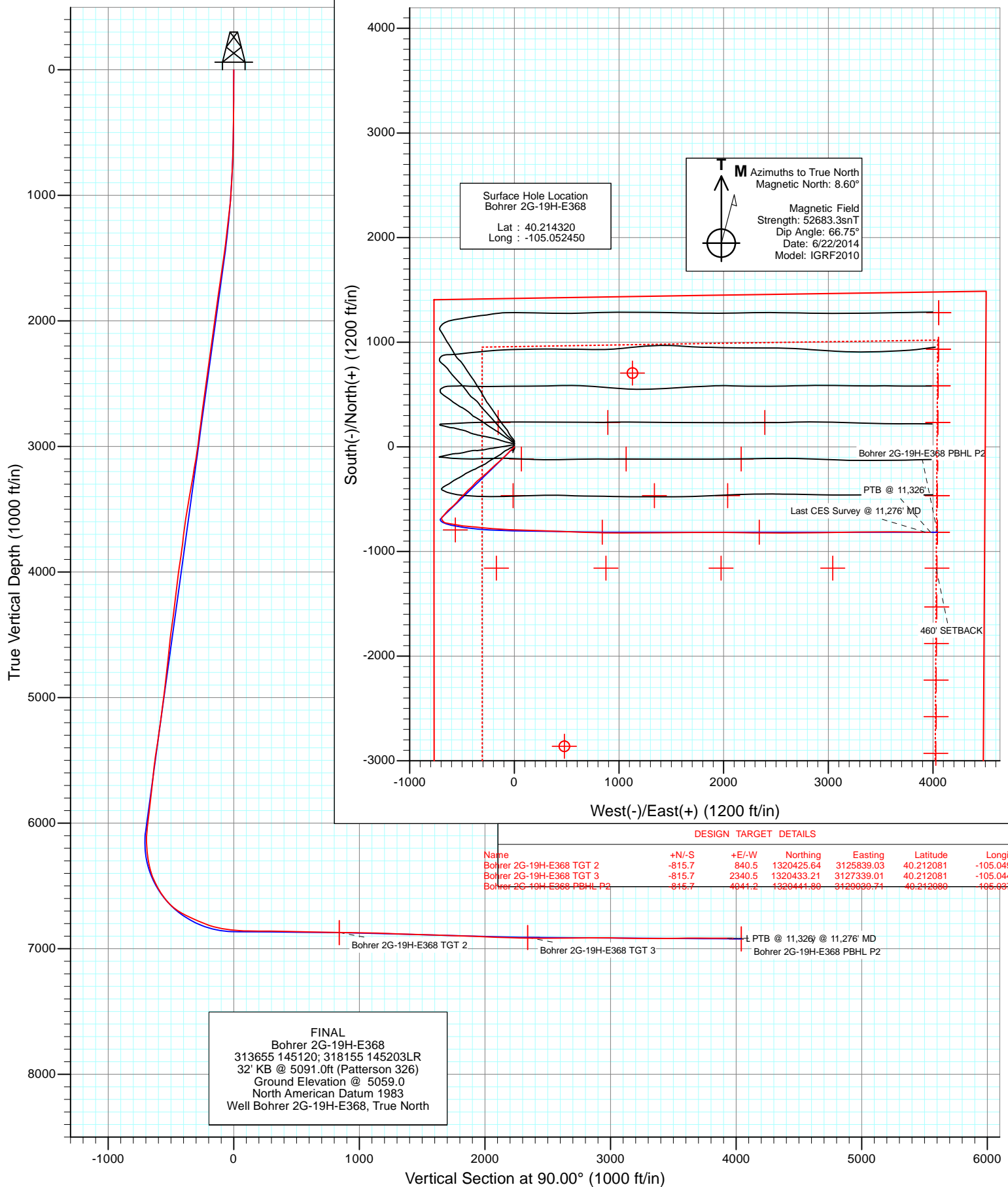


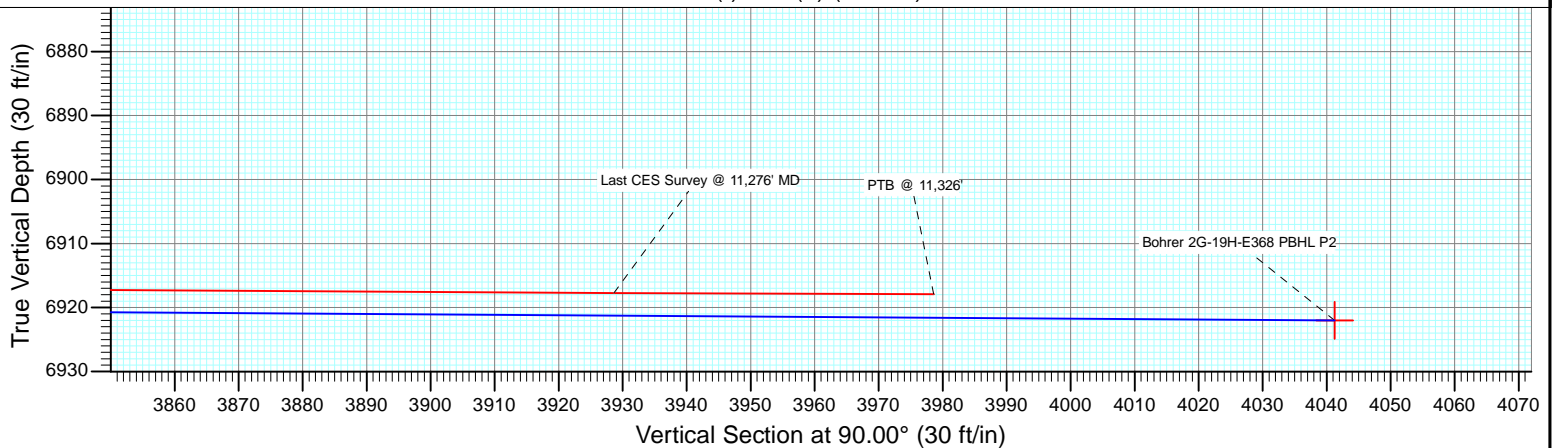
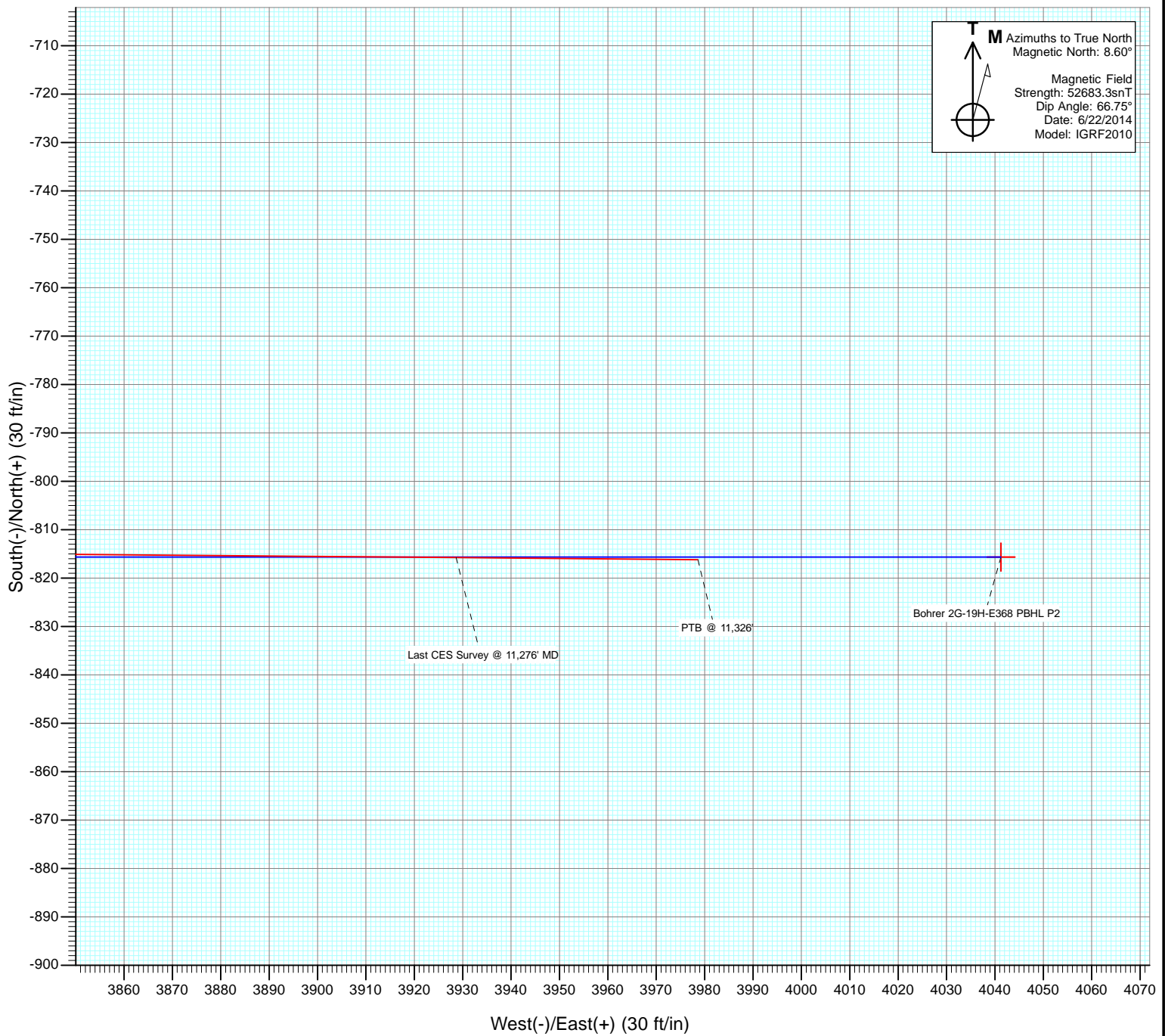


Project: DJ Wattenberg
 Site: S19-T3N-R68W (Bohrer/Boyd)
 Well: Bohrer 2G-19H-E368
 Wellbore: Hz
 Design: FINAL





Project: DJ Wattenberg
Site: S19-T3N-R68W (Bohrer/Boyd)
Well: Bohrer 2G-19H-E368
Design: FINAL



Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2G-19H-E368
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 5091.0ft (Patterson 326)
Site:	S19-T3N-R68W (Bohrer/Boyd)	MD Reference:	32' KB @ 5091.0ft (Patterson 326)
Well:	Bohrer 2G-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/Boyd)			
Site Position:		Northing:	1,318,413.13 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 2G-19H-E368					
Well Position	+N/-S	0.0 ft	Northing:	1,321,237.04 ft	Latitude:	40.214320
	+E/-W	0.0 ft	Easting:	3,124,994.42 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	6/22/2014	8.60	66.75	52,683

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

Survey Program	Date	6/30/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
145.0	11,326.0	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	0.70	356.70	145.0	0.9	-0.1	-0.1	0.48	0.48		
239.0	0.70	229.60	239.0	1.1	-0.5	-0.5	1.33	0.00		
334.0	0.80	204.20	334.0	0.1	-1.2	-1.2	0.36	0.11		
428.0	1.10	224.80	428.0	-1.1	-2.1	-2.1	0.48	0.32		
523.0	1.50	233.40	522.9	-2.5	-3.8	-3.8	0.47	0.42		
617.0	2.10	208.00	616.9	-4.8	-5.6	-5.6	1.05	0.64		
712.0	2.40	227.70	711.8	-7.7	-7.9	-7.9	0.87	0.32		
806.0	4.10	229.50	805.7	-11.2	-11.9	-11.9	1.81	1.81		
830.0	4.70	222.00	829.6	-12.4	-13.2	-13.2	3.46	2.50		
931.0	5.10	220.90	930.2	-18.9	-18.9	-18.9	0.41	0.40		
1,025.0	5.40	226.40	1,023.8	-25.1	-24.8	-24.8	0.62	0.32		
1,120.0	8.70	233.10	1,118.1	-32.5	-33.8	-33.8	3.57	3.47		

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2G-19H-E368
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 5091.0ft (Patterson 326)
Site:	S19-T3N-R68W (Bohrer/Boyd)	MD Reference:	32' KB @ 5091.0ft (Patterson 326)
Well:	Bohrer 2G-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
1,215.0	10.50	221.50	1,211.8	-43.3	-45.3	-45.3	2.77	1.89	
1,310.0	9.60	217.40	1,305.3	-56.1	-55.9	-55.9	1.21	-0.95	
1,404.0	9.50	226.80	1,398.0	-67.6	-66.3	-66.3	1.66	-0.11	
1,497.0	11.60	229.70	1,489.5	-78.9	-79.0	-79.0	2.33	2.26	
1,589.0	11.40	226.00	1,579.6	-91.2	-92.6	-92.6	0.83	-0.22	
1,682.0	11.10	221.80	1,670.8	-104.3	-105.2	-105.2	0.94	-0.32	
1,774.0	10.70	231.30	1,761.2	-116.2	-117.7	-117.7	2.00	-0.43	
1,865.0	10.60	228.80	1,850.6	-127.0	-130.6	-130.6	0.52	-0.11	
1,957.0	10.30	226.60	1,941.1	-138.3	-143.0	-143.0	0.54	-0.33	
2,049.0	11.10	231.60	2,031.5	-149.4	-155.9	-155.9	1.33	0.87	
2,142.0	10.80	227.10	2,122.8	-160.9	-169.3	-169.3	0.97	-0.32	
2,233.0	9.70	225.70	2,212.3	-172.1	-181.0	-181.0	1.24	-1.21	
2,325.0	10.70	229.60	2,302.9	-183.0	-193.1	-193.1	1.32	1.09	
2,417.0	9.90	227.80	2,393.4	-193.9	-205.4	-205.4	0.94	-0.87	
2,509.0	11.20	226.40	2,483.8	-205.3	-217.8	-217.8	1.44	1.41	
2,601.0	9.90	225.60	2,574.3	-217.0	-229.9	-229.9	1.42	-1.41	
2,693.0	11.20	228.50	2,664.7	-228.5	-242.2	-242.2	1.53	1.41	
2,785.0	9.80	223.50	2,755.2	-240.1	-254.3	-254.3	1.81	-1.52	
2,880.0	10.90	230.20	2,848.6	-251.7	-266.8	-266.8	1.71	1.16	
2,975.0	9.10	225.00	2,942.2	-262.8	-279.0	-279.0	2.12	-1.89	
3,069.0	10.60	230.30	3,034.8	-273.5	-290.9	-290.9	1.86	1.60	
3,164.0	12.80	233.10	3,127.8	-285.4	-306.0	-306.0	2.39	2.32	
3,259.0	11.40	229.20	3,220.7	-297.9	-321.6	-321.6	1.71	-1.47	
3,354.0	13.80	228.40	3,313.4	-311.6	-337.1	-337.1	2.53	2.53	
3,449.0	13.70	228.00	3,405.7	-326.6	-354.0	-354.0	0.15	-0.11	
3,543.0	13.20	225.60	3,497.1	-341.6	-369.9	-369.9	0.80	-0.53	
3,638.0	12.20	220.90	3,589.8	-356.7	-384.2	-384.2	1.51	-1.05	
3,733.0	10.30	218.90	3,683.0	-370.9	-396.1	-396.1	2.04	-2.00	
3,828.0	9.50	227.40	3,776.6	-382.9	-407.3	-407.3	1.75	-0.84	
3,922.0	10.90	231.10	3,869.1	-393.7	-419.9	-419.9	1.64	1.49	
4,017.0	10.70	229.70	3,962.4	-405.0	-433.6	-433.6	0.35	-0.21	
4,112.0	9.50	224.50	4,055.9	-416.3	-445.8	-445.8	1.59	-1.26	
4,207.0	10.70	222.40	4,149.5	-428.4	-457.3	-457.3	1.32	1.26	
4,302.0	10.40	222.30	4,242.9	-441.3	-469.0	-469.0	0.32	-0.32	
4,396.0	9.80	220.90	4,335.4	-453.6	-479.9	-479.9	0.69	-0.64	
4,491.0	10.80	227.60	4,428.9	-465.7	-491.8	-491.8	1.64	1.05	
4,585.0	9.60	226.90	4,521.4	-477.0	-504.0	-504.0	1.28	-1.28	
4,680.0	8.00	223.50	4,615.3	-487.2	-514.4	-514.4	1.77	-1.68	
4,775.0	10.20	221.80	4,709.1	-498.3	-524.5	-524.5	2.33	2.32	
4,870.0	10.10	215.80	4,802.6	-511.3	-535.0	-535.0	1.12	-0.11	
4,965.0	10.40	218.90	4,896.1	-524.8	-545.3	-545.3	0.66	0.32	
5,060.0	10.50	223.20	4,989.5	-537.7	-556.6	-556.6	0.83	0.11	
5,155.0	9.70	227.80	5,083.0	-549.4	-568.4	-568.4	1.20	-0.84	
5,250.0	10.50	223.10	5,176.5	-561.1	-580.3	-580.3	1.21	0.84	
5,344.0	10.60	233.20	5,269.0	-572.6	-593.0	-593.0	1.97	0.11	
5,439.0	11.20	228.40	5,362.2	-583.9	-606.9	-606.9	1.14	0.63	
5,534.0	11.50	231.10	5,455.4	-596.0	-621.2	-621.2	0.64	0.32	
5,628.0	7.90	225.80	5,548.0	-606.4	-633.1	-633.1	3.94	-3.83	
5,723.0	9.80	221.90	5,641.9	-616.9	-643.2	-643.2	2.10	2.00	
5,818.0	9.50	220.40	5,735.6	-628.9	-653.7	-653.7	0.41	-0.32	
5,913.0	9.90	219.30	5,829.2	-641.2	-663.9	-663.9	0.46	0.42	
6,007.0	10.30	222.30	5,921.7	-653.7	-674.7	-674.7	0.70	0.43	
6,102.0	10.00	222.70	6,015.3	-666.0	-686.0	-686.0	0.32	-0.32	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2G-19H-E368
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 5091.0ft (Patterson 326)
Site:	S19-T3N-R68W (Bohrer/Boyd)	MD Reference:	32' KB @ 5091.0ft (Patterson 326)
Well:	Bohrer 2G-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
6,149.0	8.50	217.30	6,061.6	-671.8	-690.9	-690.9	3.68	-3.19	
6,197.0	9.30	194.90	6,109.1	-678.4	-694.1	-694.1	7.36	1.67	
6,244.0	10.90	175.40	6,155.4	-686.5	-694.7	-694.7	7.98	3.40	
6,292.0	11.50	156.00	6,202.5	-695.4	-692.4	-692.4	7.91	1.25	
6,339.0	12.90	145.50	6,248.4	-704.0	-687.5	-687.5	5.57	2.98	
6,387.0	13.10	137.00	6,295.2	-712.4	-680.7	-680.7	4.00	0.42	
6,434.0	14.50	122.20	6,340.8	-719.4	-672.1	-672.1	8.05	2.98	
6,481.0	17.60	110.40	6,386.0	-725.0	-660.5	-660.5	9.54	6.60	
6,528.0	21.80	102.80	6,430.3	-729.4	-645.3	-645.3	10.45	8.94	
6,577.0	26.40	98.20	6,475.0	-733.0	-625.6	-625.6	10.13	9.39	
6,624.0	30.10	99.60	6,516.4	-736.5	-603.7	-603.7	8.00	7.87	
6,672.0	32.60	99.50	6,557.4	-740.6	-579.0	-579.0	5.21	5.21	
6,719.0	37.10	99.50	6,595.9	-745.0	-552.6	-552.6	9.57	9.57	
6,766.0	42.90	99.00	6,631.9	-749.9	-522.7	-522.7	12.36	12.34	
6,813.0	49.90	98.30	6,664.3	-755.0	-489.1	-489.1	14.93	14.89	
6,861.0	55.50	94.90	6,693.4	-759.3	-451.2	-451.2	12.95	11.67	
6,908.0	60.30	94.60	6,718.4	-762.6	-411.5	-411.5	10.23	10.21	
6,956.0	64.00	95.80	6,740.8	-766.5	-369.3	-369.3	8.02	7.71	
7,003.0	66.00	96.80	6,760.6	-771.2	-326.9	-326.9	4.67	4.26	
7,051.0	66.90	96.50	6,779.8	-776.3	-283.2	-283.2	1.96	1.87	
7,098.0	67.90	94.20	6,797.9	-780.3	-240.0	-240.0	4.99	2.13	
7,145.0	71.20	93.50	6,814.3	-783.2	-196.1	-196.1	7.16	7.02	
7,192.0	75.40	93.10	6,827.8	-785.8	-151.2	-151.2	8.97	8.94	
7,240.0	79.30	93.00	6,838.3	-788.3	-104.4	-104.4	8.13	8.12	
7,287.0	82.00	92.40	6,846.0	-790.5	-58.1	-58.1	5.88	5.74	
7,335.0	84.10	91.80	6,851.8	-792.3	-10.5	-10.5	4.55	4.37	
7,350.0	85.10	91.70	6,853.2	-792.7	4.4	4.4	6.70	6.67	
7,452.0	88.40	92.30	6,859.0	-796.3	106.2	106.2	3.29	3.24	
7,546.0	90.10	91.90	6,860.2	-799.7	200.1	200.1	1.86	1.81	
7,641.0	89.50	92.10	6,860.5	-803.0	295.1	295.1	0.67	-0.63	
7,736.0	88.50	92.00	6,862.2	-806.4	390.0	390.0	1.06	-1.05	
7,831.0	89.10	91.70	6,864.2	-809.5	484.9	484.9	0.71	0.63	
7,925.0	88.60	92.00	6,866.0	-812.5	578.9	578.9	0.62	-0.53	
8,020.0	89.00	92.20	6,868.0	-816.0	673.8	673.8	0.47	0.42	
8,115.0	89.10	91.90	6,869.6	-819.4	768.7	768.7	0.33	0.11	
8,209.0	88.90	90.90	6,871.3	-821.7	862.6	862.6	1.08	-0.21	
8,304.0	88.80	91.30	6,873.2	-823.5	957.6	957.6	0.43	-0.11	
8,399.0	89.40	89.50	6,874.7	-824.2	1,052.6	1,052.6	2.00	0.63	
8,494.0	87.90	89.10	6,876.9	-823.0	1,147.6	1,147.6	1.63	-1.58	
8,588.0	88.40	89.10	6,879.9	-821.5	1,241.5	1,241.5	0.53	0.53	
8,683.0	87.60	89.50	6,883.2	-820.4	1,336.4	1,336.4	0.94	-0.84	
8,778.0	88.40	89.10	6,886.6	-819.2	1,431.4	1,431.4	0.94	0.84	
8,873.0	88.00	89.50	6,889.5	-818.1	1,526.3	1,526.3	0.60	-0.42	
8,968.0	88.80	89.60	6,892.2	-817.3	1,621.3	1,621.3	0.85	0.84	
9,063.0	87.80	90.30	6,895.0	-817.2	1,716.2	1,716.2	1.28	-1.05	
9,158.0	88.40	90.40	6,898.2	-817.8	1,811.2	1,811.2	0.64	0.63	
9,253.0	87.50	90.30	6,901.6	-818.4	1,906.1	1,906.1	0.95	-0.95	
9,348.0	87.60	90.30	6,905.6	-818.9	2,001.0	2,001.0	0.11	0.11	
9,443.0	87.90	90.50	6,909.3	-819.6	2,095.9	2,095.9	0.38	0.32	
9,538.0	88.10	90.30	6,912.7	-820.2	2,190.9	2,190.9	0.30	0.21	
9,633.0	89.00	90.40	6,915.1	-820.8	2,285.9	2,285.9	0.95	0.95	
9,728.0	89.40	90.50	6,916.4	-821.5	2,380.8	2,380.8	0.43	0.42	
9,822.0	89.30	90.40	6,917.5	-822.3	2,474.8	2,474.8	0.15	-0.11	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2G-19H-E368
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 5091.0ft (Patterson 326)
Site:	S19-T3N-R68W (Bohrer/Boyd)	MD Reference:	32' KB @ 5091.0ft (Patterson 326)
Well:	Bohrer 2G-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
9,917.0	90.70	89.60	6,917.5	-822.3	2,569.8	2,569.8	1.70	1.47	
10,012.0	91.20	90.10	6,915.9	-822.0	2,664.8	2,664.8	0.74	0.53	
10,107.0	90.00	89.10	6,914.9	-821.4	2,759.8	2,759.8	1.64	-1.26	
10,202.0	91.10	89.50	6,914.0	-820.2	2,854.8	2,854.8	1.23	1.16	
10,296.0	89.60	89.50	6,913.4	-819.4	2,948.8	2,948.8	1.60	-1.60	
10,391.0	88.50	89.30	6,915.0	-818.4	3,043.8	3,043.8	1.18	-1.16	
10,486.0	88.70	88.90	6,917.3	-816.9	3,138.7	3,138.7	0.47	0.21	
10,580.0	89.70	89.30	6,918.6	-815.4	3,232.7	3,232.7	1.15	1.06	
10,675.0	89.90	89.00	6,918.9	-814.0	3,327.7	3,327.7	0.38	0.21	
10,770.0	90.20	88.80	6,918.9	-812.2	3,422.7	3,422.7	0.38	0.32	
10,865.0	90.50	90.70	6,918.3	-811.8	3,517.7	3,517.7	2.02	0.32	
10,960.0	91.10	90.10	6,917.0	-812.4	3,612.7	3,612.7	0.89	0.63	
11,055.0	89.40	91.00	6,916.5	-813.4	3,707.6	3,707.6	2.02	-1.79	
11,150.0	90.00	90.60	6,917.0	-814.7	3,802.6	3,802.6	0.76	0.63	
11,244.0	89.40	90.40	6,917.5	-815.5	3,896.6	3,896.6	0.67	-0.64	
11,276.0	89.80	90.50	6,917.8	-815.8	3,928.6	3,928.6	1.29	1.25	Last CES Survey @ 11,276' MD
11,326.0	89.80	90.50	6,917.9	-816.2	3,978.6	3,978.6	0.00	0.00	PTB @ 11,326'

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Bohrer 2G-19H-E368 TC - hit/miss target - Shape	0.00	0.00	6,872.0	-815.7	840.5	1,320,425.64	3,125,839.03	40.212081	-105.049440
- actual wellpath misses target center by 5.8ft at 8186.7ft MD (6870.8 TVD, -821.3 N, 840.4 E)									
- Point									
Bohrer 2G-19H-E368 PE - hit/miss target - Shape	0.00	0.00	6,922.0	-815.7	4,041.2	1,320,441.80	3,129,039.71	40.212080	-105.037980
- actual wellpath misses target center by 62.8ft at 11326.0ft MD (6917.9 TVD, -816.2 N, 3978.6 E)									
- Point									
Bohrer 2G-19H-E368 TC - hit/miss target - Shape	0.00	0.00	6,911.0	-815.7	2,340.5	1,320,433.21	3,127,339.01	40.212081	-105.044070
- actual wellpath misses target center by 7.4ft at 9687.6ft MD (6915.9 TVD, -821.2 N, 2340.4 E)									
- Point									
Bohrer 2G-19H-E368 PE - hit/miss target - Shape	0.00	0.00	6,860.0	-815.7	4,041.2	1,320,441.80	3,129,039.71	40.212080	-105.037980
- actual wellpath misses target center by 85.3ft at 11326.0ft MD (6917.9 TVD, -816.2 N, 3978.6 E)									
- Point									
Bohrer 2G-19H-E368 TC - hit/miss target - Shape	0.00	0.00	6,860.0	-794.0	-563.7	1,320,440.17	3,124,434.74	40.212140	-105.054468
- actual wellpath misses target center by 204.0ft at 6861.0ft MD (6693.4 TVD, -759.3 N, -451.2 E)									
- Point									

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
11,276.0	6,917.8	-815.8	3,928.6	Last CES Survey @ 11,276' MD
11,326.0	6,917.9	-816.2	3,978.6	PTB @ 11,326'

Checked By: _____ Approved By: _____ Date: _____

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S19-T3N-R68W (Bohrer/Boyd)

Bohrer 2G-19H-E368

Hz

Design: FINAL

Survey Report - Geographic

30 June, 2014

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2G-19H-E368
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 5091.0ft (Patterson 326)
Site:	S19-T3N-R68W (Bohrer/Boyd)	MD Reference:	32' KB @ 5091.0ft (Patterson 326)
Well:	Bohrer 2G-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/Boyd)				
Site Position:		Northing:	1,318,413.13 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 2G-19H-E368					
Well Position	+N/-S	0.0 ft	Northing:	1,321,237.04 ft	Latitude:	40.214320
	+E/-W	0.0 ft	Easting:	3,124,994.42 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	6/22/2014	8.60	66.75	52,683

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	6/30/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
145.0	11,326.0	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	1,321,237.04	3,124,994.42	40.214320	-105.052450	
145.0	0.70	356.70	145.0	0.9	-0.1	1,321,237.92	3,124,994.37	40.214322	-105.052450	
239.0	0.70	229.60	239.0	1.1	-0.5	1,321,238.12	3,124,993.90	40.214323	-105.052452	
334.0	0.80	204.20	334.0	0.1	-1.2	1,321,237.14	3,124,993.19	40.214320	-105.052455	
428.0	1.10	224.80	428.0	-1.1	-2.1	1,321,235.90	3,124,992.29	40.214317	-105.052458	
523.0	1.50	233.40	522.9	-2.5	-3.8	1,321,234.50	3,124,990.65	40.214313	-105.052464	
617.0	2.10	208.00	616.9	-4.8	-5.6	1,321,232.24	3,124,988.87	40.214307	-105.052470	
712.0	2.40	227.70	711.8	-7.7	-7.9	1,321,229.35	3,124,986.60	40.214299	-105.052478	
806.0	4.10	229.50	805.7	-11.2	-11.9	1,321,225.82	3,124,982.60	40.214289	-105.052493	
830.0	4.70	222.00	829.6	-12.4	-13.2	1,321,224.53	3,124,981.30	40.214286	-105.052497	
931.0	5.10	220.90	930.2	-18.9	-18.9	1,321,218.03	3,124,975.62	40.214268	-105.052518	
1,025.0	5.40	226.40	1,023.8	-25.1	-24.8	1,321,211.79	3,124,969.72	40.214251	-105.052539	

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2G-19H-E368
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 5091.0ft (Patterson 326)
Site:	S19-T3N-R68W (Bohrer/Boyd)	MD Reference:	32' KB @ 5091.0ft (Patterson 326)
Well:	Bohrer 2G-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
1,120.0	8.70	233.10	1,118.1	-32.5	-33.8	1,321,204.35	3,124,960.77	40.214231	-105.052571
1,215.0	10.50	221.50	1,211.8	-43.3	-45.3	1,321,193.49	3,124,949.34	40.214201	-105.052612
1,310.0	9.60	217.40	1,305.3	-56.1	-55.9	1,321,180.66	3,124,938.86	40.214166	-105.052650
1,404.0	9.50	226.80	1,398.0	-67.6	-66.3	1,321,169.07	3,124,928.50	40.214134	-105.052688
1,497.0	11.60	229.70	1,489.5	-78.9	-79.0	1,321,157.70	3,124,915.83	40.214103	-105.052733
1,589.0	11.40	226.00	1,579.6	-91.2	-92.6	1,321,145.34	3,124,902.30	40.214070	-105.052782
1,682.0	11.10	221.80	1,670.8	-104.3	-105.2	1,321,132.22	3,124,889.78	40.214034	-105.052827
1,774.0	10.70	231.30	1,761.2	-116.2	-117.7	1,321,120.21	3,124,877.27	40.214001	-105.052872
1,865.0	10.60	228.80	1,850.6	-127.0	-130.6	1,321,109.35	3,124,864.44	40.213971	-105.052918
1,957.0	10.30	226.60	1,941.1	-138.3	-143.0	1,321,098.06	3,124,852.15	40.213941	-105.052962
2,049.0	11.10	231.60	2,031.5	-149.4	-155.9	1,321,086.84	3,124,839.29	40.213910	-105.053008
2,142.0	10.80	227.10	2,122.8	-160.9	-169.3	1,321,075.28	3,124,825.95	40.213878	-105.053056
2,233.0	9.70	225.70	2,212.3	-172.1	-181.0	1,321,064.07	3,124,814.27	40.213848	-105.053098
2,325.0	10.70	229.60	2,302.9	-183.0	-193.1	1,321,053.06	3,124,802.28	40.213818	-105.053142
2,417.0	9.90	227.80	2,393.4	-193.9	-205.4	1,321,042.15	3,124,789.97	40.213788	-105.053186
2,509.0	11.20	226.40	2,483.8	-205.3	-217.8	1,321,030.61	3,124,777.70	40.213756	-105.053230
2,601.0	9.90	225.60	2,574.3	-217.0	-229.9	1,321,018.85	3,124,765.64	40.213724	-105.053273
2,693.0	11.20	228.50	2,664.7	-228.5	-242.2	1,321,007.34	3,124,753.35	40.213693	-105.053318
2,785.0	9.80	223.50	2,755.2	-240.1	-254.3	1,320,995.68	3,124,741.33	40.213661	-105.053361
2,880.0	10.90	230.20	2,848.6	-251.7	-266.8	1,320,984.00	3,124,728.92	40.213629	-105.053406
2,975.0	9.10	225.00	2,942.2	-262.8	-279.0	1,320,972.87	3,124,716.76	40.213599	-105.053449
3,069.0	10.60	230.30	3,034.8	-273.5	-290.9	1,320,962.03	3,124,704.91	40.213569	-105.053492
3,164.0	12.80	233.10	3,127.8	-285.4	-306.0	1,320,950.06	3,124,689.83	40.213536	-105.053546
3,259.0	11.40	229.20	3,220.7	-297.9	-321.6	1,320,937.52	3,124,674.37	40.213502	-105.053602
3,354.0	13.80	228.40	3,313.4	-311.6	-337.1	1,320,923.79	3,124,658.85	40.213465	-105.053657
3,449.0	13.70	228.00	3,405.7	-326.6	-354.0	1,320,908.65	3,124,642.10	40.213423	-105.053718
3,543.0	13.20	225.60	3,497.1	-341.6	-369.9	1,320,893.61	3,124,626.23	40.213382	-105.053775
3,638.0	12.20	220.90	3,589.8	-356.7	-384.2	1,320,878.36	3,124,611.98	40.213341	-105.053826
3,733.0	10.30	218.90	3,683.0	-370.9	-396.1	1,320,864.11	3,124,600.15	40.213302	-105.053869
3,828.0	9.50	227.40	3,776.6	-382.9	-407.3	1,320,852.13	3,124,589.11	40.213269	-105.053909
3,922.0	10.90	231.10	3,869.1	-393.7	-419.9	1,320,841.24	3,124,576.53	40.213239	-105.053954
4,017.0	10.70	229.70	3,962.4	-405.0	-433.6	1,320,829.82	3,124,562.87	40.213208	-105.054003
4,112.0	9.50	224.50	4,055.9	-416.3	-445.8	1,320,818.47	3,124,550.71	40.213177	-105.054047
4,207.0	10.70	222.40	4,149.5	-428.4	-457.3	1,320,806.30	3,124,539.33	40.213144	-105.054088
4,302.0	10.40	222.30	4,242.9	-441.3	-469.0	1,320,793.39	3,124,527.68	40.213109	-105.054130
4,396.0	9.80	220.90	4,335.4	-453.6	-479.9	1,320,781.01	3,124,516.79	40.213075	-105.054169
4,491.0	10.80	227.60	4,428.9	-465.7	-491.8	1,320,768.84	3,124,504.98	40.213042	-105.054211
4,585.0	9.60	226.90	4,521.4	-477.0	-504.0	1,320,757.48	3,124,492.81	40.213011	-105.054255
4,680.0	8.00	223.50	4,615.3	-487.2	-514.4	1,320,747.22	3,124,482.53	40.212983	-105.054292
4,775.0	10.20	221.80	4,709.1	-498.3	-524.5	1,320,736.10	3,124,472.43	40.212952	-105.054328
4,870.0	10.10	215.80	4,802.6	-511.3	-535.0	1,320,723.02	3,124,462.01	40.212916	-105.054366
4,965.0	10.40	218.90	4,896.1	-524.8	-545.3	1,320,709.54	3,124,451.82	40.212880	-105.054403
5,060.0	10.50	223.20	4,989.5	-537.7	-556.6	1,320,696.50	3,124,440.58	40.212844	-105.054443
5,155.0	9.70	227.80	5,083.0	-549.4	-568.4	1,320,684.76	3,124,428.78	40.212812	-105.054486
5,250.0	10.50	223.10	5,176.5	-561.1	-580.3	1,320,673.00	3,124,417.00	40.212780	-105.054528
5,344.0	10.60	233.20	5,269.0	-572.6	-593.0	1,320,661.50	3,124,404.28	40.212748	-105.054574
5,439.0	11.20	228.40	5,362.2	-583.9	-606.9	1,320,650.07	3,124,390.44	40.212717	-105.054623
5,534.0	11.50	231.10	5,455.4	-596.0	-621.2	1,320,637.93	3,124,376.23	40.212684	-105.054675
5,628.0	7.90	225.80	5,548.0	-606.4	-633.1	1,320,627.48	3,124,364.36	40.212655	-105.054717
5,723.0	9.80	221.90	5,641.9	-616.9	-643.2	1,320,616.85	3,124,354.33	40.212626	-105.054753
5,818.0	9.50	220.40	5,735.6	-628.9	-653.7	1,320,604.81	3,124,343.91	40.212594	-105.054791
5,913.0	9.90	219.30	5,829.2	-641.2	-663.9	1,320,592.47	3,124,333.72	40.212560	-105.054828
6,007.0	10.30	222.30	5,921.7	-653.7	-674.7	1,320,579.95	3,124,323.01	40.212526	-105.054866
6,102.0	10.00	222.70	6,015.3	-666.0	-686.0	1,320,567.55	3,124,311.76	40.212492	-105.054907
6,149.0	8.50	217.30	6,061.6	-671.8	-690.9	1,320,561.76	3,124,306.92	40.212476	-105.054924

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2G-19H-E368
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 5091.0ft (Patterson 326)
Site:	S19-T3N-R68W (Bohrer/Boyd)	MD Reference:	32' KB @ 5091.0ft (Patterson 326)
Well:	Bohrer 2G-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
6,197.0	9.30	194.90	6,109.1	-678.4	-694.1	1,320,555.17	3,124,303.80	40.212458	-105.054935
6,244.0	10.90	175.40	6,155.4	-686.5	-694.7	1,320,547.07	3,124,303.22	40.212436	-105.054938
6,292.0	11.50	156.00	6,202.5	-695.4	-692.4	1,320,538.18	3,124,305.58	40.212411	-105.054929
6,339.0	12.90	145.50	6,248.4	-704.0	-687.5	1,320,529.60	3,124,310.50	40.212388	-105.054912
6,387.0	13.10	137.00	6,295.2	-712.4	-680.7	1,320,521.24	3,124,317.29	40.212364	-105.054888
6,434.0	14.50	122.20	6,340.8	-719.4	-672.1	1,320,514.25	3,124,325.94	40.212345	-105.054857
6,481.0	17.60	110.40	6,386.0	-725.0	-660.5	1,320,508.69	3,124,337.61	40.212330	-105.054815
6,528.0	21.80	102.80	6,430.3	-729.4	-645.3	1,320,504.36	3,124,352.81	40.212318	-105.054761
6,577.0	26.40	98.20	6,475.0	-733.0	-625.6	1,320,500.89	3,124,372.50	40.212308	-105.054690
6,624.0	30.10	99.60	6,516.4	-736.5	-603.7	1,320,497.54	3,124,394.49	40.212298	-105.054612
6,672.0	32.60	99.50	6,557.4	-740.6	-579.0	1,320,493.52	3,124,419.13	40.212287	-105.054524
6,719.0	37.10	99.50	6,595.9	-745.0	-552.6	1,320,489.22	3,124,445.64	40.212275	-105.054429
6,766.0	42.90	99.00	6,631.9	-749.9	-522.7	1,320,484.53	3,124,475.47	40.212262	-105.054322
6,813.0	49.90	98.30	6,664.3	-755.0	-489.1	1,320,479.59	3,124,509.12	40.212248	-105.054202
6,861.0	55.50	94.90	6,693.4	-759.3	-451.2	1,320,475.44	3,124,547.05	40.212236	-105.054066
6,908.0	60.30	94.60	6,718.4	-762.6	-411.5	1,320,472.35	3,124,586.74	40.212227	-105.053924
6,956.0	64.00	95.80	6,740.8	-766.5	-369.3	1,320,468.71	3,124,629.01	40.212216	-105.053773
7,003.0	66.00	96.80	6,760.6	-771.2	-326.9	1,320,464.25	3,124,671.37	40.212203	-105.053621
7,051.0	66.90	96.50	6,779.8	-776.3	-283.2	1,320,459.37	3,124,715.10	40.212189	-105.053464
7,098.0	67.90	94.20	6,797.9	-780.3	-240.0	1,320,455.55	3,124,758.32	40.212178	-105.053310
7,145.0	71.20	93.50	6,814.3	-783.2	-196.1	1,320,452.82	3,124,802.27	40.212170	-105.053152
7,192.0	75.40	93.10	6,827.8	-785.8	-151.2	1,320,450.45	3,124,847.21	40.212163	-105.052992
7,240.0	79.30	93.00	6,838.3	-788.3	-104.4	1,320,448.20	3,124,893.98	40.212156	-105.052824
7,287.0	82.00	92.40	6,846.0	-790.5	-58.1	1,320,446.25	3,124,940.31	40.212150	-105.052658
7,335.0	84.10	91.80	6,851.8	-792.3	-10.5	1,320,444.74	3,124,987.93	40.212145	-105.052488
7,350.0	85.10	91.70	6,853.2	-792.7	4.4	1,320,444.36	3,125,002.86	40.212144	-105.052434
7,452.0	88.40	92.30	6,859.0	-796.3	106.2	1,320,441.32	3,125,104.64	40.212134	-105.052070
7,546.0	90.10	91.90	6,860.2	-799.7	200.1	1,320,438.35	3,125,198.58	40.212125	-105.051734
7,641.0	89.50	92.10	6,860.5	-803.0	295.1	1,320,435.52	3,125,293.54	40.212116	-105.051394
7,736.0	88.50	92.00	6,862.2	-806.4	390.0	1,320,432.60	3,125,388.48	40.212106	-105.051054
7,831.0	89.10	91.70	6,864.2	-809.5	484.9	1,320,430.01	3,125,483.42	40.212098	-105.050714
7,925.0	88.60	92.00	6,866.0	-812.5	578.9	1,320,427.45	3,125,577.37	40.212090	-105.050378
8,020.0	89.00	92.20	6,868.0	-816.0	673.8	1,320,424.45	3,125,672.30	40.212080	-105.050038
8,115.0	89.10	91.90	6,869.6	-819.4	768.7	1,320,421.53	3,125,767.24	40.212071	-105.049698
8,209.0	88.90	90.90	6,871.3	-821.7	862.6	1,320,419.71	3,125,861.21	40.212064	-105.049361
8,304.0	88.80	91.30	6,873.2	-823.5	957.6	1,320,418.36	3,125,956.18	40.212059	-105.049021
8,399.0	89.40	89.50	6,874.7	-824.2	1,052.6	1,320,418.18	3,126,051.16	40.212058	-105.048681
8,494.0	87.90	89.10	6,876.9	-823.0	1,147.6	1,320,419.82	3,126,146.12	40.212061	-105.048341
8,588.0	88.40	89.10	6,879.9	-821.5	1,241.5	1,320,421.77	3,126,240.05	40.212065	-105.048005
8,683.0	87.60	89.50	6,883.2	-820.4	1,336.4	1,320,423.41	3,126,334.98	40.212068	-105.047665
8,778.0	88.40	89.10	6,886.6	-819.2	1,431.4	1,320,425.05	3,126,429.90	40.212071	-105.047325
8,873.0	88.00	89.50	6,889.5	-818.1	1,526.3	1,320,426.69	3,126,524.84	40.212074	-105.046985
8,968.0	88.80	89.60	6,892.2	-817.3	1,621.3	1,320,427.91	3,126,619.80	40.212076	-105.046645
9,063.0	87.80	90.30	6,895.0	-817.2	1,716.2	1,320,428.47	3,126,714.75	40.212076	-105.046305
9,158.0	88.40	90.40	6,898.2	-817.8	1,811.2	1,320,428.37	3,126,809.70	40.212075	-105.045965
9,253.0	87.50	90.30	6,901.6	-818.4	1,906.1	1,320,428.27	3,126,904.64	40.212073	-105.045625
9,348.0	87.60	90.30	6,905.6	-818.9	2,001.0	1,320,428.25	3,126,999.55	40.212072	-105.045285
9,443.0	87.90	90.50	6,909.3	-819.6	2,095.9	1,320,428.07	3,127,094.48	40.212070	-105.044946
9,538.0	88.10	90.30	6,912.7	-820.2	2,190.9	1,320,427.89	3,127,189.42	40.212068	-105.044606
9,633.0	89.00	90.40	6,915.1	-820.8	2,285.9	1,320,427.79	3,127,284.39	40.212067	-105.044266
9,728.0	89.40	90.50	6,916.4	-821.5	2,380.8	1,320,427.52	3,127,379.38	40.212064	-105.043925
9,822.0	89.30	90.40	6,917.5	-822.3	2,474.8	1,320,427.26	3,127,473.37	40.212062	-105.043589
9,917.0	90.70	89.60	6,917.5	-822.3	2,569.8	1,320,427.74	3,127,568.37	40.212062	-105.043249
10,012.0	91.20	90.10	6,915.9	-822.0	2,664.8	1,320,428.46	3,127,663.35	40.212063	-105.042909
10,107.0	90.00	89.10	6,914.9	-821.4	2,759.8	1,320,429.61	3,127,758.34	40.212065	-105.042569

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2G-19H-E368
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 5091.0ft (Patterson 326)
Site:	S19-T3N-R68W (Bohrer/Boyd)	MD Reference:	32' KB @ 5091.0ft (Patterson 326)
Well:	Bohrer 2G-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		
10,202.0	91.10	89.50	6,914.0	-820.2	2,854.8	1,320,431.25	3,127,853.32	40.212068	-105.042228	
10,296.0	89.60	89.50	6,913.4	-819.4	2,948.8	1,320,432.54	3,127,947.30	40.212070	-105.041892	
10,391.0	88.50	89.30	6,915.0	-818.4	3,043.8	1,320,434.02	3,128,042.28	40.212073	-105.041552	
10,486.0	88.70	88.90	6,917.3	-816.9	3,138.7	1,320,435.99	3,128,137.23	40.212077	-105.041212	
10,580.0	89.70	89.30	6,918.6	-815.4	3,232.7	1,320,437.94	3,128,231.20	40.212081	-105.040875	
10,675.0	89.90	89.00	6,918.9	-814.0	3,327.7	1,320,439.83	3,128,326.18	40.212085	-105.040535	
10,770.0	90.20	88.80	6,918.9	-812.2	3,422.7	1,320,442.13	3,128,421.15	40.212090	-105.040195	
10,865.0	90.50	90.70	6,918.3	-811.8	3,517.7	1,320,443.02	3,128,516.14	40.212091	-105.039855	
10,960.0	91.10	90.10	6,917.0	-812.4	3,612.7	1,320,442.84	3,128,611.13	40.212089	-105.039515	
11,055.0	89.40	91.00	6,916.5	-813.4	3,707.6	1,320,442.41	3,128,706.13	40.212087	-105.039175	
11,150.0	90.00	90.60	6,917.0	-814.7	3,802.6	1,320,441.56	3,128,801.12	40.212083	-105.038835	
11,244.0	89.40	90.40	6,917.5	-815.5	3,896.6	1,320,441.21	3,128,895.12	40.212081	-105.038498	
11,276.0	89.80	90.50	6,917.8	-815.8	3,928.6	1,320,441.12	3,128,927.09	40.212080	-105.038384	
Last CES Survey @ 11,276' MD										
11,326.0	89.80	90.50	6,917.9	-816.2	3,978.6	1,320,440.94	3,128,977.09	40.212079	-105.038204	
PTB @ 11,326'										

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 2G-19H-E368 TC	0.00	0.00	6,872.0	-815.7	840.5	1,320,425.64	3,125,839.03	40.212081	-105.049441	
- actual wellpath misses target center by 5.8ft at 8186.7ft MD (6870.8 TVD, -821.3 N, 840.4 E)										
- Point										
Bohrer 2G-19H-E368 TC	0.00	0.00	6,911.0	-815.7	2,340.5	1,320,433.21	3,127,339.01	40.212081	-105.044070	
- actual wellpath misses target center by 7.4ft at 9687.6ft MD (6915.9 TVD, -821.2 N, 2340.4 E)										
- Point										
Bohrer 2G-19H-E368 PE	0.00	0.00	6,922.0	-815.7	4,041.2	1,320,441.80	3,129,039.71	40.212080	-105.037980	
- actual wellpath misses target center by 62.8ft at 11326.0ft MD (6917.9 TVD, -816.2 N, 3978.6 E)										
- Point										

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
11,276.0	6,917.8	-815.8	3,928.6	Last CES Survey @ 11,276' MD	
11,326.0	6,917.9	-816.2	3,978.6	PTB @ 11,326'	

Checked By: _____ Approved By: _____ Date: _____