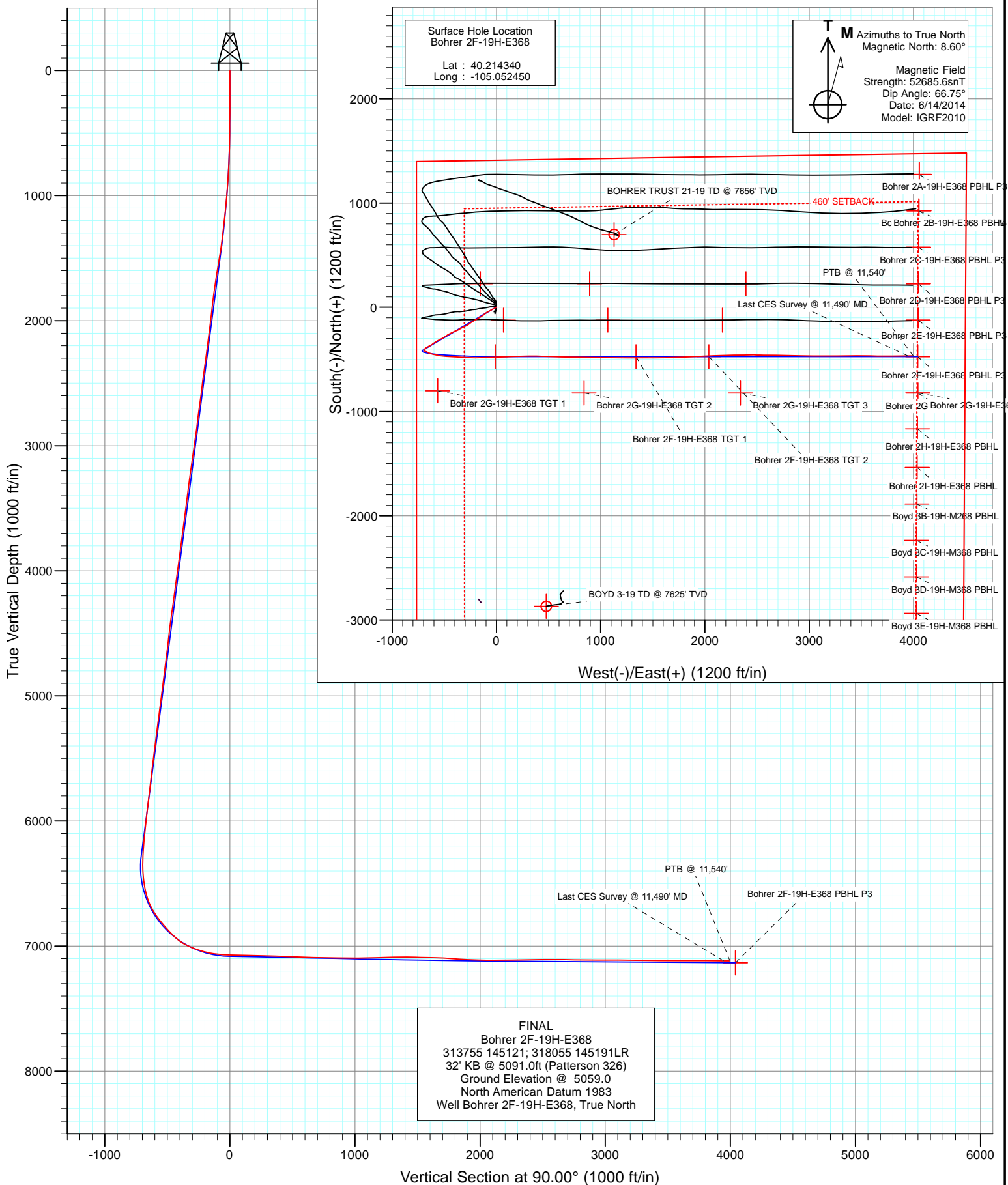


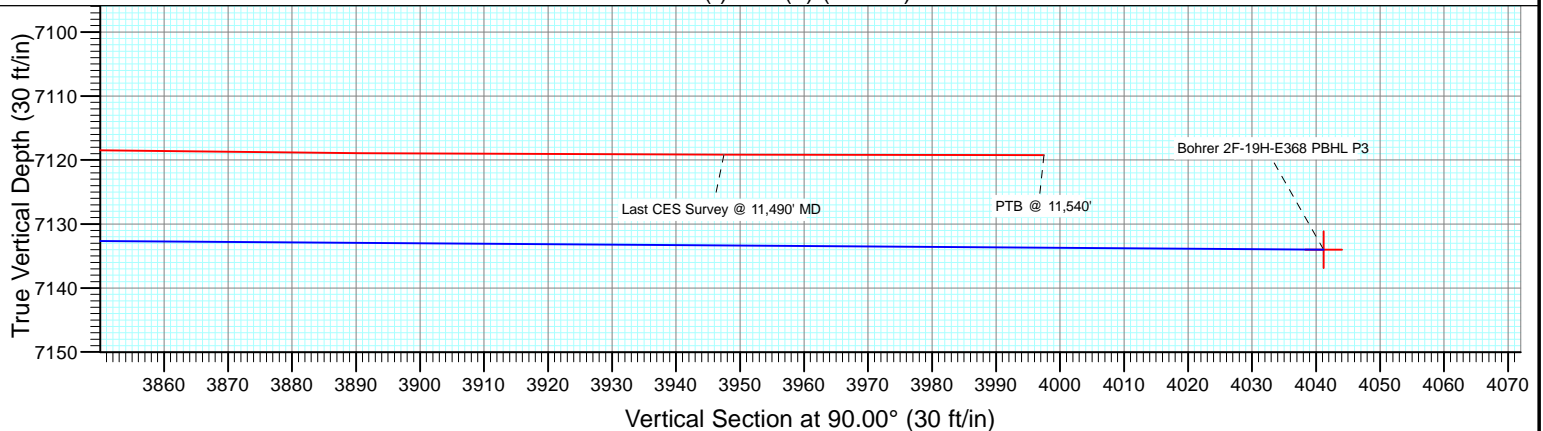
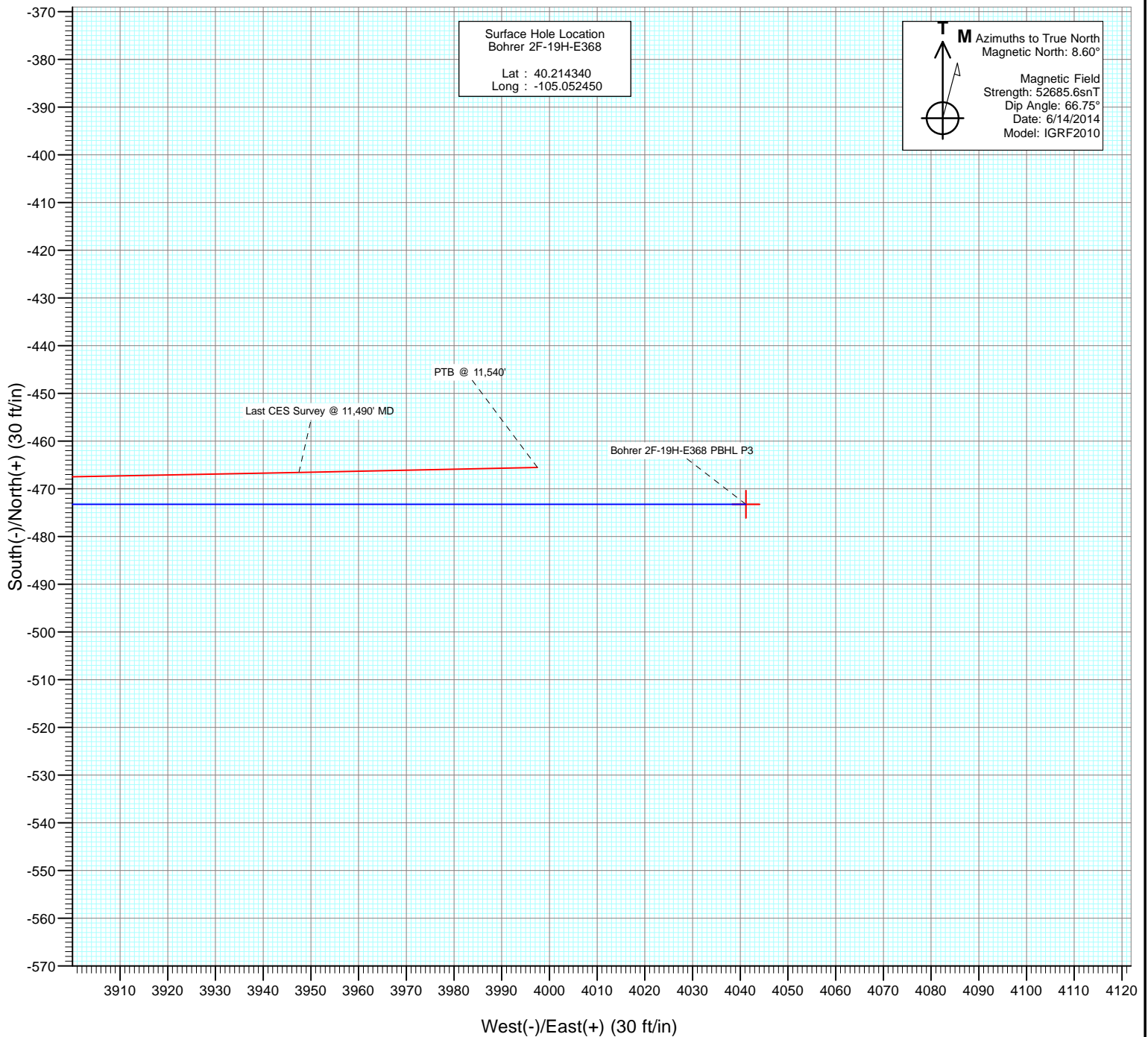


Project: DJ Wattenberg
Site: S19-T3N-R68W (Bohrer)
Well: Bohrer 2F-19H-E368
Wellbore: Hz
Design: FINAL





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



Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2F-19H-E368
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 5091.0ft (Patterson 326)
Site:	S19-T3N-R68W (Bohrer)	MD Reference:	32' KB @ 5091.0ft (Patterson 326)
Well:	Bohrer 2F-19H-E368	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

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		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 2F-19H-E368				
Well Position	+N/-S	0.0 ft	Northing:	1,321,244.33 ft	Latitude:	40.214340
	+E/-W	0.0 ft	Easting:	3,124,994.39 ft	Longitude:	-105.052450
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,059.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/14/2014	8.60	66.75	52,686

Design	FINAL				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	90.00	

Survey Program	Date	6/21/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
145.0	11,540.0	Survey #1 (Hz)	Geolink MWD	Geolink MWD	

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
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
145.0	0.20	18.80	145.0	0.2	0.1	0.1	0.14	0.14	
239.0	0.20	47.80	239.0	0.5	0.3	0.3	0.11	0.00	
334.0	0.00	12.40	334.0	0.6	0.4	0.4	0.21	-0.21	
428.0	0.70	232.80	428.0	0.3	-0.1	-0.1	0.74	0.74	
523.0	0.30	247.50	523.0	-0.2	-0.8	-0.8	0.44	-0.42	
617.0	2.30	246.00	617.0	-1.0	-2.7	-2.7	2.13	2.13	
712.0	2.60	257.20	711.9	-2.3	-6.6	-6.6	0.59	0.32	
806.0	3.50	243.10	805.7	-4.1	-11.2	-11.2	1.24	0.96	
931.0	4.00	233.20	930.5	-8.4	-18.1	-18.1	0.65	0.40	
1,026.0	5.70	247.90	1,025.1	-12.2	-25.1	-25.1	2.20	1.79	
1,120.0	8.00	239.70	1,118.5	-17.2	-35.1	-35.1	2.65	2.45	
1,215.0	7.70	236.60	1,212.6	-24.1	-46.1	-46.1	0.55	-0.32	

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2F-19H-E368
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 5091.0ft (Patterson 326)
Site:	S19-T3N-R68W (Bohrer)	MD Reference:	32' KB @ 5091.0ft (Patterson 326)
Well:	Bohrer 2F-19H-E368	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	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
1,310.0	7.30	243.40	1,306.8	-30.3	-56.8	-56.8	1.02	-0.42	
1,404.0	8.50	243.20	1,399.9	-36.1	-68.4	-68.4	1.28	1.28	
1,497.0	10.30	245.40	1,491.6	-42.6	-82.1	-82.1	1.97	1.94	
1,588.0	11.70	233.90	1,581.0	-51.5	-96.9	-96.9	2.85	1.54	
1,680.0	11.50	228.30	1,671.1	-63.1	-111.3	-111.3	1.24	-0.22	
1,773.0	9.50	232.90	1,762.5	-73.8	-124.3	-124.3	2.33	-2.15	
1,865.0	8.30	240.40	1,853.4	-81.7	-136.2	-136.2	1.81	-1.30	
1,957.0	7.70	234.90	1,944.5	-88.5	-147.0	-147.0	1.06	-0.65	
2,048.0	7.90	236.60	2,034.7	-95.5	-157.2	-157.2	0.34	0.22	
2,140.0	9.30	245.60	2,125.6	-102.0	-169.3	-169.3	2.11	1.52	
2,232.0	8.40	240.40	2,216.6	-108.4	-181.9	-181.9	1.31	-0.98	
2,324.0	8.00	235.20	2,307.6	-115.4	-193.0	-193.0	0.92	-0.43	
2,416.0	9.30	245.20	2,398.6	-122.2	-205.0	-205.0	2.16	1.41	
2,508.0	8.70	239.80	2,489.4	-128.8	-217.7	-217.7	1.13	-0.65	
2,600.0	7.90	233.40	2,580.5	-136.1	-228.8	-228.8	1.33	-0.87	
2,693.0	9.90	240.20	2,672.4	-143.8	-240.9	-240.9	2.43	2.15	
2,785.0	9.10	233.20	2,763.1	-152.1	-253.6	-253.6	1.53	-0.87	
2,880.0	8.20	228.90	2,857.0	-161.1	-264.7	-264.7	1.17	-0.95	
2,975.0	9.50	237.70	2,950.9	-169.7	-276.4	-276.4	1.97	1.37	
3,069.0	9.50	247.80	3,043.6	-176.8	-290.2	-290.2	1.77	0.00	
3,164.0	8.90	245.40	3,137.4	-182.8	-304.1	-304.1	0.75	-0.63	
3,259.0	8.50	243.90	3,231.3	-189.0	-317.1	-317.1	0.48	-0.42	
3,354.0	8.50	242.20	3,325.2	-195.3	-329.6	-329.6	0.26	0.00	
3,449.0	8.50	241.00	3,419.2	-202.0	-342.0	-342.0	0.19	0.00	
3,543.0	8.30	239.50	3,512.2	-208.8	-353.9	-353.9	0.32	-0.21	
3,638.0	7.90	238.10	3,606.2	-215.8	-365.3	-365.3	0.47	-0.42	
3,733.0	8.70	250.40	3,700.3	-221.6	-377.7	-377.7	2.04	0.84	
3,828.0	8.10	250.10	3,794.2	-226.3	-390.7	-390.7	0.63	-0.63	
3,922.0	7.80	247.20	3,887.3	-231.0	-402.8	-402.8	0.53	-0.32	
4,017.0	8.70	243.40	3,981.3	-236.7	-415.2	-415.2	1.11	0.95	
4,112.0	8.10	241.20	4,075.3	-243.2	-427.5	-427.5	0.72	-0.63	
4,207.0	9.30	243.60	4,169.2	-249.8	-440.2	-440.2	1.32	1.26	
4,302.0	8.60	244.40	4,263.1	-256.3	-453.5	-453.5	0.75	-0.74	
4,396.0	9.40	237.40	4,355.9	-263.5	-466.3	-466.3	1.44	0.85	
4,491.0	9.10	236.40	4,449.7	-271.8	-479.1	-479.1	0.36	-0.32	
4,586.0	8.10	236.40	4,543.6	-279.7	-490.9	-490.9	1.05	-1.05	
4,680.0	7.30	232.80	4,636.8	-287.0	-501.2	-501.2	0.99	-0.85	
4,775.0	7.70	244.00	4,731.0	-293.4	-511.7	-511.7	1.59	0.42	
4,871.0	7.80	242.20	4,826.1	-299.3	-523.3	-523.3	0.27	0.10	
4,966.0	8.20	245.20	4,920.2	-305.1	-535.1	-535.1	0.61	0.42	
5,060.0	8.50	242.50	5,013.2	-311.1	-547.4	-547.4	0.53	0.32	
5,155.0	9.70	239.80	5,107.0	-318.4	-560.5	-560.5	1.34	1.26	
5,250.0	8.50	238.70	5,200.8	-326.1	-573.4	-573.4	1.28	-1.26	
5,344.0	7.60	238.70	5,293.8	-332.9	-584.7	-584.7	0.96	-0.96	
5,439.0	9.20	235.00	5,387.8	-340.5	-596.3	-596.3	1.78	1.68	
5,534.0	8.40	234.30	5,481.7	-348.9	-608.1	-608.1	0.85	-0.84	
5,629.0	8.20	234.40	5,575.7	-356.9	-619.3	-619.3	0.21	-0.21	
5,724.0	7.30	244.00	5,669.8	-363.5	-630.2	-630.2	1.66	-0.95	
5,819.0	8.70	240.90	5,763.9	-369.7	-641.9	-641.9	1.54	1.47	
5,914.0	7.20	238.90	5,858.0	-376.2	-653.3	-653.3	1.61	-1.58	
6,008.0	7.80	242.70	5,951.2	-382.2	-664.0	-664.0	0.83	0.64	
6,102.0	7.70	234.70	6,044.3	-388.8	-674.8	-674.8	1.15	-0.11	
6,197.0	6.30	231.40	6,138.6	-395.7	-684.1	-684.1	1.53	-1.47	

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2F-19H-E368
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 5091.0ft (Patterson 326)
Site:	S19-T3N-R68W (Bohrer)	MD Reference:	32' KB @ 5091.0ft (Patterson 326)
Well:	Bohrer 2F-19H-E368	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	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
6,292.0	5.70	225.20	6,233.1	-402.3	-691.5	-691.5	0.93	-0.63	
6,339.0	4.60	217.10	6,279.9	-405.4	-694.3	-694.3	2.80	-2.34	
6,387.0	3.60	187.50	6,327.8	-408.4	-695.7	-695.7	4.80	-2.08	
6,434.0	4.70	162.00	6,374.7	-411.7	-695.3	-695.3	4.51	2.34	
6,482.0	5.80	146.20	6,422.5	-415.6	-693.3	-693.3	3.76	2.29	
6,529.0	7.60	121.70	6,469.2	-419.2	-689.3	-689.3	7.10	3.83	
6,577.0	10.50	114.10	6,516.6	-422.7	-682.6	-682.6	6.52	6.04	
6,624.0	14.10	116.20	6,562.5	-427.0	-673.6	-673.6	7.72	7.66	
6,672.0	18.90	114.90	6,608.5	-432.8	-661.3	-661.3	10.03	10.00	
6,719.0	24.10	111.80	6,652.2	-439.6	-645.5	-645.5	11.32	11.06	
6,767.0	28.40	105.50	6,695.3	-446.3	-625.3	-625.3	10.66	8.96	
6,814.0	32.90	103.40	6,735.7	-452.2	-602.1	-602.1	9.84	9.57	
6,862.0	37.40	101.40	6,774.9	-458.1	-575.2	-575.2	9.68	9.37	
6,909.0	39.50	99.60	6,811.7	-463.5	-546.4	-546.4	5.06	4.47	
6,957.0	41.50	96.10	6,848.2	-467.7	-515.5	-515.5	6.31	4.17	
7,004.0	42.70	93.90	6,883.1	-470.4	-484.2	-484.2	4.05	2.55	
7,051.0	45.20	93.10	6,916.9	-472.4	-451.6	-451.6	5.45	5.32	
7,098.0	50.60	93.20	6,948.4	-474.3	-416.8	-416.8	11.49	11.49	
7,145.0	58.10	94.30	6,975.8	-476.8	-378.7	-378.7	16.07	15.96	
7,192.0	65.20	93.90	6,998.1	-479.8	-337.5	-337.5	15.12	15.11	
7,241.0	70.00	92.30	7,016.8	-482.2	-292.3	-292.3	10.25	9.80	
7,288.0	71.80	91.10	7,032.2	-483.5	-247.9	-247.9	4.53	3.83	
7,336.0	73.50	90.00	7,046.5	-484.0	-202.1	-202.1	4.16	3.54	
7,383.0	79.30	88.30	7,057.5	-483.3	-156.4	-156.4	12.83	12.34	
7,430.0	83.70	88.40	7,064.5	-482.0	-110.0	-110.0	9.36	9.36	
7,494.0	86.20	88.00	7,070.1	-480.0	-46.2	-46.2	3.96	3.91	
7,547.0	88.80	87.90	7,072.4	-478.1	6.7	6.7	4.91	4.91	
7,642.0	89.10	87.60	7,074.2	-474.3	101.6	101.6	0.45	0.32	
7,737.0	87.90	88.20	7,076.6	-470.9	196.5	196.5	1.41	-1.26	
7,832.0	88.20	89.40	7,079.9	-468.9	291.4	291.4	1.30	0.32	
7,927.0	88.70	90.60	7,082.4	-468.9	386.4	386.4	1.37	0.53	
8,022.0	87.60	91.90	7,085.5	-470.9	481.3	481.3	1.79	-1.16	
8,116.0	87.80	92.10	7,089.3	-474.2	575.2	575.2	0.30	0.21	
8,210.0	88.10	91.10	7,092.6	-476.8	669.1	669.1	1.11	0.32	
8,305.0	89.50	90.70	7,094.6	-478.3	764.0	764.0	1.53	1.47	
8,400.0	89.20	91.10	7,095.7	-479.8	859.0	859.0	0.53	-0.32	
8,495.0	89.30	91.00	7,097.0	-481.6	954.0	954.0	0.15	0.11	
8,590.0	91.40	90.60	7,096.4	-482.9	1,049.0	1,049.0	2.25	2.21	
8,684.0	91.40	90.30	7,094.1	-483.6	1,142.9	1,142.9	0.32	0.00	
8,779.0	91.10	90.10	7,092.0	-484.0	1,237.9	1,237.9	0.38	-0.32	
8,874.0	91.40	90.00	7,089.9	-484.0	1,332.9	1,332.9	0.33	0.32	
8,968.0	89.50	90.30	7,089.2	-484.3	1,426.9	1,426.9	2.05	-2.02	
9,063.0	88.30	89.30	7,091.0	-484.0	1,521.9	1,521.9	1.64	-1.26	
9,157.0	89.00	89.00	7,093.2	-482.6	1,615.8	1,615.8	0.81	0.74	
9,252.0	86.60	88.70	7,096.9	-480.7	1,710.7	1,710.7	2.55	-2.53	
9,346.0	85.30	87.30	7,103.5	-477.4	1,804.4	1,804.4	2.03	-1.38	
9,441.0	88.00	87.60	7,109.1	-473.2	1,899.2	1,899.2	2.86	2.84	
9,536.0	87.80	87.30	7,112.5	-468.9	1,994.0	1,994.0	0.38	-0.21	
9,631.0	90.10	87.10	7,114.3	-464.3	2,088.9	2,088.9	2.43	2.42	
9,726.0	90.60	89.40	7,113.7	-461.4	2,183.8	2,183.8	2.48	0.53	
9,821.0	90.90	88.30	7,112.5	-459.5	2,278.8	2,278.8	1.20	0.32	
9,916.0	91.20	89.30	7,110.7	-457.5	2,373.8	2,373.8	1.10	0.32	
10,010.0	91.30	90.30	7,108.7	-457.2	2,467.7	2,467.7	1.07	0.11	

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2F-19H-E368
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 5091.0ft (Patterson 326)
Site:	S19-T3N-R68W (Bohrer)	MD Reference:	32' KB @ 5091.0ft (Patterson 326)
Well:	Bohrer 2F-19H-E368	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	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
10,105.0	89.20	91.30	7,108.3	-458.5	2,562.7	2,562.7	2.45	-2.21	
10,200.0	89.10	90.30	7,109.7	-459.8	2,657.7	2,657.7	1.06	-0.11	
10,295.0	89.50	91.50	7,110.8	-461.3	2,752.7	2,752.7	1.33	0.42	
10,390.0	89.50	91.20	7,111.7	-463.6	2,847.7	2,847.7	0.32	0.00	
10,484.0	89.60	91.00	7,112.4	-465.4	2,941.6	2,941.6	0.24	0.11	
10,579.0	89.90	91.20	7,112.8	-467.2	3,036.6	3,036.6	0.38	0.32	
10,675.0	89.70	89.70	7,113.1	-467.9	3,132.6	3,132.6	1.58	-0.21	
10,770.0	89.30	89.50	7,114.0	-467.3	3,227.6	3,227.6	0.47	-0.42	
10,864.0	89.30	89.10	7,115.1	-466.1	3,321.6	3,321.6	0.43	0.00	
10,959.0	89.30	90.20	7,116.3	-465.6	3,416.6	3,416.6	1.16	0.00	
11,054.0	89.40	89.60	7,117.4	-465.4	3,511.6	3,511.6	0.64	0.11	
11,148.0	90.60	92.00	7,117.4	-466.7	3,605.6	3,605.6	2.85	1.28	
11,243.0	89.80	90.50	7,117.0	-468.8	3,700.5	3,700.5	1.79	-0.84	
11,338.0	89.10	89.50	7,117.9	-468.8	3,795.5	3,795.5	1.28	-0.74	
11,433.0	89.70	89.10	7,118.9	-467.6	3,890.5	3,890.5	0.76	0.63	
11,490.0	89.90	88.80	7,119.1	-466.6	3,947.5	3,947.5	0.63	0.35	Last CES Survey @ 11,490' MD
11,540.0	89.90	88.80	7,119.2	-465.5	3,997.5	3,997.5	0.00	0.00	PTB @ 11,540'

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Bohrer 2F-19H-E368 LP - hit/miss target - Shape	0.00	0.00	7,082.0	-473.2	-12.4	1,320,771.05	3,124,984.38	40.213041	-105.052494
- actual wellpath misses target center by 11.5ft at 7528.6ft MD (7071.9 TVD, -478.7 N, -11.7 E)									
- Point									
Bohrer 2F-19H-E368 PB - hit/miss target - Shape	0.00	0.00	7,076.0	-473.2	4,041.2	1,320,791.51	3,129,037.89	40.213040	-105.037980
- actual wellpath misses target center by 61.9ft at 11540.0ft MD (7119.2 TVD, -465.5 N, 3997.5 E)									
- Point									
Bohrer 2F-19H-E368 PB - hit/miss target - Shape	0.00	0.00	7,134.0	-473.2	4,041.2	1,320,791.51	3,129,037.89	40.213040	-105.037980
- actual wellpath misses target center by 46.8ft at 11540.0ft MD (7119.2 TVD, -465.5 N, 3997.5 E)									
- Point									
Bohrer 2F-19H-E368 TC - hit/miss target - Shape	0.00	0.00	7,110.0	-473.2	1,337.6	1,320,777.86	3,126,334.37	40.213041	-105.047660
- actual wellpath misses target center by 22.9ft at 8878.5ft MD (7089.8 TVD, -484.0 N, 1337.4 E)									
- Point									
Bohrer 2F-19H-E368 TC - hit/miss target - Shape	0.00	0.00	7,120.0	-473.2	2,037.6	1,320,781.39	3,127,034.36	40.213041	-105.045154
- actual wellpath misses target center by 8.9ft at 9579.5ft MD (7113.8 TVD, -466.9 N, 2037.4 E)									
- Point									

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
11,490.0	7,119.1	-466.6	3,947.5	Last CES Survey @ 11,490' MD
11,540.0	7,119.2	-465.5	3,997.5	PTB @ 11,540'

Checked By: _____	Approved By: _____	Date: _____
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EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S19-T3N-R68W (Bohrer)

Bohrer 2F-19H-E368

Hz

Design: FINAL

Survey Report - Geographic

21 June, 2014

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2F-19H-E368
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 5091.0ft (Patterson 326)
Site:	S19-T3N-R68W (Bohrer)	MD Reference:	32' KB @ 5091.0ft (Patterson 326)
Well:	Bohrer 2F-19H-E368	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

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	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 2F-19H-E368					
Well Position	+N/-S	0.0 ft	Northing:	1,321,244.33 ft	Latitude:	40.214340
	+E/-W	0.0 ft	Easting:	3,124,994.39 ft	Longitude:	-105.052450
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,059.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/14/2014	8.60	66.75	52,686

Design	FINAL				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	90.00	

Survey Program	Date	6/21/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
145.0	11,540.0	Survey #1 (Hz)	Geolink MWD	Geolink MWD	

Survey										
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	1,321,244.33	3,124,994.39	40.214340	-105.052450	
145.0	0.20	18.80	145.0	0.2	0.1	1,321,244.57	3,124,994.47	40.214341	-105.052450	
239.0	0.20	47.80	239.0	0.5	0.3	1,321,244.83	3,124,994.64	40.214341	-105.052449	
334.0	0.00	12.40	334.0	0.6	0.4	1,321,244.94	3,124,994.76	40.214342	-105.052449	
428.0	0.70	232.80	428.0	0.3	-0.1	1,321,244.60	3,124,994.31	40.214341	-105.052451	
523.0	0.30	247.50	523.0	-0.2	-0.8	1,321,244.15	3,124,993.62	40.214340	-105.052453	
617.0	2.30	246.00	617.0	-1.0	-2.7	1,321,243.27	3,124,991.67	40.214337	-105.052460	
712.0	2.60	257.20	711.9	-2.3	-6.6	1,321,242.00	3,124,987.83	40.214334	-105.052474	
806.0	3.50	243.10	805.7	-4.1	-11.2	1,321,240.21	3,124,983.20	40.214329	-105.052490	
931.0	4.00	233.20	930.5	-8.4	-18.1	1,321,235.84	3,124,976.33	40.214317	-105.052515	
1,026.0	5.70	247.90	1,025.1	-12.2	-25.1	1,321,232.04	3,124,969.33	40.214307	-105.052540	
1,120.0	8.00	239.70	1,118.5	-17.2	-35.1	1,321,226.93	3,124,959.38	40.214293	-105.052576	

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2F-19H-E368
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 5091.0ft (Patterson 326)
Site:	S19-T3N-R68W (Bohrer)	MD Reference:	32' KB @ 5091.0ft (Patterson 326)
Well:	Bohrer 2F-19H-E368	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	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
1,215.0	7.70	236.60	1,212.6	-24.1	-46.1	1,321,220.04	3,124,948.39	40.214274	-105.052615
1,310.0	7.30	243.40	1,306.8	-30.3	-56.8	1,321,213.78	3,124,937.71	40.214257	-105.052654
1,404.0	8.50	243.20	1,399.9	-36.1	-68.4	1,321,207.91	3,124,926.20	40.214241	-105.052695
1,497.0	10.30	245.40	1,491.6	-42.6	-82.1	1,321,201.28	3,124,912.54	40.214223	-105.052744
1,588.0	11.70	233.90	1,581.0	-51.5	-96.9	1,321,192.38	3,124,897.73	40.214199	-105.052797
1,680.0	11.50	228.30	1,671.1	-63.1	-111.3	1,321,180.71	3,124,883.40	40.214167	-105.052849
1,773.0	9.50	232.90	1,762.5	-73.8	-124.3	1,321,169.85	3,124,870.41	40.214137	-105.052896
1,865.0	8.30	240.40	1,853.4	-81.7	-136.2	1,321,161.93	3,124,858.62	40.214116	-105.052938
1,957.0	7.70	234.90	1,944.5	-88.5	-147.0	1,321,155.05	3,124,847.84	40.214097	-105.052977
2,048.0	7.90	236.60	2,034.7	-95.5	-157.2	1,321,148.05	3,124,837.67	40.214078	-105.053013
2,140.0	9.30	245.60	2,125.6	-102.0	-169.3	1,321,141.44	3,124,825.65	40.214060	-105.053056
2,232.0	8.40	240.40	2,216.6	-108.4	-181.9	1,321,134.99	3,124,813.07	40.214042	-105.053101
2,324.0	8.00	235.20	2,307.6	-115.4	-193.0	1,321,127.96	3,124,802.00	40.214023	-105.053141
2,416.0	9.30	245.20	2,398.6	-122.2	-205.0	1,321,121.12	3,124,790.03	40.214005	-105.053184
2,508.0	8.70	239.80	2,489.4	-128.8	-217.7	1,321,114.44	3,124,777.30	40.213987	-105.053230
2,600.0	7.90	233.40	2,580.5	-136.1	-228.8	1,321,107.12	3,124,766.25	40.213967	-105.053270
2,693.0	9.90	240.20	2,672.4	-143.8	-240.9	1,321,099.27	3,124,754.22	40.213945	-105.053313
2,785.0	9.10	233.20	2,763.1	-152.1	-253.6	1,321,090.92	3,124,741.57	40.213922	-105.053358
2,880.0	8.20	228.90	2,857.0	-161.1	-264.7	1,321,081.91	3,124,730.50	40.213898	-105.053398
2,975.0	9.50	237.70	2,950.9	-169.7	-276.4	1,321,073.21	3,124,718.81	40.213874	-105.053440
3,069.0	9.50	247.80	3,043.6	-176.8	-290.2	1,321,066.06	3,124,705.10	40.213855	-105.053489
3,164.0	8.90	245.40	3,137.4	-182.8	-304.1	1,321,059.97	3,124,691.19	40.213838	-105.053539
3,259.0	8.50	243.90	3,231.3	-189.0	-317.1	1,321,053.75	3,124,678.24	40.213821	-105.053586
3,354.0	8.50	242.20	3,325.2	-195.3	-329.6	1,321,047.33	3,124,665.75	40.213804	-105.053631
3,449.0	8.50	241.00	3,419.2	-202.0	-342.0	1,321,040.59	3,124,653.44	40.213785	-105.053675
3,543.0	8.30	239.50	3,512.2	-208.8	-353.9	1,321,033.72	3,124,641.55	40.213767	-105.053717
3,638.0	7.90	238.10	3,606.2	-215.8	-365.3	1,321,026.73	3,124,630.13	40.213748	-105.053758
3,733.0	8.70	250.40	3,700.3	-221.6	-377.7	1,321,020.80	3,124,617.85	40.213732	-105.053803
3,828.0	8.10	250.10	3,794.2	-226.3	-390.7	1,321,016.05	3,124,604.81	40.213719	-105.053849
3,922.0	7.80	247.20	3,887.3	-231.0	-402.8	1,321,011.26	3,124,592.73	40.213706	-105.053893
4,017.0	8.70	243.40	3,981.3	-236.7	-415.2	1,321,005.49	3,124,580.39	40.213690	-105.053937
4,112.0	8.10	241.20	4,075.3	-243.2	-427.5	1,320,998.98	3,124,568.14	40.213672	-105.053981
4,207.0	9.30	243.60	4,169.2	-249.8	-440.2	1,320,992.28	3,124,555.43	40.213654	-105.054027
4,302.0	8.60	244.40	4,263.1	-256.3	-453.5	1,320,985.73	3,124,542.18	40.213636	-105.054074
4,396.0	9.40	237.40	4,355.9	-263.5	-466.3	1,320,978.49	3,124,529.41	40.213617	-105.054120
4,491.0	9.10	236.40	4,449.7	-271.8	-479.1	1,320,970.09	3,124,516.66	40.213594	-105.054166
4,586.0	8.10	236.40	4,543.6	-279.7	-490.9	1,320,962.17	3,124,504.87	40.213572	-105.054208
4,680.0	7.30	232.80	4,636.8	-287.0	-501.2	1,320,954.84	3,124,494.63	40.213552	-105.054245
4,775.0	7.70	244.00	4,731.0	-293.4	-511.7	1,320,948.35	3,124,484.14	40.213535	-105.054283
4,871.0	7.80	242.20	4,826.1	-299.3	-523.3	1,320,942.44	3,124,472.62	40.213519	-105.054324
4,966.0	8.20	245.20	4,920.2	-305.1	-535.1	1,320,936.53	3,124,460.80	40.213502	-105.054366
5,060.0	8.50	242.50	5,013.2	-311.1	-547.4	1,320,930.45	3,124,448.58	40.213486	-105.054410
5,155.0	9.70	239.80	5,107.0	-318.4	-560.5	1,320,923.11	3,124,435.47	40.213466	-105.054457
5,250.0	8.50	238.70	5,200.8	-326.1	-573.4	1,320,915.37	3,124,422.60	40.213445	-105.054504
5,344.0	7.60	238.70	5,293.8	-332.9	-584.7	1,320,908.48	3,124,411.38	40.213426	-105.054544
5,439.0	9.20	235.00	5,387.8	-340.5	-596.3	1,320,900.80	3,124,399.83	40.213405	-105.054585
5,534.0	8.40	234.30	5,481.7	-348.9	-608.1	1,320,892.33	3,124,388.02	40.213382	-105.054628
5,629.0	8.20	234.40	5,575.7	-356.9	-619.3	1,320,884.29	3,124,376.92	40.213360	-105.054668
5,724.0	7.30	244.00	5,669.8	-363.5	-630.2	1,320,877.64	3,124,366.01	40.213342	-105.054707
5,819.0	8.70	240.90	5,763.9	-369.7	-641.9	1,320,871.44	3,124,354.34	40.213325	-105.054749
5,914.0	7.20	238.90	5,858.0	-376.2	-653.3	1,320,864.81	3,124,343.00	40.213307	-105.054789
6,008.0	7.80	242.70	5,951.2	-382.2	-664.0	1,320,858.79	3,124,332.32	40.213291	-105.054828
6,102.0	7.70	234.70	6,044.3	-388.8	-674.8	1,320,852.17	3,124,321.54	40.213273	-105.054867
6,197.0	6.30	231.40	6,138.6	-395.7	-684.1	1,320,845.20	3,124,312.31	40.213254	-105.054900
6,292.0	5.70	225.20	6,233.1	-402.3	-691.5	1,320,838.58	3,124,304.92	40.213236	-105.054926

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2F-19H-E368
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 5091.0ft (Patterson 326)
Site:	S19-T3N-R68W (Bohrer)	MD Reference:	32' KB @ 5091.0ft (Patterson 326)
Well:	Bohrer 2F-19H-E368	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	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
6,339.0	4.60	217.10	6,279.9	-405.4	-694.3	1,320,835.42	3,124,302.14	40.213227	-105.054936
6,387.0	3.60	187.50	6,327.8	-408.4	-695.7	1,320,832.38	3,124,300.80	40.213219	-105.054941
6,434.0	4.70	162.00	6,374.7	-411.7	-695.3	1,320,829.09	3,124,301.22	40.213210	-105.054940
6,482.0	5.80	146.20	6,422.5	-415.6	-693.3	1,320,825.22	3,124,303.20	40.213199	-105.054933
6,529.0	7.60	121.70	6,469.2	-419.2	-689.3	1,320,821.63	3,124,307.18	40.213189	-105.054919
6,577.0	10.50	114.10	6,516.6	-422.7	-682.6	1,320,818.21	3,124,313.89	40.213180	-105.054895
6,624.0	14.10	116.20	6,562.5	-427.0	-673.6	1,320,813.97	3,124,322.96	40.213168	-105.054862
6,672.0	18.90	114.90	6,608.5	-432.8	-661.3	1,320,808.18	3,124,335.30	40.213152	-105.054818
6,719.0	24.10	111.80	6,652.2	-439.6	-645.5	1,320,801.49	3,124,351.16	40.213133	-105.054761
6,767.0	28.40	105.50	6,695.3	-446.3	-625.3	1,320,794.89	3,124,371.30	40.213115	-105.054689
6,814.0	32.90	103.40	6,735.7	-452.2	-602.1	1,320,789.06	3,124,394.53	40.213099	-105.054606
6,862.0	37.40	101.40	6,774.9	-458.1	-575.2	1,320,783.29	3,124,421.55	40.213082	-105.054510
6,909.0	39.50	99.60	6,811.7	-463.5	-546.4	1,320,778.12	3,124,450.31	40.213068	-105.054407
6,957.0	41.50	96.10	6,848.2	-467.7	-515.5	1,320,774.04	3,124,481.20	40.213056	-105.054296
7,004.0	42.70	93.90	6,883.1	-470.4	-484.2	1,320,771.46	3,124,512.60	40.213049	-105.054184
7,051.0	45.20	93.10	6,916.9	-472.4	-451.6	1,320,769.64	3,124,545.17	40.213043	-105.054067
7,098.0	50.60	93.20	6,948.4	-474.3	-416.8	1,320,767.90	3,124,579.98	40.213038	-105.053943
7,145.0	58.10	94.30	6,975.8	-476.8	-378.7	1,320,765.58	3,124,618.08	40.213031	-105.053806
7,192.0	65.20	93.90	6,998.1	-479.8	-337.5	1,320,762.83	3,124,659.32	40.213023	-105.053659
7,241.0	70.00	92.30	7,016.8	-482.2	-292.3	1,320,760.62	3,124,704.56	40.213016	-105.053497
7,288.0	71.80	91.10	7,032.2	-483.5	-247.9	1,320,759.53	3,124,748.95	40.213013	-105.053338
7,336.0	73.50	90.00	7,046.5	-484.0	-202.1	1,320,759.33	3,124,794.77	40.213011	-105.053174
7,383.0	79.30	88.30	7,057.5	-483.3	-156.4	1,320,760.24	3,124,840.42	40.213013	-105.053010
7,430.0	83.70	88.40	7,064.5	-482.0	-110.0	1,320,761.82	3,124,886.86	40.213017	-105.052844
7,494.0	86.20	88.00	7,070.1	-480.0	-46.2	1,320,764.14	3,124,950.57	40.213023	-105.052616
7,547.0	88.80	87.90	7,072.4	-478.1	6.7	1,320,766.30	3,125,003.47	40.213028	-105.052426
7,642.0	89.10	87.60	7,074.2	-474.3	101.6	1,320,770.51	3,125,098.36	40.213038	-105.052087
7,737.0	87.90	88.20	7,076.6	-470.9	196.5	1,320,774.47	3,125,193.24	40.213047	-105.051747
7,832.0	88.20	89.40	7,079.9	-468.9	291.4	1,320,776.94	3,125,288.15	40.213053	-105.051407
7,927.0	88.70	90.60	7,082.4	-468.9	386.4	1,320,777.41	3,125,383.11	40.213053	-105.051067
8,022.0	87.60	91.90	7,085.5	-470.9	481.3	1,320,775.82	3,125,478.05	40.213047	-105.050727
8,116.0	87.80	92.10	7,089.3	-474.2	575.2	1,320,773.02	3,125,571.93	40.213038	-105.050391
8,210.0	88.10	91.10	7,092.6	-476.8	669.1	1,320,770.87	3,125,665.84	40.213031	-105.050055
8,305.0	89.50	90.70	7,094.6	-478.3	764.0	1,320,769.86	3,125,760.82	40.213027	-105.049715
8,400.0	89.20	91.10	7,095.7	-479.8	859.0	1,320,768.84	3,125,855.80	40.213023	-105.049374
8,495.0	89.30	91.00	7,097.0	-481.6	954.0	1,320,767.58	3,125,950.79	40.213018	-105.049034
8,590.0	91.40	90.60	7,096.4	-482.9	1,049.0	1,320,766.74	3,126,045.78	40.213014	-105.048694
8,684.0	91.40	90.30	7,094.1	-483.6	1,142.9	1,320,766.47	3,126,139.75	40.213012	-105.048358
8,779.0	91.10	90.10	7,092.0	-484.0	1,237.9	1,320,766.62	3,126,234.72	40.213011	-105.048018
8,874.0	91.40	90.00	7,089.9	-484.0	1,332.9	1,320,767.02	3,126,329.70	40.213011	-105.047678
8,968.0	89.50	90.30	7,089.2	-484.3	1,426.9	1,320,767.25	3,126,423.69	40.213011	-105.047341
9,063.0	88.30	89.30	7,091.0	-484.0	1,521.9	1,320,768.06	3,126,518.67	40.213011	-105.047001
9,157.0	89.00	89.00	7,093.2	-482.6	1,615.8	1,320,769.92	3,126,612.62	40.213015	-105.046665
9,252.0	86.60	88.70	7,096.9	-480.7	1,710.7	1,320,772.31	3,126,707.52	40.213020	-105.046325
9,346.0	85.30	87.30	7,103.5	-477.4	1,804.4	1,320,776.05	3,126,801.20	40.213029	-105.045989
9,441.0	88.00	87.60	7,109.1	-473.2	1,899.2	1,320,780.75	3,126,895.92	40.213041	-105.045650
9,536.0	87.80	87.30	7,112.5	-468.9	1,994.0	1,320,785.45	3,126,990.74	40.213053	-105.045310
9,631.0	90.10	87.10	7,114.3	-464.3	2,088.9	1,320,790.57	3,127,085.57	40.213065	-105.044971
9,726.0	90.60	89.40	7,113.7	-461.4	2,183.8	1,320,793.95	3,127,180.51	40.213073	-105.044631
9,821.0	90.90	88.30	7,112.5	-459.5	2,278.8	1,320,796.34	3,127,275.47	40.213078	-105.044291
9,916.0	91.20	89.30	7,110.7	-457.5	2,373.8	1,320,798.80	3,127,370.42	40.213084	-105.043951
10,010.0	91.30	90.30	7,108.7	-457.2	2,467.7	1,320,799.61	3,127,464.39	40.213085	-105.043614
10,105.0	89.20	91.30	7,108.3	-458.5	2,562.7	1,320,798.76	3,127,559.38	40.213081	-105.043274
10,200.0	89.10	90.30	7,109.7	-459.8	2,657.7	1,320,797.91	3,127,654.36	40.213077	-105.042934
10,295.0	89.50	91.50	7,110.8	-461.3	2,752.7	1,320,796.90	3,127,749.35	40.213073	-105.042594

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2F-19H-E368
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 5091.0ft (Patterson 326)
Site:	S19-T3N-R68W (Bohrer)	MD Reference:	32' KB @ 5091.0ft (Patterson 326)
Well:	Bohrer 2F-19H-E368	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	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
10,390.0	89.50	91.20	7,111.7	-463.6	2,847.7	1,320,795.14	3,127,844.35	40.213067	-105.042254
10,484.0	89.60	91.00	7,112.4	-465.4	2,941.6	1,320,793.81	3,127,938.34	40.213062	-105.041917
10,579.0	89.90	91.20	7,112.8	-467.2	3,036.6	1,320,792.47	3,128,033.33	40.213057	-105.041577
10,675.0	89.70	89.70	7,113.1	-467.9	3,132.6	1,320,792.20	3,128,129.32	40.213055	-105.041233
10,770.0	89.30	89.50	7,114.0	-467.3	3,227.6	1,320,793.34	3,128,224.31	40.213057	-105.040893
10,864.0	89.30	89.10	7,115.1	-466.1	3,321.6	1,320,794.96	3,128,318.29	40.213060	-105.040557
10,959.0	89.30	90.20	7,116.3	-465.6	3,416.6	1,320,796.02	3,128,413.28	40.213061	-105.040217
11,054.0	89.40	89.60	7,117.4	-465.4	3,511.6	1,320,796.67	3,128,508.27	40.213062	-105.039877
11,148.0	90.60	92.00	7,117.4	-466.7	3,605.6	1,320,795.83	3,128,602.26	40.213058	-105.039540
11,243.0	89.80	90.50	7,117.0	-468.8	3,700.5	1,320,794.24	3,128,697.24	40.213052	-105.039200
11,338.0	89.10	89.50	7,117.9	-468.8	3,795.5	1,320,794.72	3,128,792.23	40.213052	-105.038860
11,433.0	89.70	89.10	7,118.9	-467.6	3,890.5	1,320,796.36	3,128,887.21	40.213056	-105.038520
11,490.0	89.90	88.80	7,119.1	-466.6	3,947.5	1,320,797.69	3,128,944.17	40.213058	-105.038316
Last CES Survey @ 11,490' MD									
11,540.0	89.90	88.80	7,119.2	-465.5	3,997.5	1,320,798.99	3,128,994.16	40.213061	-105.038137
PTB @ 11,540'									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Bohrer 2F-19H-E368 PB	0.00	0.00	7,134.0	-473.2	4,041.2	1,320,791.50	3,129,037.89	40.213040	-105.037980
- actual wellpath misses target center by 46.8ft at 11540.0ft MD (7119.2 TVD, -465.5 N, 3997.5 E)									
- Point									

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
11,490.0	7,119.1	-466.6	3,947.5	Last CES Survey @ 11,490' MD	
11,540.0	7,119.2	-465.5	3,997.5	PTB @ 11,540'	

Checked By: _____ Approved By: _____ Date: _____