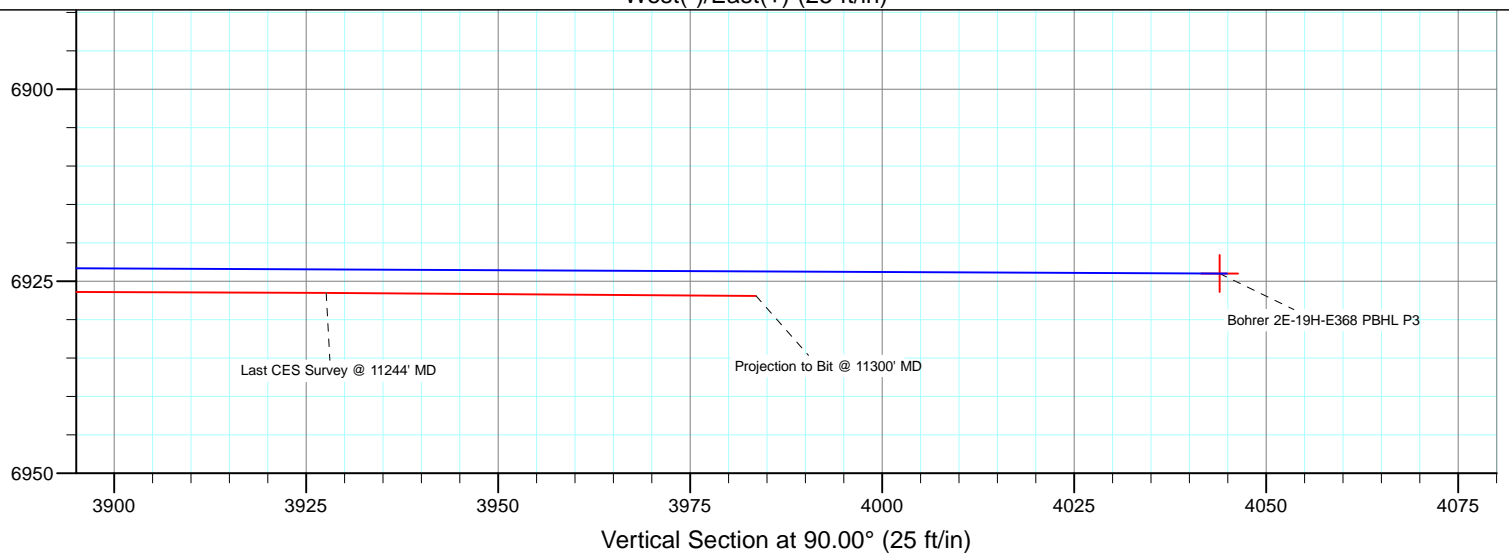
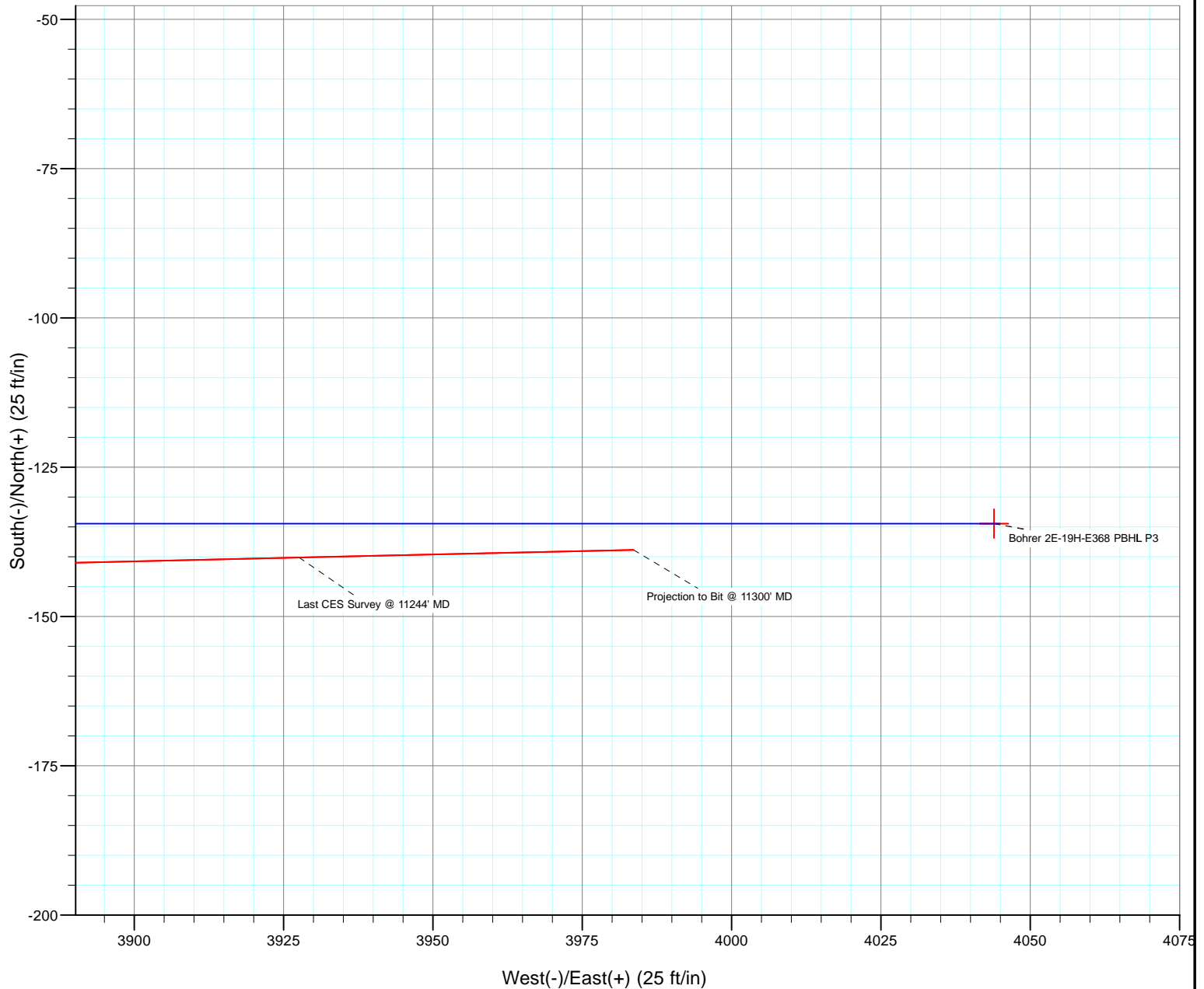




Project: DJ Wattenberg  
Site: S19-T3N-R68W (Bohrer)  
Well: Bohrer 2E-19H-E368  
Wellbore: Hz  
Design: FINAL



## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Bohrer 2E-19H-E368
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Site:</b>	S19-T3N-R68W (Bohrer)	<b>MD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Well:</b>	Bohrer 2E-19H-E368	<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		

Site		S19-T3N-R68W (Bohrer)			
Site Position:		Northing:	1,318,413.14 ft	Latitude:	40.206570
From:	Lat/Long	Easting:	3,124,860.64 ft	Longitude:	-105.052980
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.29 °

Well	Bohrer 2E-19H-E368					
Well Position	+N/-S	0.0 ft	Northing:	1,321,255.25 ft	Latitude:	40.214370
	+E/-W	0.0 ft	Easting:	3,124,994.33 ft	Longitude:	-105.052450
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,060.0 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	6/7/2014	8.60	66.75	52,688

<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	90.00	

<b>Survey Program</b>	<b>Date</b>	6/13/2014			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
145.0	11,300.0	Survey #1 (Hz)	Geolink MWD	Geolink MWD	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Formations / Comments</b>	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00		
145.0	0.70	333.90	145.0	0.8	-0.4	-0.4	0.48	0.48		
239.0	0.40	303.90	239.0	1.5	-0.9	-0.9	0.43	-0.32		
334.0	0.50	121.30	334.0	1.5	-0.8	-0.8	0.95	0.11		
428.0	0.70	142.50	428.0	0.8	-0.1	-0.1	0.31	0.21		
523.0	1.00	179.50	523.0	-0.5	0.2	0.2	0.64	0.32		
617.0	1.50	249.40	617.0	-1.7	-0.9	-0.9	1.58	0.53		
712.0	1.00	262.70	711.9	-2.3	-2.9	-2.9	0.61	-0.53		
806.0	2.60	285.60	805.9	-1.8	-5.8	-5.8	1.83	1.70		
835.0	2.90	280.30	834.9	-1.5	-7.1	-7.1	1.36	1.03		
932.0	3.80	270.70	931.7	-1.0	-12.8	-12.8	1.09	0.93		
1,027.0	5.30	273.20	1,026.4	-0.8	-20.3	-20.3	1.59	1.58		
1,122.0	6.90	269.70	1,120.8	-0.5	-30.4	-30.4	1.73	1.68		

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Bohrer 2E-19H-E368
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Site:</b>	S19-T3N-R68W (Bohrer)	<b>MD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Well:</b>	Bohrer 2E-19H-E368	<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
1,217.0	8.70	257.70	1,215.0	-2.1	-43.1	-43.1	2.55	1.89	
1,312.0	8.80	251.10	1,308.9	-6.0	-57.0	-57.0	1.06	0.11	
1,406.0	7.90	255.00	1,401.9	-10.0	-70.0	-70.0	1.13	-0.96	
1,499.0	8.60	264.60	1,493.9	-12.3	-83.1	-83.1	1.66	0.75	
1,590.0	8.60	266.50	1,583.9	-13.3	-96.7	-96.7	0.31	0.00	
1,682.0	8.90	262.00	1,674.8	-14.8	-110.6	-110.6	0.81	0.33	
1,775.0	9.10	257.00	1,766.7	-17.4	-124.9	-124.9	0.87	0.22	
1,867.0	7.80	260.20	1,857.7	-20.1	-138.1	-138.1	1.50	-1.41	
1,959.0	8.20	262.30	1,948.8	-22.1	-150.8	-150.8	0.54	0.43	
2,050.0	8.10	261.90	2,038.9	-23.8	-163.6	-163.6	0.13	-0.11	
2,142.0	8.20	259.30	2,129.9	-26.0	-176.4	-176.4	0.42	0.11	
2,234.0	8.00	255.10	2,221.0	-28.8	-189.1	-189.1	0.68	-0.22	
2,326.0	7.40	266.10	2,312.2	-30.9	-201.2	-201.2	1.73	-0.65	
2,418.0	7.20	265.90	2,403.4	-31.7	-212.8	-212.8	0.22	-0.22	
2,510.0	7.20	262.00	2,494.7	-32.9	-224.3	-224.3	0.53	0.00	
2,602.0	7.80	263.80	2,585.9	-34.4	-236.2	-236.2	0.70	0.65	
2,695.0	7.20	257.30	2,678.1	-36.3	-248.2	-248.2	1.12	-0.65	
2,787.0	8.70	258.70	2,769.2	-39.0	-260.6	-260.6	1.64	1.63	
2,882.0	7.90	253.60	2,863.3	-42.2	-273.9	-273.9	1.14	-0.84	
2,977.0	8.80	256.50	2,957.2	-45.8	-287.3	-287.3	1.05	0.95	
3,071.0	8.70	267.10	3,050.2	-47.8	-301.3	-301.3	1.72	-0.11	
3,166.0	7.70	263.80	3,144.2	-48.9	-314.9	-314.9	1.16	-1.05	
3,261.0	8.70	264.00	3,238.2	-50.3	-328.3	-328.3	1.05	1.05	
3,356.0	8.10	260.10	3,332.2	-52.2	-342.1	-342.1	0.87	-0.63	
3,451.0	9.40	271.70	3,426.1	-53.1	-356.4	-356.4	2.30	1.37	
3,545.0	9.20	271.40	3,518.9	-52.7	-371.6	-371.6	0.22	-0.21	
3,640.0	8.50	266.10	3,612.7	-53.0	-386.2	-386.2	1.13	-0.74	
3,735.0	7.70	264.00	3,706.8	-54.1	-399.5	-399.5	0.90	-0.84	
3,830.0	7.20	260.60	3,801.0	-55.8	-411.7	-411.7	0.70	-0.53	
3,924.0	6.50	262.00	3,894.3	-57.5	-422.8	-422.8	0.77	-0.74	
4,019.0	7.90	254.80	3,988.6	-59.9	-434.4	-434.4	1.75	1.47	
4,114.0	7.30	255.20	4,082.7	-63.2	-446.6	-446.6	0.63	-0.63	
4,209.0	7.20	254.10	4,177.0	-66.4	-458.1	-458.1	0.18	-0.11	
4,304.0	8.40	259.40	4,271.1	-69.3	-470.7	-470.7	1.47	1.26	
4,398.0	8.40	260.40	4,364.1	-71.7	-484.2	-484.2	0.16	0.00	
4,493.0	8.00	257.90	4,458.1	-74.2	-497.5	-497.5	0.56	-0.42	
4,587.0	8.00	256.90	4,551.2	-77.1	-510.3	-510.3	0.15	0.00	
4,682.0	7.40	257.80	4,645.3	-79.9	-522.7	-522.7	0.64	-0.63	
4,777.0	7.70	271.50	4,739.5	-81.0	-535.0	-535.0	1.92	0.32	
4,872.0	8.30	267.60	4,833.6	-81.1	-548.2	-548.2	0.85	0.63	
4,967.0	7.40	264.70	4,927.7	-82.0	-561.2	-561.2	1.03	-0.95	
5,062.0	9.50	264.90	5,021.7	-83.2	-575.1	-575.1	2.21	2.21	
5,157.0	8.50	262.00	5,115.5	-84.9	-589.9	-589.9	1.16	-1.05	
5,252.0	7.40	260.70	5,209.6	-86.9	-602.8	-602.8	1.17	-1.16	
5,346.0	9.00	253.10	5,302.6	-90.0	-615.9	-615.9	2.05	1.70	
5,441.0	8.30	249.00	5,396.5	-94.6	-629.4	-629.4	0.98	-0.74	
5,536.0	8.20	259.40	5,490.6	-98.3	-642.4	-642.4	1.57	-0.11	
5,630.0	6.90	256.50	5,583.7	-100.9	-654.5	-654.5	1.44	-1.38	
5,725.0	8.10	263.50	5,677.9	-102.9	-666.7	-666.7	1.59	1.26	
5,820.0	6.50	262.00	5,772.2	-104.5	-678.7	-678.7	1.70	-1.68	
5,915.0	8.10	258.30	5,866.4	-106.6	-690.6	-690.6	1.75	1.68	
6,009.0	8.40	251.80	5,959.4	-110.0	-703.6	-703.6	1.04	0.32	
6,041.0	7.80	251.00	5,991.1	-111.5	-707.8	-707.8	1.91	-1.87	

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Bohrer 2E-19H-E368
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Site:</b>	S19-T3N-R68W (Bohrer)	<b>MD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Well:</b>	Bohrer 2E-19H-E368	<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
6,072.0	7.60	253.40	6,021.8	-112.8	-711.8	-711.8	1.22	-0.65	
6,104.0	6.10	251.10	6,053.6	-113.9	-715.4	-715.4	4.76	-4.69	
6,135.0	2.70	239.50	6,084.5	-114.8	-717.6	-717.6	11.28	-10.97	
6,167.0	1.70	117.50	6,116.5	-115.4	-717.9	-717.9	12.12	-3.12	
6,199.0	3.80	96.50	6,148.4	-115.8	-716.4	-716.4	7.17	6.56	
6,246.0	6.30	95.30	6,195.3	-116.2	-712.3	-712.3	5.32	5.32	
6,293.0	8.40	96.10	6,241.9	-116.8	-706.3	-706.3	4.47	4.47	
6,340.0	11.20	93.00	6,288.2	-117.4	-698.3	-698.3	6.06	5.96	
6,388.0	15.60	92.30	6,334.9	-117.9	-687.2	-687.2	9.17	9.17	
6,435.0	19.90	93.70	6,379.6	-118.6	-672.9	-672.9	9.19	9.15	
6,483.0	23.50	97.40	6,424.2	-120.4	-655.2	-655.2	8.02	7.50	
6,530.0	26.60	97.10	6,466.8	-122.9	-635.5	-635.5	6.60	6.60	
6,579.0	29.20	95.30	6,510.1	-125.4	-612.7	-612.7	5.58	5.31	
6,626.0	32.20	94.90	6,550.5	-127.5	-588.8	-588.8	6.40	6.38	
6,673.0	37.90	93.20	6,589.0	-129.4	-561.9	-561.9	12.30	12.13	
6,720.0	44.70	92.00	6,624.2	-130.8	-530.9	-530.9	14.57	14.47	
6,768.0	49.10	92.10	6,657.0	-132.0	-495.9	-495.9	9.17	9.17	
6,815.0	52.10	92.60	6,686.9	-133.5	-459.6	-459.6	6.44	6.38	
6,863.0	54.30	89.60	6,715.6	-134.2	-421.2	-421.2	6.79	4.58	
6,910.0	56.30	87.50	6,742.4	-133.3	-382.6	-382.6	5.62	4.26	
6,958.0	60.10	88.20	6,767.7	-131.7	-341.8	-341.8	8.01	7.92	
7,005.0	66.40	89.50	6,788.8	-130.9	-299.9	-299.9	13.63	13.40	
7,053.0	71.30	88.90	6,806.1	-130.3	-255.1	-255.1	10.27	10.21	
7,100.0	74.50	87.90	6,819.9	-129.0	-210.2	-210.2	7.11	6.81	
7,147.0	76.60	88.50	6,831.7	-127.6	-164.8	-164.8	4.64	4.47	
7,194.0	79.10	90.80	6,841.6	-127.3	-118.8	-118.8	7.15	5.32	
7,242.0	83.00	91.70	6,849.0	-128.3	-71.4	-71.4	8.33	8.12	
7,280.0	86.10	91.40	6,852.6	-129.4	-33.6	-33.6	8.20	8.16	
7,358.0	86.50	93.50	6,857.7	-132.7	44.1	44.1	2.74	0.51	
7,382.1	86.27	93.04	6,859.2	-134.1	68.2	68.2	2.11	-0.95	Bohrer 2E-19H-E368 TGT 1
7,453.0	85.60	91.70	6,864.2	-137.0	138.8	138.8	2.11	-0.95	
7,548.0	85.70	91.60	6,871.4	-139.7	233.5	233.5	0.15	0.11	
7,643.0	86.80	89.80	6,877.6	-140.9	328.3	328.3	2.22	1.16	
7,738.0	87.90	89.20	6,882.0	-140.1	423.2	423.2	1.32	1.16	
7,833.0	89.20	88.40	6,884.4	-138.1	518.1	518.1	1.61	1.37	
7,928.0	89.60	89.50	6,885.4	-136.3	613.1	613.1	1.23	0.42	
8,023.0	88.60	88.80	6,886.9	-134.9	708.1	708.1	1.28	-1.05	
8,117.0	90.50	90.60	6,887.7	-134.4	802.1	802.1	2.78	2.02	
8,211.0	90.50	90.00	6,886.8	-134.9	896.1	896.1	0.64	0.00	
8,306.0	90.80	89.30	6,885.8	-134.3	991.1	991.1	0.80	0.32	
8,382.7	90.88	90.19	6,884.6	-134.0	1,067.8	1,067.8	1.16	0.11	Bohrer 2E-19H-E368 TGT 2
8,401.0	90.90	90.40	6,884.3	-134.1	1,086.0	1,086.0	1.16	0.11	
8,496.0	88.80	90.10	6,884.6	-134.5	1,181.0	1,181.0	2.23	-2.21	
8,591.0	87.60	90.40	6,887.6	-134.9	1,276.0	1,276.0	1.30	-1.26	
8,685.0	87.60	90.40	6,891.5	-135.6	1,369.9	1,369.9	0.00	0.00	
8,780.0	88.30	90.40	6,894.9	-136.2	1,464.8	1,464.8	0.74	0.74	
8,875.0	87.90	89.60	6,898.1	-136.2	1,559.8	1,559.8	0.94	-0.42	
8,969.0	89.50	89.90	6,900.2	-135.8	1,653.8	1,653.8	1.73	1.70	
9,064.0	88.30	90.00	6,902.0	-135.7	1,748.7	1,748.7	1.27	-1.26	
9,159.0	88.30	89.90	6,904.8	-135.7	1,843.7	1,843.7	0.11	0.00	
9,253.0	87.80	89.70	6,908.0	-135.3	1,937.6	1,937.6	0.57	-0.53	
9,347.0	87.10	89.50	6,912.2	-134.7	2,031.5	2,031.5	0.77	-0.74	
9,442.0	88.30	89.00	6,916.0	-133.4	2,126.5	2,126.5	1.37	1.26	

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Bohrer 2E-19H-E368
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Site:</b>	S19-T3N-R68W (Bohrer)	<b>MD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Well:</b>	Bohrer 2E-19H-E368	<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
9,483.4	88.08	88.91	6,917.3	-132.7	2,167.8	2,167.8	0.57	-0.53	Bohrer 2E-19H-E368 TGT 3
9,537.0	87.80	88.80	6,919.3	-131.6	2,221.4	2,221.4	0.57	-0.53	
9,632.0	89.50	89.10	6,921.5	-129.9	2,316.3	2,316.3	1.82	1.79	
9,727.0	91.50	90.10	6,920.7	-129.2	2,411.3	2,411.3	2.35	2.11	
9,822.0	91.60	89.30	6,918.1	-128.7	2,506.3	2,506.3	0.85	0.11	
9,917.0	92.10	90.10	6,915.0	-128.2	2,601.2	2,601.2	0.99	0.53	
10,012.0	90.80	90.80	6,912.6	-129.0	2,696.2	2,696.2	1.55	-1.37	
10,107.0	90.70	92.40	6,911.4	-131.6	2,791.2	2,791.2	1.69	-0.11	
10,201.0	89.80	92.10	6,911.0	-135.3	2,885.1	2,885.1	1.01	-0.96	
10,296.0	90.00	92.40	6,911.1	-139.0	2,980.0	2,980.0	0.38	0.21	
10,391.0	88.70	92.00	6,912.2	-142.7	3,074.9	3,074.9	1.43	-1.37	
10,486.0	87.30	91.90	6,915.5	-145.9	3,169.8	3,169.8	1.48	-1.47	
10,580.0	88.40	90.00	6,919.1	-147.5	3,263.7	3,263.7	2.33	1.17	
10,676.0	88.40	90.40	6,921.7	-147.8	3,359.7	3,359.7	0.42	0.00	
10,771.0	89.50	89.50	6,923.5	-147.7	3,454.7	3,454.7	1.50	1.16	
10,866.0	89.80	90.10	6,924.1	-147.4	3,549.7	3,549.7	0.71	0.32	
10,960.0	89.30	88.70	6,924.8	-146.4	3,643.7	3,643.7	1.58	-0.53	
11,055.0	89.50	88.80	6,925.8	-144.3	3,738.6	3,738.6	0.24	0.21	
11,150.0	90.00	88.70	6,926.2	-142.3	3,833.6	3,833.6	0.54	0.53	
11,244.0	89.60	88.70	6,926.5	-140.1	3,927.6	3,927.6	0.43	-0.43	Last CES Survey @ 11244' MD
11,300.0	89.60	88.70	6,926.9	-138.8	3,983.6	3,983.6	0.00	0.00	Projection to Bit @ 11300' MD - Bohrer 2E-19H-I

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Bohrer 2E-19H-E368
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Site:</b>	S19-T3N-R68W (Bohrer)	<b>MD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Well:</b>	Bohrer 2E-19H-E368	<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

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
Bohrer 2E-19H-E368 TC - survey misses target center by 2.2ft at 9483.4ft MD (6917.3 TVD, -132.7 N, 2167.8 E) - Point	0.00	0.00	6,916.0	-134.4	2,167.9	1,321,131.76	3,127,162.89	40.214001	-105.044687
Bohrer 2E-19H-E368 TC - survey misses target center by 10.4ft at 8382.7ft MD (6884.6 TVD, -134.0 N, 1067.8 E) - Point	0.00	0.00	6,895.0	-134.4	1,067.9	1,321,126.21	3,126,062.91	40.214001	-105.048626
Bohrer 2E-19H-E368 PE - survey misses target center by 90.2ft at 11300.0ft MD (6926.9 TVD, -138.8 N, 3983.6 E) - Point	0.00	0.00	6,860.0	-134.4	4,043.9	1,321,141.23	3,129,038.86	40.214000	-105.037970
Bohrer 2E-19H-E368 TC - survey misses target center by 3.8ft at 7382.1ft MD (6859.2 TVD, -134.1 N, 68.2 E) - Point	0.00	0.00	6,863.0	-134.4	67.9	1,321,121.16	3,125,062.92	40.214001	-105.052207
Bohrer 2E-19H-E368 PE - survey misses target center by 60.6ft at 11300.0ft MD (6926.9 TVD, -138.8 N, 3983.6 E) - Point	0.00	0.00	6,924.0	-134.4	4,043.9	1,321,141.23	3,129,038.86	40.214000	-105.037970

Survey Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
11,244.0	6,926.5	-140.1	3,927.6	Last CES Survey @ 11244' MD	
11,300.0	6,926.9	-138.8	3,983.6	Projection to Bit @ 11300' MD	

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

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

**DJ Wattenberg**

**S19-T3N-R68W (Bohrer)**

**Bohrer 2E-19H-E368**

**Hz**

**Survey: Survey #1**

## **Survey Report - Geographic**

**13 June, 2014**



## Survey Report - Geographic

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Bohrer 2E-19H-E368
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Site:</b>	S19-T3N-R68W (Bohrer)	<b>MD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Well:</b>	Bohrer 2E-19H-E368	<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		

Site	S19-T3N-R68W (Bohrer)				
Site Position:		Northing:	1,318,413.14 ft	Latitude:	40.206570
From:	Lat/Long	Easting:	3,124,860.64 ft	Longitude:	-105.052980
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.29 °

Well	Bohrer 2E-19H-E368					
Well Position	+N/-S	0.0 ft	Northing:	1,321,255.25 ft	Latitude:	40.214370
	+E/-W	0.0 ft	Easting:	3,124,994.33 ft	Longitude:	-105.052450
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,060.0 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	6/7/2014	8.60	66.75	52,688

<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	90.00	

<b>Survey Program</b>	<b>Date</b>	6/13/2014			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
145.0	11,300.0	Survey #1 (Hz)	Geolink MWD	Geolink MWD	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Map Northing (ft)</b>	<b>Map Easting (ft)</b>	<b>Latitude</b>	<b>Longitude</b>	
0.0	0.00	0.00	0.0	0.0	0.0	1,321,255.25	3,124,994.33	40.214370	-105.052450	
145.0	0.70	333.90	145.0	0.8	-0.4	1,321,256.04	3,124,993.94	40.214372	-105.052452	
239.0	0.40	303.90	239.0	1.5	-0.9	1,321,256.74	3,124,993.41	40.214374	-105.052454	
334.0	0.50	121.30	334.0	1.5	-0.8	1,321,256.71	3,124,993.49	40.214374	-105.052453	
428.0	0.70	142.50	428.0	0.8	-0.1	1,321,256.05	3,124,994.19	40.214372	-105.052451	
523.0	1.00	179.50	523.0	-0.5	0.2	1,321,254.76	3,124,994.56	40.214369	-105.052449	
617.0	1.50	249.40	617.0	-1.7	-0.9	1,321,253.50	3,124,993.42	40.214365	-105.052454	
712.0	1.00	262.70	711.9	-2.3	-2.9	1,321,252.95	3,124,991.44	40.214364	-105.052461	
806.0	2.60	285.60	805.9	-1.8	-5.8	1,321,253.40	3,124,988.57	40.214365	-105.052471	
835.0	2.90	280.30	834.9	-1.5	-7.1	1,321,253.70	3,124,987.21	40.214366	-105.052476	
932.0	3.80	270.70	931.7	-1.0	-12.8	1,321,254.15	3,124,981.58	40.214367	-105.052496	
1,027.0	5.30	273.20	1,026.4	-0.8	-20.3	1,321,254.40	3,124,974.05	40.214368	-105.052523	

# Survey Report - Geographic

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Bohrer 2E-19H-E368
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Site:</b>	S19-T3N-R68W (Bohrer)	<b>MD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Well:</b>	Bohrer 2E-19H-E368	<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	
1,122.0	6.90	269.70	1,120.8	-0.5	-30.4	1,321,254.56	3,124,963.96	40.214369	-105.052559	
1,217.0	8.70	257.70	1,215.0	-2.1	-43.1	1,321,252.94	3,124,951.24	40.214364	-105.052605	
1,312.0	8.80	251.10	1,308.9	-6.0	-57.0	1,321,248.98	3,124,937.36	40.214354	-105.052654	
1,406.0	7.90	255.00	1,401.9	-10.0	-70.0	1,321,244.91	3,124,924.34	40.214343	-105.052701	
1,499.0	8.60	264.60	1,493.9	-12.3	-83.1	1,321,242.54	3,124,911.26	40.214336	-105.052748	
1,590.0	8.60	266.50	1,583.9	-13.3	-96.7	1,321,241.42	3,124,897.70	40.214333	-105.052797	
1,682.0	8.90	262.00	1,674.8	-14.8	-110.6	1,321,239.94	3,124,883.79	40.214330	-105.052846	
1,775.0	9.10	257.00	1,766.7	-17.4	-124.9	1,321,237.21	3,124,869.51	40.214322	-105.052898	
1,867.0	7.80	260.20	1,857.7	-20.1	-138.1	1,321,234.44	3,124,856.29	40.214315	-105.052945	
1,959.0	8.20	262.30	1,948.8	-22.1	-150.8	1,321,232.44	3,124,843.64	40.214309	-105.052990	
2,050.0	8.10	261.90	2,038.9	-23.8	-163.6	1,321,230.60	3,124,830.87	40.214305	-105.053036	
2,142.0	8.20	259.30	2,129.9	-26.0	-176.4	1,321,228.40	3,124,818.02	40.214299	-105.053082	
2,234.0	8.00	255.10	2,221.0	-28.8	-189.1	1,321,225.47	3,124,805.40	40.214291	-105.053127	
2,326.0	7.40	266.10	2,312.2	-30.9	-201.2	1,321,223.36	3,124,793.31	40.214285	-105.053171	
2,418.0	7.20	265.90	2,403.4	-31.7	-212.8	1,321,222.49	3,124,781.66	40.214283	-105.053212	
2,510.0	7.20	262.00	2,494.7	-32.9	-224.3	1,321,221.22	3,124,770.20	40.214280	-105.053253	
2,602.0	7.80	263.80	2,585.9	-34.4	-236.2	1,321,219.68	3,124,758.30	40.214276	-105.053296	
2,695.0	7.20	257.30	2,678.1	-36.3	-248.2	1,321,217.66	3,124,746.35	40.214270	-105.053339	
2,787.0	8.70	258.70	2,769.2	-39.0	-260.6	1,321,214.96	3,124,733.91	40.214263	-105.053383	
2,882.0	7.90	253.60	2,863.3	-42.2	-273.9	1,321,211.65	3,124,720.62	40.214254	-105.053431	
2,977.0	8.80	256.50	2,957.2	-45.8	-287.3	1,321,208.04	3,124,707.31	40.214244	-105.053479	
3,071.0	8.70	267.10	3,050.2	-47.8	-301.3	1,321,205.93	3,124,693.23	40.214239	-105.053529	
3,166.0	7.70	263.80	3,144.2	-48.9	-314.9	1,321,204.81	3,124,679.73	40.214236	-105.053578	
3,261.0	8.70	264.00	3,238.2	-50.3	-328.3	1,321,203.30	3,124,666.26	40.214232	-105.053626	
3,356.0	8.10	260.10	3,332.2	-52.2	-342.1	1,321,201.33	3,124,652.53	40.214227	-105.053675	
3,451.0	9.40	271.70	3,426.1	-53.1	-356.4	1,321,200.34	3,124,638.19	40.214224	-105.053726	
3,545.0	9.20	271.40	3,518.9	-52.7	-371.6	1,321,200.67	3,124,623.00	40.214225	-105.053781	
3,640.0	8.50	266.10	3,612.7	-53.0	-386.2	1,321,200.31	3,124,608.41	40.214225	-105.053833	
3,735.0	7.70	264.00	3,706.8	-54.1	-399.5	1,321,199.10	3,124,595.08	40.214221	-105.053881	
3,830.0	7.20	260.60	3,801.0	-55.8	-411.7	1,321,197.40	3,124,582.88	40.214217	-105.053925	
3,924.0	6.50	262.00	3,894.3	-57.5	-422.8	1,321,195.64	3,124,571.81	40.214212	-105.053964	
4,019.0	7.90	254.80	3,988.6	-59.9	-434.4	1,321,193.12	3,124,560.20	40.214205	-105.054006	
4,114.0	7.30	255.20	4,082.7	-63.2	-446.6	1,321,189.81	3,124,548.08	40.214197	-105.054049	
4,209.0	7.20	254.10	4,177.0	-66.4	-458.1	1,321,186.58	3,124,536.53	40.214188	-105.054091	
4,304.0	8.40	259.40	4,271.1	-69.3	-470.7	1,321,183.60	3,124,524.00	40.214180	-105.054136	
4,398.0	8.40	260.40	4,364.1	-71.7	-484.2	1,321,181.13	3,124,510.50	40.214173	-105.054184	
4,493.0	8.00	257.90	4,458.1	-74.2	-497.5	1,321,178.52	3,124,497.20	40.214166	-105.054232	
4,587.0	8.00	256.90	4,551.2	-77.1	-510.3	1,321,175.60	3,124,484.45	40.214158	-105.054277	
4,682.0	7.40	257.80	4,645.3	-79.9	-522.7	1,321,172.75	3,124,472.05	40.214151	-105.054322	
4,777.0	7.70	271.50	4,739.5	-81.0	-535.0	1,321,171.56	3,124,459.71	40.214148	-105.054366	
4,872.0	8.30	267.60	4,833.6	-81.1	-548.2	1,321,171.37	3,124,446.50	40.214147	-105.054413	
4,967.0	7.40	264.70	4,927.7	-82.0	-561.2	1,321,170.45	3,124,433.56	40.214145	-105.054460	
5,062.0	9.50	264.90	5,021.7	-83.2	-575.1	1,321,169.12	3,124,419.66	40.214142	-105.054510	
5,157.0	8.50	262.00	5,115.5	-84.9	-589.9	1,321,167.37	3,124,404.91	40.214137	-105.054562	
5,252.0	7.40	260.70	5,209.6	-86.9	-602.8	1,321,165.34	3,124,391.93	40.214132	-105.054609	
5,346.0	9.00	253.10	5,302.6	-90.0	-615.9	1,321,162.16	3,124,378.94	40.214123	-105.054655	
5,441.0	8.30	249.00	5,396.5	-94.6	-629.4	1,321,157.47	3,124,365.45	40.214110	-105.054704	
5,536.0	8.20	259.40	5,490.6	-98.3	-642.4	1,321,153.70	3,124,352.40	40.214100	-105.054751	
5,630.0	6.90	256.50	5,583.7	-100.9	-654.5	1,321,151.09	3,124,340.34	40.214093	-105.054794	
5,725.0	8.10	263.50	5,677.9	-102.9	-666.7	1,321,148.94	3,124,328.15	40.214087	-105.054838	
5,820.0	6.50	262.00	5,772.2	-104.5	-678.7	1,321,147.37	3,124,316.18	40.214083	-105.054880	
5,915.0	8.10	258.30	5,866.4	-106.6	-690.6	1,321,145.21	3,124,304.31	40.214077	-105.054923	
6,009.0	8.40	251.80	5,959.4	-110.0	-703.6	1,321,141.66	3,124,291.32	40.214068	-105.054970	
6,041.0	7.80	251.00	5,991.1	-111.5	-707.8	1,321,140.20	3,124,287.06	40.214064	-105.054985	
6,072.0	7.60	253.40	6,021.8	-112.8	-711.8	1,321,138.91	3,124,283.11	40.214060	-105.054999	

# Survey Report - Geographic

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Bohrer 2E-19H-E368
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Site:</b>	S19-T3N-R68W (Bohrer)	<b>MD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Well:</b>	Bohrer 2E-19H-E368	<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
6,104.0	6.10	251.10	6,053.6	-113.9	-715.4	1,321,137.73	3,124,279.48	40.214057	-105.055012
6,135.0	2.70	239.50	6,084.5	-114.8	-717.6	1,321,136.82	3,124,277.30	40.214055	-105.055020
6,167.0	1.70	117.50	6,116.5	-115.4	-717.9	1,321,136.21	3,124,277.07	40.214053	-105.055021
6,199.0	3.80	96.50	6,148.4	-115.8	-716.4	1,321,135.88	3,124,278.55	40.214052	-105.055015
6,246.0	6.30	95.30	6,195.3	-116.2	-712.3	1,321,135.49	3,124,282.66	40.214051	-105.055001
6,293.0	8.40	96.10	6,241.9	-116.8	-706.3	1,321,134.92	3,124,288.65	40.214049	-105.054979
6,340.0	11.20	93.00	6,288.2	-117.4	-698.3	1,321,134.35	3,124,296.63	40.214048	-105.054951
6,388.0	15.60	92.30	6,334.9	-117.9	-687.2	1,321,133.90	3,124,307.74	40.214046	-105.054911
6,435.0	19.90	93.70	6,379.6	-118.6	-672.9	1,321,133.21	3,124,322.04	40.214044	-105.054860
6,483.0	23.50	97.40	6,424.2	-120.4	-655.2	1,321,131.54	3,124,339.70	40.214039	-105.054796
6,530.0	26.60	97.10	6,466.8	-122.9	-635.5	1,321,129.13	3,124,359.45	40.214033	-105.054726
6,579.0	29.20	95.30	6,510.1	-125.4	-612.7	1,321,126.78	3,124,382.26	40.214026	-105.054644
6,626.0	32.20	94.90	6,550.5	-127.5	-588.8	1,321,124.77	3,124,406.17	40.214020	-105.054559
6,673.0	37.90	93.20	6,589.0	-129.4	-561.9	1,321,123.03	3,124,433.09	40.214015	-105.054462
6,720.0	44.70	92.00	6,624.2	-130.8	-530.9	1,321,121.80	3,124,464.06	40.214011	-105.054351
6,768.0	49.10	92.10	6,657.0	-132.0	-495.9	1,321,120.73	3,124,499.09	40.214008	-105.054226
6,815.0	52.10	92.60	6,686.9	-133.5	-459.6	1,321,119.42	3,124,535.38	40.214004	-105.054096
6,863.0	54.30	89.60	6,715.6	-134.2	-421.2	1,321,118.89	3,124,573.80	40.214002	-105.053959
6,910.0	56.30	87.50	6,742.4	-133.3	-382.6	1,321,120.07	3,124,612.42	40.214004	-105.053820
6,958.0	60.10	88.20	6,767.7	-131.7	-341.8	1,321,121.80	3,124,653.17	40.214008	-105.053674
7,005.0	66.40	89.50	6,788.8	-130.9	-299.9	1,321,122.84	3,124,695.10	40.214011	-105.053524
7,053.0	71.30	88.90	6,806.1	-130.3	-255.1	1,321,123.69	3,124,739.85	40.214012	-105.053364
7,100.0	74.50	87.90	6,819.9	-129.0	-210.2	1,321,125.18	3,124,784.74	40.214016	-105.053203
7,147.0	76.60	88.50	6,831.7	-127.6	-164.8	1,321,126.84	3,124,830.22	40.214020	-105.053040
7,194.0	79.10	90.80	6,841.6	-127.3	-118.8	1,321,127.34	3,124,876.15	40.214021	-105.052876
7,242.0	83.00	91.70	6,849.0	-128.3	-71.4	1,321,126.55	3,124,923.55	40.214018	-105.052706
7,280.0	86.10	91.40	6,852.6	-129.4	-33.6	1,321,125.72	3,124,961.37	40.214015	-105.052571
7,358.0	86.50	93.50	6,857.7	-132.7	44.1	1,321,122.78	3,125,039.15	40.214006	-105.052292
7,382.1	86.27	93.04	6,859.2	-134.1	68.2	1,321,121.53	3,125,063.20	40.214002	-105.052206
<b>Bohrer 2E-19H-E368 TGT 1</b>									
7,453.0	85.60	91.70	6,864.2	-137.0	138.8	1,321,118.96	3,125,133.84	40.213994	-105.051953
7,548.0	85.70	91.60	6,871.4	-139.7	233.5	1,321,116.71	3,125,228.54	40.213986	-105.051614
7,643.0	86.80	89.80	6,877.6	-140.9	328.3	1,321,116.03	3,125,323.33	40.213983	-105.051275
7,738.0	87.90	89.20	6,882.0	-140.1	423.2	1,321,117.34	3,125,418.21	40.213986	-105.050935
7,833.0	89.20	88.40	6,884.4	-138.1	518.1	1,321,119.81	3,125,513.15	40.213991	-105.050595
7,928.0	89.60	89.50	6,885.4	-136.3	613.1	1,321,122.03	3,125,608.12	40.213996	-105.050255
8,023.0	88.60	88.80	6,886.9	-134.9	708.1	1,321,123.91	3,125,703.08	40.214000	-105.049915
8,117.0	90.50	90.60	6,887.7	-134.4	802.1	1,321,124.88	3,125,797.07	40.214001	-105.049578
8,211.0	90.50	90.00	6,886.8	-134.9	896.1	1,321,124.86	3,125,891.06	40.214000	-105.049242
8,306.0	90.80	89.30	6,885.8	-134.3	991.1	1,321,125.92	3,125,986.05	40.214001	-105.048902
8,382.7	90.88	90.19	6,884.6	-134.0	1,067.8	1,321,126.65	3,126,062.75	40.214002	-105.048627
<b>Bohrer 2E-19H-E368 TGT 2</b>									
8,401.0	90.90	90.40	6,884.3	-134.1	1,086.0	1,321,126.65	3,126,081.04	40.214002	-105.048561
8,496.0	88.80	90.10	6,884.6	-134.5	1,181.0	1,321,126.72	3,126,176.03	40.214001	-105.048221
8,591.0	87.60	90.40	6,887.6	-134.9	1,276.0	1,321,126.78	3,126,270.98	40.214000	-105.047881
8,685.0	87.60	90.40	6,891.5	-135.6	1,369.9	1,321,126.60	3,126,364.90	40.213998	-105.047545
8,780.0	88.30	90.40	6,894.9	-136.2	1,464.8	1,321,126.42	3,126,459.84	40.213996	-105.047205
8,875.0	87.90	89.60	6,898.1	-136.2	1,559.8	1,321,126.89	3,126,554.78	40.213996	-105.046865
8,969.0	89.50	89.90	6,900.2	-135.8	1,653.8	1,321,127.78	3,126,648.75	40.213997	-105.046529
9,064.0	88.30	90.00	6,902.0	-135.7	1,748.7	1,321,128.34	3,126,743.73	40.213997	-105.046189
9,159.0	88.30	89.90	6,904.8	-135.7	1,843.7	1,321,128.90	3,126,838.69	40.213997	-105.045849
9,253.0	87.80	89.70	6,908.0	-135.3	1,937.6	1,321,129.70	3,126,932.63	40.213998	-105.045512
9,347.0	87.10	89.50	6,912.2	-134.7	2,031.5	1,321,130.83	3,127,026.53	40.214000	-105.045176
9,442.0	88.30	89.00	6,916.0	-133.4	2,126.5	1,321,132.56	3,127,121.43	40.214004	-105.044836

## Survey Report - Geographic

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Bohrer 2E-19H-E368
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Site:</b>	S19-T3N-R68W (Bohrer)	<b>MD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Well:</b>	Bohrer 2E-19H-E368	<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
9,483.4	88.08	88.91	6,917.3	-132.7	2,167.8	1,321,133.52	3,127,162.80	40.214006	-105.044688
<b>Bohrer 2E-19H-E368 TGT 3</b>									
9,537.0	87.80	88.80	6,919.3	-131.6	2,221.4	1,321,134.86	3,127,216.35	40.214008	-105.044496
9,632.0	89.50	89.10	6,921.5	-129.9	2,316.3	1,321,137.08	3,127,311.30	40.214013	-105.044156
9,727.0	91.50	90.10	6,920.7	-129.2	2,411.3	1,321,138.22	3,127,406.28	40.214015	-105.043816
9,822.0	91.60	89.30	6,918.1	-128.7	2,506.3	1,321,139.20	3,127,501.24	40.214016	-105.043476
9,917.0	92.10	90.10	6,915.0	-128.2	2,601.2	1,321,140.17	3,127,596.18	40.214018	-105.043136
10,012.0	90.80	90.80	6,912.6	-129.0	2,696.2	1,321,139.91	3,127,691.15	40.214016	-105.042796
10,107.0	90.70	92.40	6,911.4	-131.6	2,791.2	1,321,137.73	3,127,786.11	40.214008	-105.042456
10,201.0	89.80	92.10	6,911.0	-135.3	2,885.1	1,321,134.52	3,127,880.06	40.213998	-105.042120
10,296.0	90.00	92.40	6,911.1	-139.0	2,980.0	1,321,131.27	3,127,975.00	40.213988	-105.041780
10,391.0	88.70	92.00	6,912.2	-142.7	3,074.9	1,321,128.10	3,128,069.94	40.213978	-105.041440
10,486.0	87.30	91.90	6,915.5	-145.9	3,169.8	1,321,125.35	3,128,164.84	40.213969	-105.041100
10,580.0	88.40	90.00	6,919.1	-147.5	3,263.7	1,321,124.26	3,128,258.76	40.213965	-105.040764
10,676.0	88.40	90.40	6,921.7	-147.8	3,359.7	1,321,124.41	3,128,354.72	40.213964	-105.040420
10,771.0	89.50	89.50	6,923.5	-147.7	3,454.7	1,321,124.98	3,128,449.70	40.213964	-105.040080
10,866.0	89.80	90.10	6,924.1	-147.4	3,549.7	1,321,125.79	3,128,544.70	40.213965	-105.039740
10,960.0	89.30	88.70	6,924.8	-146.4	3,643.7	1,321,127.25	3,128,638.68	40.213967	-105.039403
11,055.0	89.50	88.80	6,925.8	-144.3	3,738.6	1,321,129.80	3,128,733.64	40.213973	-105.039063
11,150.0	90.00	88.70	6,926.2	-142.3	3,833.6	1,321,132.35	3,128,828.61	40.213979	-105.038723
11,244.0	89.60	88.70	6,926.5	-140.1	3,927.6	1,321,134.96	3,128,922.57	40.213985	-105.038387
<b>Last CES Survey @ 11244' MD</b>									
11,300.0	89.60	88.70	6,926.9	-138.8	3,983.6	1,321,136.51	3,128,978.55	40.213988	-105.038186
<b>Projection to Bit @ 11300' MD - Bohrer 2E-19H-E368 PBHL P3</b>									

Design 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
Bohrer 2E-19H-E368 TC - survey misses target center by 3.8ft at 7382.1ft MD (6859.2 TVD, -134.1 N, 68.2 E) - Point	0.00	0.00	6,863.0	-134.4	67.9	1,321,121.16	3,125,062.92	40.214001	-105.052207
Bohrer 2E-19H-E368 TC - survey misses target center by 10.4ft at 8382.7ft MD (6884.6 TVD, -134.0 N, 1067.8 E) - Point	0.00	0.00	6,895.0	-134.4	1,067.9	1,321,126.21	3,126,062.91	40.214001	-105.048626
Bohrer 2E-19H-E368 TC - survey misses target center by 2.2ft at 9483.4ft MD (6917.3 TVD, -132.7 N, 2167.8 E) - Point	0.00	0.00	6,916.0	-134.4	2,167.9	1,321,131.76	3,127,162.89	40.214001	-105.044688
Bohrer 2E-19H-E368 PE - survey misses target center by 60.6ft at 11300.0ft MD (6926.9 TVD, -138.8 N, 3983.6 E) - Point	0.00	0.00	6,924.0	-134.4	4,043.9	1,321,141.23	3,129,038.86	40.214000	-105.037970

Survey Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
11,244.0	6,926.5	-140.1	3,927.6	Last CES Survey @ 11244' MD	
11,300.0	6,926.9	-138.8	3,983.6	Projection to Bit @ 11300' MD	

## Survey Report - Geographic

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Bohrer 2E-19H-E368
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Site:</b>	S19-T3N-R68W (Bohrer)	<b>MD Reference:</b>	32' KB @ 5091.0ft (Patterson 326)
<b>Well:</b>	Bohrer 2E-19H-E368	<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

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