142.5	2.02	0.77	
8,830.0	90.90	359.40	7,606.7	1,234.4	516.3	1,234.4	1.24	-0.76	
8,921.0	91.00	359.00	7,605.2	1,325.4	515.1	1,325.4	0.45	0.11	
9,012.0	90.50	358.30	7,604.0	1,416.4	512.9	1,416.4	0.95	-0.55	
9,104.0	89.80	357.80	7,603.8	1,508.3	509.8	1,508.3	0.94	-0.76	
9,196.0	90.80	359.20	7,603.3	1,600.3	507.4	1,600.3	1.87	1.09	
9,288.0	90.40	358.60	7,602.3	1,692.3	505.6	1,692.3	0.78	-0.43	
9,379.0	86.90	354.50	7,604.5	1,783.0	500.1	1,783.0	5.92	-3.85	
9,471.0	89.10	355.10	7,607.7	1,874.6	491.8	1,874.6	2.48	2.39	
9,563.0	89.80	357.40	7,608.5	1,966.4	485.8	1,966.4	2.61	0.76	

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Jillson-East Rinn 3J-22H-N268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5000.0ft
<b>Site:</b>	S22-T2N-R68W (Jillson-East Rinn)	<b>MD Reference:</b>	KB @ 5000.0ft
<b>Well:</b>	Jillson-East Rinn 3J-22H-N268	<b>North Reference:</b>	True
<b>Wellbore:</b>	Hz	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	FINAL	<b>Database:</b>	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
9,654.0	91.80	358.90	7,607.3	2,057.3	482.9	2,057.3	2.75	2.20	
9,746.0	91.80	1.40	7,604.4	2,149.3	483.1	2,149.3	2.72	0.00	
9,838.0	91.10	1.10	7,602.1	2,241.2	485.1	2,241.2	0.83	-0.76	
9,929.0	91.70	1.00	7,599.8	2,332.2	486.8	2,332.2	0.67	0.66	
10,021.0	91.20	0.50	7,597.5	2,424.2	488.0	2,424.2	0.77	-0.54	
10,113.0	90.50	359.30	7,596.1	2,516.1	487.8	2,516.1	1.51	-0.76	
10,205.0	91.10	0.30	7,594.9	2,608.1	487.5	2,608.1	1.27	0.65	
10,296.0	90.20	359.00	7,593.8	2,699.1	486.9	2,699.1	1.74	-0.99	
10,388.0	90.10	359.60	7,593.6	2,791.1	485.8	2,791.1	0.66	-0.11	
10,479.0	91.20	0.00	7,592.6	2,882.1	485.5	2,882.1	1.29	1.21	
10,571.0	88.90	358.10	7,592.5	2,974.1	484.0	2,974.1	3.24	-2.50	
10,662.0	89.80	359.50	7,593.5	3,065.0	482.1	3,065.0	1.83	0.99	
10,752.0	90.60	359.90	7,593.2	3,155.0	481.6	3,155.0	0.99	0.89	
10,844.0	91.90	359.80	7,591.2	3,247.0	481.4	3,247.0	1.42	1.41	
10,936.0	91.30	359.30	7,588.6	3,339.0	480.6	3,339.0	0.85	-0.65	
11,028.0	91.80	359.40	7,586.1	3,430.9	479.6	3,430.9	0.55	0.54	
11,119.0	89.40	357.90	7,585.2	3,521.9	477.4	3,521.9	3.11	-2.64	
11,210.0	89.10	359.30	7,586.4	3,612.9	475.2	3,612.9	1.57	-0.33	
11,301.0	90.20	0.10	7,586.9	3,703.9	474.7	3,703.9	1.49	1.21	
11,392.0	90.90	0.90	7,586.0	3,794.9	475.5	3,794.9	1.17	0.77	
11,487.0	90.40	0.70	7,585.0	3,889.8	476.9	3,889.8	0.57	-0.53	
11,582.0	90.00	0.60	7,584.6	3,984.8	477.9	3,984.8	0.43	-0.42	
11,677.0	90.30	359.80	7,584.4	4,079.8	478.3	4,079.8	0.90	0.32	
11,771.0	89.60	359.20	7,584.5	4,173.8	477.5	4,173.8	0.98	-0.74	
11,867.0	90.20	359.20	7,584.6	4,269.8	476.1	4,269.8	0.62	0.62	
11,962.0	89.80	359.50	7,584.6	4,364.8	475.0	4,364.8	0.53	-0.42	
12,057.0	90.10	359.20	7,584.7	4,459.8	474.0	4,459.8	0.45	0.32	
12,152.0	90.70	358.10	7,584.1	4,554.8	471.7	4,554.8	1.32	0.63	
12,247.0	91.10	358.50	7,582.6	4,649.7	468.9	4,649.7	0.60	0.42	
12,342.0	91.00	358.60	7,580.8	4,744.7	466.5	4,744.7	0.15	-0.11	
12,438.0	91.20	358.60	7,579.0	4,840.6	464.2	4,840.6	0.21	0.21	
12,533.0	90.40	358.40	7,577.7	4,935.6	461.7	4,935.6	0.87	-0.84	
12,628.0	91.30	359.90	7,576.2	5,030.6	460.3	5,030.6	1.84	0.95	
12,723.0	90.60	359.70	7,574.7	5,125.5	459.9	5,125.5	0.77	-0.74	
12,818.0	90.20	359.20	7,574.0	5,220.5	459.0	5,220.5	0.67	-0.42	
12,913.0	90.00	0.00	7,573.8	5,315.5	458.3	5,315.5	0.87	-0.21	
13,009.0	89.60	1.00	7,574.2	5,411.5	459.2	5,411.5	1.12	-0.42	
13,104.0	90.20	0.60	7,574.3	5,506.5	460.5	5,506.5	0.76	0.63	
13,199.0	91.00	0.90	7,573.3	5,601.5	461.8	5,601.5	0.90	0.84	
13,294.0	91.50	359.40	7,571.3	5,696.5	462.0	5,696.5	1.66	0.53	
13,389.0	90.30	359.00	7,569.8	5,791.5	460.7	5,791.5	1.33	-1.26	
13,484.0	91.30	358.50	7,568.5	5,886.4	458.6	5,886.4	1.18	1.05	
13,579.0	91.20	358.80	7,566.4	5,981.4	456.4	5,981.4	0.33	-0.11	
13,674.0	91.20	359.00	7,564.4	6,076.3	454.5	6,076.3	0.21	0.00	
13,770.0	90.00	359.30	7,563.4	6,172.3	453.1	6,172.3	1.29	-1.25	
13,865.0	90.30	0.10	7,563.1	6,267.3	452.6	6,267.3	0.90	0.32	
13,960.0	89.50	359.90	7,563.3	6,362.3	452.6	6,362.3	0.87	-0.84	
14,055.0	89.80	1.10	7,563.9	6,457.3	453.5	6,457.3	1.30	0.32	
14,151.0	90.10	1.40	7,564.0	6,553.3	455.5	6,553.3	0.44	0.31	
14,246.0	89.60	1.10	7,564.2	6,648.3	457.6	6,648.3	0.61	-0.53	
14,341.0	92.40	3.90	7,562.6	6,743.1	461.8	6,743.1	4.17	2.95	
14,437.0	90.00	2.50	7,560.5	6,839.0	467.1	6,839.0	2.89	-2.50	
14,532.0	89.70	2.10	7,560.8	6,933.9	470.9	6,933.9	0.53	-0.32	

## Survey Report

<b>Company:</b> EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b> Well Jillson-East Rinn 3J-22H-N268
<b>Project:</b> DJ Wattenberg	<b>TVD Reference:</b> KB @ 5000.0ft
<b>Site:</b> S22-T2N-R68W (Jillson-East Rinn)	<b>MD Reference:</b> KB @ 5000.0ft
<b>Well:</b> Jillson-East Rinn 3J-22H-N268	<b>North Reference:</b> True
<b>Wellbore:</b> Hz	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Design:</b> FINAL	<b>Database:</b> USA EDM 5000 Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
14,627.0	91.20	2.50	7,560.1	7,028.8	474.7	7,028.8	1.63	1.58	
14,722.0	90.90	2.30	7,558.3	7,123.7	478.7	7,123.7	0.38	-0.32	
14,818.0	90.20	1.80	7,557.4	7,219.6	482.2	7,219.6	0.90	-0.73	
14,913.0	90.20	2.20	7,557.1	7,314.6	485.5	7,314.6	0.42	0.00	
15,008.0	91.80	2.30	7,555.4	7,409.5	489.2	7,409.5	1.69	1.68	
15,103.0	91.30	2.50	7,552.8	7,504.4	493.2	7,504.4	0.57	-0.53	
15,198.0	91.20	2.60	7,550.8	7,599.2	497.4	7,599.2	0.15	-0.11	
15,254.0	90.70	2.50	7,549.8	7,655.2	499.9	7,655.2	0.91	-0.89	Last CES Survey @ 15,254' MD
15,304.0	90.70	2.50	7,549.2	7,705.1	502.1	7,705.1	0.00	0.00	PTB @ 15,304'

Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
Jillson-East Rinn 3J-22H - hit/miss target - Shape	0.00	0.00	7,560.9	6,206.1	446.7	1,292,301.79	3,142,711.55	40.134628	-104.989607	
- actual wellpath misses target center by 6.6ft at 13803.8ft MD (7563.4 TVD, 6206.1 N, 452.8 E)										
- Point										
Jillson-East Rinn 3J-22H - hit/miss target - Shape	0.00	0.00	7,616.0	6,206.1	446.7	1,292,301.77	3,142,711.55	40.134628	-104.989607	
- actual wellpath misses target center by 53.0ft at 13803.7ft MD (7563.4 TVD, 6206.0 N, 452.8 E)										
- Point										
Jillson-East Rinn 3J-22H - hit/miss target - Shape	0.00	0.00	7,516.9	7,717.7	494.9	1,293,813.59	3,142,751.04	40.138777	-104.989435	
- actual wellpath misses target center by 35.4ft at 15304.0ft MD (7549.2 TVD, 7705.1 N, 502.1 E)										
- Point										
Jillson-East Rinn 3J-22H - hit/miss target - Shape	0.00	0.00	7,530.0	6,206.1	446.7	1,292,301.79	3,142,711.55	40.134628	-104.989607	
- actual wellpath misses target center by 33.9ft at 13803.9ft MD (7563.4 TVD, 6206.2 N, 452.8 E)										
- Point										
Jillson-East Rinn 3J-22H - hit/miss target - Shape	0.00	0.00	7,616.0	7,717.7	494.9	1,293,813.59	3,142,751.04	40.138777	-104.989435	
- actual wellpath misses target center by 68.3ft at 15304.0ft MD (7549.2 TVD, 7705.1 N, 502.1 E)										
- Point										
Jillson-East Rinn 3J-22H - hit/miss target - Shape	0.00	0.00	7,547.8	7,717.7	494.9	1,293,813.59	3,142,751.04	40.138777	-104.989435	
- actual wellpath misses target center by 14.5ft at 15304.0ft MD (7549.2 TVD, 7705.1 N, 502.1 E)										
- Point										

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment	
15,254.0	7,549.8	7,655.2	499.9	Last CES Survey @ 15,254' MD	
15,304.0	7,549.2	7,705.1	502.1	PTB @ 15,304'	

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

# **EnCana Oil & Gas (USA) Inc**

**DJ Wattenberg**

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

**Jillson-East Rinn 3J-22H-N268**

**Hz**

**Design: FINAL**

## **Survey Report - Geographic**

**30 June, 2014**

## Survey Report - Geographic

<b>Company:</b> EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b> Well Jillson-East Rinn 3J-22H-N268
<b>Project:</b> DJ Wattenberg	<b>TVD Reference:</b> KB @ 5000.0ft
<b>Site:</b> S22-T2N-R68W (Jillson-East Rinn)	<b>MD Reference:</b> KB @ 5000.0ft
<b>Well:</b> Jillson-East Rinn 3J-22H-N268	<b>North Reference:</b> True
<b>Wellbore:</b> Hz	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Design:</b> FINAL	<b>Database:</b> USA EDM 5000 Multi Users DB

<b>Project</b> DJ Wattenberg		
<b>Map System:</b> US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b> North American Datum 1983		
<b>Map Zone:</b> Colorado Northern Zone		

<b>Site</b> S22-T2N-R68W (Jillson-East Rinn)				
<b>Site Position:</b>	<b>Northing:</b>	1,289,542.88 ft	<b>Latitude:</b>	40.127030
<b>From:</b> Lat/Long	<b>Easting:</b>	3,144,231.14 ft	<b>Longitude:</b>	-104.984230
<b>Position Uncertainty:</b> 0.0 ft	<b>Slot Radius:</b> 13.200 in		<b>Grid Convergence:</b>	0.33 °

<b>Well</b> Jillson-East Rinn 3J-22H-N268				
<b>Well Position</b>	<b>+N/-S</b> 0.0 ft	<b>Northing:</b> 1,286,093.22 ft	<b>Latitude:</b>	40.117591
	<b>+E/-W</b> 0.0 ft	<b>Easting:</b> 3,142,300.47 ft	<b>Longitude:</b>	-104.991205
<b>Position Uncertainty</b>	0.0 ft	<b>Wellhead Elevation:</b> ft	<b>Ground Level:</b>	4,975.0 ft

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

<b>Design</b> FINAL					
<b>Audit Notes:</b>					
<b>Version:</b> 1.0	<b>Phase:</b> ACTUAL	<b>Tie On Depth:</b>	0.0		
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0		0.00

<b>Survey Program</b>		<b>Date</b> 6/30/2014
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>
143.0	15,304.0	Survey #1 (Hz)
		<b>Tool Name</b> Geolink MWD
		<b>Description</b> Geolink MWD

<b>Survey</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude	
0.0	0.00	0.00	0.0	0.0	0.0	1,286,093.22	3,142,300.47	40.117591	-104.991205	
143.0	0.50	295.30	143.0	0.3	-0.6	1,286,093.49	3,142,299.90	40.117592	-104.991207	
204.0	0.40	156.70	204.0	0.2	-0.7	1,286,093.40	3,142,299.75	40.117592	-104.991208	
265.0	0.50	149.00	265.0	-0.2	-0.5	1,286,092.98	3,142,299.97	40.117590	-104.991207	
326.0	1.40	125.10	326.0	-0.9	0.2	1,286,092.33	3,142,300.72	40.117589	-104.991204	
387.0	1.90	125.90	387.0	-1.9	1.7	1,286,091.32	3,142,302.16	40.117586	-104.991199	
448.0	2.90	117.30	447.9	-3.2	3.9	1,286,090.03	3,142,304.36	40.117582	-104.991191	
509.0	4.20	110.80	508.8	-4.7	7.3	1,286,088.55	3,142,307.82	40.117578	-104.991179	
574.0	4.40	111.40	573.6	-6.5	11.9	1,286,086.82	3,142,312.38	40.117573	-104.991163	
601.0	4.20	117.50	600.5	-7.3	13.7	1,286,085.99	3,142,314.23	40.117571	-104.991156	
693.0	4.30	124.00	692.3	-10.8	19.6	1,286,082.54	3,142,320.09	40.117561	-104.991135	
784.0	4.20	126.00	783.0	-14.7	25.1	1,286,078.71	3,142,325.64	40.117551	-104.991116	

## Survey Report - Geographic

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Jillson-East Rinn 3J-22H-N268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5000.0ft
<b>Site:</b>	S22-T2N-R68W (Jillson-East Rinn)	<b>MD Reference:</b>	KB @ 5000.0ft
<b>Well:</b>	Jillson-East Rinn 3J-22H-N268	<b>North Reference:</b>	True
<b>Wellbore:</b>	Hz	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	FINAL	<b>Database:</b>	USA EDM 5000 Multi Users DB

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude	
830.0	4.10	123.80	828.9	-16.6	27.8	1,286,076.82	3,142,328.38	40.117546	-104.991106	
917.0	4.50	128.50	915.7	-20.4	33.1	1,286,072.99	3,142,333.66	40.117535	-104.991087	
1,008.0	4.40	130.10	1,006.4	-24.9	38.5	1,286,068.56	3,142,339.15	40.117523	-104.991067	
1,100.0	5.40	124.10	1,098.1	-29.6	44.8	1,286,063.89	3,142,345.46	40.117510	-104.991045	
1,192.0	6.30	121.80	1,189.6	-34.7	52.7	1,286,058.85	3,142,353.36	40.117496	-104.991017	
1,284.0	6.40	111.70	1,281.0	-39.2	61.7	1,286,054.35	3,142,362.44	40.117483	-104.990984	
1,375.0	6.00	111.80	1,371.5	-42.9	70.9	1,286,050.76	3,142,371.59	40.117473	-104.990952	
1,467.0	5.20	105.90	1,463.0	-45.8	79.4	1,286,047.88	3,142,380.08	40.117465	-104.990922	
1,558.0	5.10	111.70	1,553.7	-48.4	87.1	1,286,045.30	3,142,387.82	40.117458	-104.990894	
1,650.0	5.00	103.20	1,645.3	-50.9	94.8	1,286,042.91	3,142,395.54	40.117451	-104.990866	
1,741.0	5.50	114.50	1,735.9	-53.6	102.6	1,286,040.24	3,142,403.38	40.117444	-104.990838	
1,832.0	5.00	108.80	1,826.6	-56.7	110.3	1,286,037.20	3,142,411.12	40.117436	-104.990811	
1,923.0	4.40	113.10	1,917.3	-59.3	117.3	1,286,034.59	3,142,418.10	40.117428	-104.990786	
2,015.0	4.40	106.20	2,009.0	-61.7	123.9	1,286,032.26	3,142,424.75	40.117422	-104.990762	
2,106.0	3.60	114.00	2,099.8	-63.8	129.9	1,286,030.16	3,142,430.73	40.117416	-104.990741	
2,198.0	3.80	125.30	2,191.6	-66.7	135.0	1,286,027.25	3,142,435.87	40.117408	-104.990722	
2,289.0	3.60	116.30	2,282.4	-69.8	140.0	1,286,024.27	3,142,440.91	40.117400	-104.990705	
2,381.0	4.70	120.10	2,374.1	-72.9	145.9	1,286,021.14	3,142,446.78	40.117391	-104.990684	
2,471.0	4.40	118.50	2,463.9	-76.4	152.1	1,286,017.68	3,142,453.02	40.117381	-104.990661	
2,562.0	4.00	117.90	2,554.6	-79.6	158.0	1,286,014.56	3,142,458.91	40.117373	-104.990640	
2,654.0	3.60	111.40	2,646.4	-82.1	163.5	1,286,012.04	3,142,464.45	40.117366	-104.990621	
2,746.0	3.40	105.40	2,738.2	-83.9	168.8	1,286,010.29	3,142,469.78	40.117361	-104.990602	
2,837.0	4.50	118.50	2,829.0	-86.3	174.6	1,286,007.90	3,142,475.54	40.117354	-104.990581	
2,929.0	4.00	116.90	2,920.8	-89.5	180.6	1,286,004.76	3,142,481.59	40.117345	-104.990559	
3,021.0	4.20	110.00	3,012.5	-92.1	186.6	1,286,002.19	3,142,487.63	40.117338	-104.990538	
3,113.0	4.00	110.90	3,104.3	-94.4	192.8	1,285,999.93	3,142,493.81	40.117332	-104.990516	
3,204.0	3.80	108.40	3,195.1	-96.5	198.6	1,285,997.88	3,142,499.64	40.117326	-104.990495	
3,296.0	4.40	109.30	3,286.9	-98.6	204.8	1,285,995.79	3,142,505.88	40.117320	-104.990473	
3,391.0	5.10	118.30	3,381.5	-101.8	212.0	1,285,992.62	3,142,513.06	40.117312	-104.990447	
3,486.0	5.10	122.10	3,476.2	-106.1	219.3	1,285,988.42	3,142,520.37	40.117300	-104.990421	
3,581.0	4.40	117.90	3,570.8	-110.0	226.1	1,285,984.51	3,142,527.19	40.117289	-104.990397	
3,676.0	4.80	118.80	3,665.5	-113.6	232.8	1,285,980.93	3,142,533.92	40.117279	-104.990373	
3,771.0	4.00	113.90	3,760.2	-116.9	239.3	1,285,977.71	3,142,540.45	40.117270	-104.990350	
3,866.0	4.50	123.90	3,855.0	-120.3	245.4	1,285,974.32	3,142,546.59	40.117261	-104.990328	
3,961.0	3.60	122.10	3,949.7	-124.0	251.1	1,285,970.69	3,142,552.23	40.117251	-104.990308	
4,056.0	4.30	113.80	4,044.5	-127.0	256.8	1,285,967.70	3,142,558.04	40.117242	-104.990287	
4,151.0	4.80	117.60	4,139.2	-130.3	263.6	1,285,964.46	3,142,564.84	40.117233	-104.990263	
4,247.0	5.80	119.10	4,234.8	-134.5	271.4	1,285,960.29	3,142,572.66	40.117222	-104.990235	
4,342.0	4.80	112.70	4,329.4	-138.4	279.3	1,285,956.46	3,142,580.54	40.117211	-104.990207	
4,437.0	5.10	105.90	4,424.0	-141.1	287.0	1,285,953.82	3,142,588.28	40.117204	-104.990179	
4,532.0	5.10	113.10	4,518.7	-143.9	295.0	1,285,951.05	3,142,596.24	40.117196	-104.990151	
4,627.0	5.30	114.80	4,613.3	-147.4	302.8	1,285,947.60	3,142,604.13	40.117187	-104.990122	
4,722.0	5.20	121.00	4,707.9	-151.4	310.5	1,285,943.58	3,142,611.83	40.117175	-104.990095	
4,817.0	5.40	105.90	4,802.5	-154.9	318.5	1,285,940.19	3,142,619.84	40.117166	-104.990066	
4,912.0	5.20	108.50	4,897.1	-157.5	326.9	1,285,937.64	3,142,628.23	40.117159	-104.990037	
5,008.0	5.10	103.90	4,992.7	-159.9	335.1	1,285,935.29	3,142,636.51	40.117152	-104.990007	
5,103.0	5.00	103.20	5,087.3	-161.8	343.3	1,285,933.37	3,142,644.66	40.117147	-104.989978	
5,198.0	4.50	121.20	5,182.0	-164.7	350.5	1,285,930.54	3,142,651.89	40.117139	-104.989952	
5,293.0	4.10	119.00	5,276.7	-168.3	356.6	1,285,927.00	3,142,658.07	40.117129	-104.989930	
5,388.0	3.60	120.50	5,371.5	-171.4	362.2	1,285,923.87	3,142,663.63	40.117120	-104.989910	
5,484.0	4.20	114.60	5,467.3	-174.4	368.0	1,285,920.91	3,142,669.44	40.117112	-104.989890	
5,579.0	3.70	112.00	5,562.1	-177.0	374.0	1,285,918.35	3,142,675.46	40.117105	-104.989868	
5,674.0	3.70	112.90	5,656.9	-179.4	379.6	1,285,916.04	3,142,681.14	40.117099	-104.989848	
5,768.0	4.90	106.00	5,750.6	-181.7	386.3	1,285,913.79	3,142,687.80	40.117092	-104.989824	
5,863.0	5.80	117.50	5,845.2	-185.0	394.5	1,285,910.50	3,142,695.98	40.117083	-104.989795	

## Survey Report - Geographic

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Jillson-East Rinn 3J-22H-N268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5000.0ft
<b>Site:</b>	S22-T2N-R68W (Jillson-East Rinn)	<b>MD Reference:</b>	KB @ 5000.0ft
<b>Well:</b>	Jillson-East Rinn 3J-22H-N268	<b>North Reference:</b>	True
<b>Wellbore:</b>	Hz	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	FINAL	<b>Database:</b>	USA EDM 5000 Multi Users DB

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude	
5,958.0	5.00	115.30	5,939.8	-189.0	402.5	1,285,906.56	3,142,704.00	40.117072	-104.989766	
6,054.0	4.50	112.20	6,035.4	-192.2	409.7	1,285,903.39	3,142,711.29	40.117063	-104.989740	
6,149.0	4.00	119.50	6,130.2	-195.2	416.1	1,285,900.39	3,142,717.64	40.117055	-104.989718	
6,244.0	5.00	114.60	6,224.9	-198.6	422.7	1,285,897.07	3,142,724.31	40.117046	-104.989694	
6,339.0	4.30	112.90	6,319.6	-201.7	429.8	1,285,894.00	3,142,731.37	40.117037	-104.989669	
6,434.0	4.00	118.90	6,414.3	-204.7	435.9	1,285,891.05	3,142,737.57	40.117029	-104.989647	
6,529.0	6.20	111.00	6,508.9	-208.1	443.6	1,285,887.66	3,142,745.28	40.117020	-104.989619	
6,625.0	5.70	110.60	6,604.4	-211.7	452.9	1,285,884.17	3,142,754.60	40.117010	-104.989586	
6,720.0	5.20	108.40	6,699.0	-214.7	461.4	1,285,881.20	3,142,763.12	40.117002	-104.989555	
6,815.0	4.80	111.50	6,793.6	-217.5	469.2	1,285,878.43	3,142,770.92	40.116994	-104.989528	
6,910.0	4.10	111.70	6,888.3	-220.2	476.1	1,285,875.76	3,142,777.79	40.116987	-104.989503	
7,005.0	4.10	101.10	6,983.1	-222.1	482.6	1,285,873.89	3,142,784.29	40.116981	-104.989480	
7,052.0	6.70	69.60	7,029.9	-221.5	486.8	1,285,874.55	3,142,788.51	40.116983	-104.989465	
7,100.0	10.30	56.60	7,077.4	-218.1	493.0	1,285,877.92	3,142,794.70	40.116992	-104.989443	
7,148.0	15.90	35.50	7,124.1	-210.4	500.4	1,285,885.69	3,142,802.06	40.117013	-104.989416	
7,195.0	19.30	21.70	7,168.9	-197.9	507.0	1,285,898.19	3,142,808.61	40.117048	-104.989392	
7,243.0	22.10	12.10	7,213.8	-181.7	511.8	1,285,914.43	3,142,813.34	40.117092	-104.989375	
7,291.0	27.10	359.90	7,257.5	-161.9	513.7	1,285,934.23	3,142,815.10	40.117146	-104.989368	
7,338.0	34.00	354.70	7,298.0	-138.1	512.5	1,285,958.04	3,142,813.73	40.117212	-104.989373	
7,386.0	37.90	356.20	7,336.8	-110.0	510.3	1,285,986.11	3,142,811.35	40.117289	-104.989381	
7,433.0	39.30	358.10	7,373.5	-80.8	508.8	1,286,015.39	3,142,809.74	40.117369	-104.989386	
7,481.0	40.20	0.70	7,410.4	-50.1	508.5	1,286,046.07	3,142,809.25	40.117454	-104.989387	
7,529.0	45.30	0.20	7,445.7	-17.5	508.7	1,286,078.64	3,142,809.31	40.117543	-104.989386	
7,576.0	47.80	1.90	7,478.0	16.6	509.4	1,286,112.75	3,142,809.75	40.117637	-104.989384	
7,601.0	50.00	2.50	7,494.4	35.4	510.1	1,286,131.58	3,142,810.36	40.117688	-104.989381	
7,651.0	53.40	1.60	7,525.4	74.7	511.5	1,286,170.81	3,142,811.54	40.117796	-104.989376	
7,674.0	56.40	0.40	7,538.7	93.5	511.8	1,286,189.62	3,142,811.75	40.117848	-104.989375	
7,721.0	65.40	358.50	7,561.5	134.5	511.4	1,286,230.64	3,142,811.09	40.117960	-104.989377	
7,769.0	73.10	358.20	7,578.5	179.3	510.1	1,286,275.46	3,142,809.54	40.118083	-104.989381	
7,816.0	73.90	358.90	7,591.8	224.4	509.0	1,286,320.51	3,142,808.14	40.118207	-104.989385	
7,864.0	75.80	359.90	7,604.4	270.7	508.5	1,286,366.83	3,142,807.39	40.118334	-104.989387	
7,910.0	79.60	358.60	7,614.2	315.6	507.9	1,286,411.76	3,142,806.55	40.118457	-104.989389	
7,984.0	85.20	0.30	7,624.0	388.9	507.2	1,286,485.05	3,142,805.43	40.118659	-104.989392	
8,016.0	87.60	0.30	7,626.0	420.9	507.4	1,286,516.99	3,142,805.41	40.118746	-104.989391	
8,048.0	90.90	0.90	7,626.4	452.8	507.7	1,286,548.98	3,142,805.56	40.118834	-104.989390	
8,080.0	90.90	0.40	7,625.9	484.8	508.1	1,286,580.97	3,142,805.74	40.118922	-104.989389	
8,175.0	92.00	0.10	7,623.5	579.8	508.5	1,286,675.94	3,142,805.61	40.119183	-104.989387	
8,270.0	91.50	0.20	7,620.6	674.8	508.7	1,286,770.90	3,142,805.32	40.119443	-104.989386	
8,365.0	91.00	359.00	7,618.5	769.7	508.1	1,286,865.86	3,142,804.11	40.119704	-104.989389	
8,460.0	92.20	1.50	7,615.9	864.7	508.5	1,286,960.82	3,142,803.98	40.119965	-104.989387	
8,556.0	91.60	2.10	7,612.7	960.6	511.5	1,287,056.73	3,142,806.44	40.120228	-104.989376	
8,647.0	90.90	2.00	7,610.7	1,051.5	514.7	1,287,147.67	3,142,809.17	40.120478	-104.989365	
8,738.0	91.60	0.30	7,608.7	1,142.5	516.6	1,287,238.63	3,142,810.48	40.120727	-104.989358	
8,830.0	90.90	359.40	7,606.7	1,234.4	516.3	1,287,330.61	3,142,809.71	40.120980	-104.989359	
8,921.0	91.00	359.00	7,605.2	1,325.4	515.1	1,287,421.58	3,142,807.92	40.121230	-104.989364	
9,012.0	90.50	358.30	7,604.0	1,416.4	512.9	1,287,512.53	3,142,805.25	40.121479	-104.989371	
9,104.0	89.80	357.80	7,603.8	1,508.3	509.8	1,287,604.46	3,142,801.59	40.121732	-104.989382	
9,196.0	90.80	359.20	7,603.3	1,600.3	507.4	1,287,696.40	3,142,798.66	40.121984	-104.989391	
9,288.0	90.40	358.60	7,602.3	1,692.3	505.6	1,287,788.37	3,142,796.36	40.122237	-104.989397	
9,379.0	86.90	354.50	7,604.5	1,783.0	500.1	1,287,879.11	3,142,790.37	40.122486	-104.989417	
9,471.0	89.10	355.10	7,607.7	1,874.6	491.8	1,287,970.62	3,142,781.51	40.122737	-104.989447	
9,563.0	89.80	357.40	7,608.5	1,966.4	485.8	1,288,062.38	3,142,774.97	40.122989	-104.989468	
9,654.0	91.80	358.90	7,607.3	2,057.3	482.9	1,288,153.30	3,142,771.51	40.123239	-104.989479	
9,746.0	91.80	1.40	7,604.4	2,149.3	483.1	1,288,245.24	3,142,771.23	40.123491	-104.989478	
9,838.0	91.10	1.10	7,602.1	2,241.2	485.1	1,288,337.20	3,142,772.70	40.123744	-104.989471	

## Survey Report - Geographic

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Jillson-East Rinn 3J-22H-N268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5000.0ft
<b>Site:</b>	S22-T2N-R68W (Jillson-East Rinn)	<b>MD Reference:</b>	KB @ 5000.0ft
<b>Well:</b>	Jillson-East Rinn 3J-22H-N268	<b>North Reference:</b>	True
<b>Wellbore:</b>	Hz	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	FINAL	<b>Database:</b>	USA EDM 5000 Multi Users DB

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude	
9,929.0	91.70	1.00	7,599.8	2,332.2	486.8	1,288,428.17	3,142,773.85	40.123993	-104.989465	
10,021.0	91.20	0.50	7,597.5	2,424.2	488.0	1,288,520.13	3,142,774.53	40.124246	-104.989460	
10,113.0	90.50	359.30	7,596.1	2,516.1	487.8	1,288,612.12	3,142,773.84	40.124498	-104.989461	
10,205.0	91.10	0.30	7,594.9	2,608.1	487.5	1,288,704.11	3,142,772.99	40.124751	-104.989462	
10,296.0	90.20	359.00	7,593.8	2,699.1	486.9	1,288,795.09	3,142,771.91	40.125001	-104.989464	
10,388.0	90.10	359.60	7,593.6	2,791.1	485.8	1,288,887.07	3,142,770.26	40.125253	-104.989468	
10,479.0	91.20	0.00	7,592.6	2,882.1	485.5	1,288,978.06	3,142,769.42	40.125503	-104.989469	
10,571.0	88.90	358.10	7,592.5	2,974.1	484.0	1,289,070.03	3,142,767.37	40.125755	-104.989475	
10,662.0	89.80	359.50	7,593.5	3,065.0	482.1	1,289,160.99	3,142,764.94	40.126005	-104.989481	
10,752.0	90.60	359.90	7,593.2	3,155.0	481.6	1,289,250.98	3,142,763.95	40.126252	-104.989483	
10,844.0	91.90	359.80	7,591.2	3,247.0	481.4	1,289,342.95	3,142,763.18	40.126505	-104.989484	
10,936.0	91.30	359.30	7,588.6	3,339.0	480.6	1,289,434.91	3,142,761.93	40.126757	-104.989486	
11,028.0	91.80	359.40	7,586.1	3,430.9	479.6	1,289,526.86	3,142,760.36	40.127009	-104.989490	
11,119.0	89.40	357.90	7,585.2	3,521.9	477.4	1,289,617.81	3,142,757.70	40.127259	-104.989498	
11,210.0	89.10	359.30	7,586.4	3,612.9	475.2	1,289,708.76	3,142,754.95	40.127509	-104.989506	
11,301.0	90.20	0.10	7,586.9	3,703.9	474.7	1,289,799.75	3,142,753.95	40.127759	-104.989508	
11,392.0	90.90	0.90	7,586.0	3,794.9	475.5	1,289,890.74	3,142,754.22	40.128008	-104.989505	
11,487.0	90.40	0.70	7,585.0	3,889.8	476.9	1,289,985.73	3,142,755.01	40.128269	-104.989500	
11,582.0	90.00	0.60	7,584.6	3,984.8	477.9	1,290,080.73	3,142,755.54	40.128530	-104.989496	
11,677.0	90.30	359.80	7,584.4	4,079.8	478.3	1,290,175.73	3,142,755.32	40.128791	-104.989495	
11,771.0	89.60	359.20	7,584.5	4,173.8	477.5	1,290,269.72	3,142,753.97	40.129049	-104.989498	
11,867.0	90.20	359.20	7,584.6	4,269.8	476.1	1,290,365.70	3,142,752.07	40.129312	-104.989503	
11,962.0	89.80	359.50	7,584.6	4,364.8	475.0	1,290,460.68	3,142,750.45	40.129573	-104.989506	
12,057.0	90.10	359.20	7,584.7	4,459.8	474.0	1,290,555.67	3,142,748.83	40.129834	-104.989510	
12,152.0	90.70	358.10	7,584.1	4,554.8	471.7	1,290,650.63	3,142,746.05	40.130095	-104.989518	
12,247.0	91.10	358.50	7,582.6	4,649.7	468.9	1,290,745.55	3,142,742.68	40.130355	-104.989528	
12,342.0	91.00	358.60	7,580.8	4,744.7	466.5	1,290,840.49	3,142,739.73	40.130616	-104.989537	
12,438.0	91.20	358.60	7,579.0	4,840.6	464.2	1,290,936.43	3,142,736.84	40.130879	-104.989545	
12,533.0	90.40	358.40	7,577.7	4,935.6	461.7	1,291,031.37	3,142,733.81	40.131140	-104.989554	
12,628.0	91.30	359.90	7,576.2	5,030.6	460.3	1,291,126.34	3,142,731.85	40.131401	-104.989559	
12,723.0	90.60	359.70	7,574.7	5,125.5	459.9	1,291,221.32	3,142,730.98	40.131661	-104.989560	
12,818.0	90.20	359.20	7,574.0	5,220.5	459.0	1,291,316.31	3,142,729.52	40.131922	-104.989564	
12,913.0	90.00	0.00	7,573.8	5,315.5	458.3	1,291,411.30	3,142,728.31	40.132183	-104.989566	
13,009.0	89.60	1.00	7,574.2	5,411.5	459.2	1,291,507.30	3,142,728.60	40.132446	-104.989563	
13,104.0	90.20	0.60	7,574.3	5,506.5	460.5	1,291,602.29	3,142,729.38	40.132707	-104.989558	
13,199.0	91.00	0.90	7,573.3	5,601.5	461.8	1,291,697.28	3,142,730.08	40.132968	-104.989554	
13,294.0	91.50	359.40	7,571.3	5,696.5	462.0	1,291,792.26	3,142,729.78	40.133229	-104.989553	
13,389.0	90.30	359.00	7,569.8	5,791.5	460.7	1,291,887.22	3,142,727.91	40.133489	-104.989558	
13,484.0	91.30	358.50	7,568.5	5,886.4	458.6	1,291,982.18	3,142,725.29	40.133750	-104.989565	
13,579.0	91.20	358.80	7,566.4	5,981.4	456.4	1,292,077.11	3,142,722.51	40.134011	-104.989573	
13,674.0	91.20	359.00	7,564.4	6,076.3	454.5	1,292,172.06	3,142,720.14	40.134271	-104.989580	
13,770.0	90.00	359.30	7,563.4	6,172.3	453.1	1,292,268.04	3,142,718.17	40.134535	-104.989585	
13,865.0	90.30	0.10	7,563.1	6,267.3	452.6	1,292,363.03	3,142,717.13	40.134796	-104.989586	
13,960.0	89.50	359.90	7,563.3	6,362.3	452.6	1,292,458.03	3,142,716.58	40.135056	-104.989586	
14,055.0	89.80	1.10	7,563.9	6,457.3	453.5	1,292,553.02	3,142,716.87	40.135317	-104.989583	
14,151.0	90.10	1.40	7,564.0	6,553.3	455.5	1,292,649.01	3,142,718.41	40.135581	-104.989576	
14,246.0	89.60	1.10	7,564.2	6,648.3	457.6	1,292,744.00	3,142,719.94	40.135841	-104.989569	
14,341.0	92.40	3.90	7,562.6	6,743.1	461.8	1,292,838.90	3,142,723.53	40.136102	-104.989554	
14,437.0	90.00	2.50	7,560.5	6,839.0	467.1	1,292,934.74	3,142,728.34	40.136365	-104.989535	
14,532.0	89.70	2.10	7,560.8	6,933.9	470.9	1,293,029.69	3,142,731.61	40.136626	-104.989521	
14,627.0	91.20	2.50	7,560.1	7,028.8	474.7	1,293,124.63	3,142,734.88	40.136886	-104.989507	
14,722.0	90.90	2.30	7,558.3	7,123.7	478.7	1,293,219.55	3,142,738.31	40.137147	-104.989493	
14,818.0	90.20	1.80	7,557.4	7,219.6	482.2	1,293,315.50	3,142,741.19	40.137410	-104.989481	
14,913.0	90.20	2.20	7,557.1	7,314.6	485.5	1,293,410.46	3,142,743.96	40.137671	-104.989469	
15,008.0	91.80	2.30	7,555.4	7,409.5	489.2	1,293,505.39	3,142,747.15	40.137931	-104.989456	

Survey Report - Geographic

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Jillson-East Rinn 3J-22H-N268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5000.0ft
<b>Site:</b>	S22-T2N-R68W (Jillson-East Rinn)	<b>MD Reference:</b>	KB @ 5000.0ft
<b>Well:</b>	Jillson-East Rinn 3J-22H-N268	<b>North Reference:</b>	True
<b>Wellbore:</b>	Hz	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	FINAL	<b>Database:</b>	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
15,103.0	91.30	2.50	7,552.8	7,504.4	493.2	1,293,600.29	3,142,750.58	40.138192	-104.989441
15,198.0	91.20	2.60	7,550.8	7,599.2	497.4	1,293,695.20	3,142,754.26	40.138452	-104.989426
15,254.0	90.70	2.50	7,549.8	7,655.2	499.9	1,293,751.15	3,142,756.43	40.138606	-104.989417
<b>Last CES Survey @ 15,254' MD</b>									
15,304.0	90.70	2.50	7,549.2	7,705.1	502.1	1,293,801.11	3,142,758.32	40.138743	-104.989409
<b>PTB @ 15,304'</b>									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Jillson-East Rinn 3J-22H - hit/miss target - Shape	0.00	0.00	7,547.8	7,717.7	494.9	1,293,813.59	3,142,751.04	40.138777	-104.989435
- actual wellpath misses target center by 14.5ft at 15304.0ft MD (7549.2 TVD, 7705.1 N, 502.1 E)									
- Point									
Jillson-East Rinn 3J-22H - actual wellpath misses target center by 6.6ft at 13803.8ft MD (7563.4 TVD, 6206.1 N, 452.8 E)	0.00	0.00	7,560.9	6,206.1	446.7	1,292,301.78	3,142,711.55	40.134628	-104.989608
- Point									

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
15,254.0	7,549.8	7,655.2	499.9	Last CES Survey @ 15,254' MD
15,304.0	7,549.2	7,705.1	502.1	PTB @ 15,304'

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_