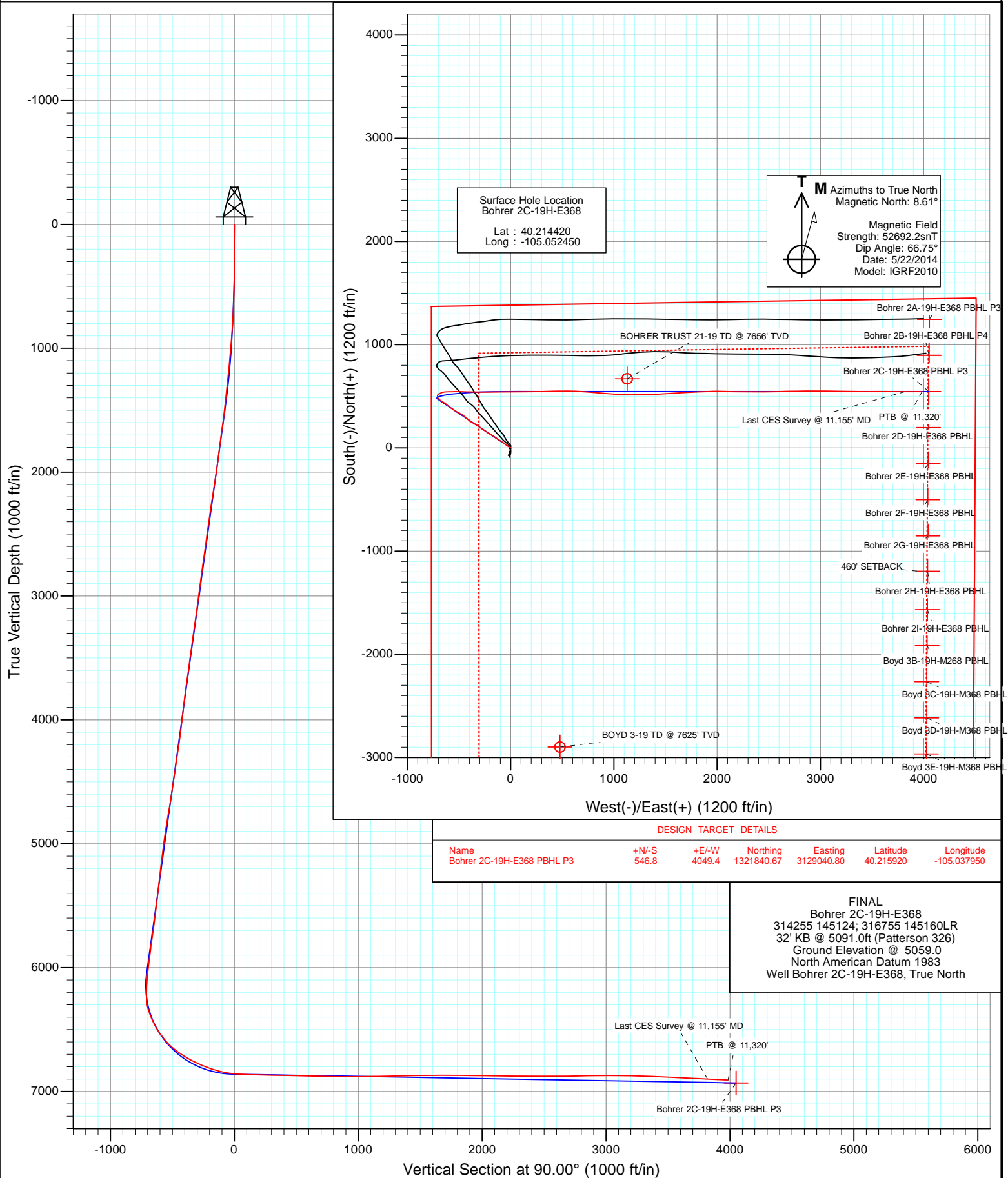


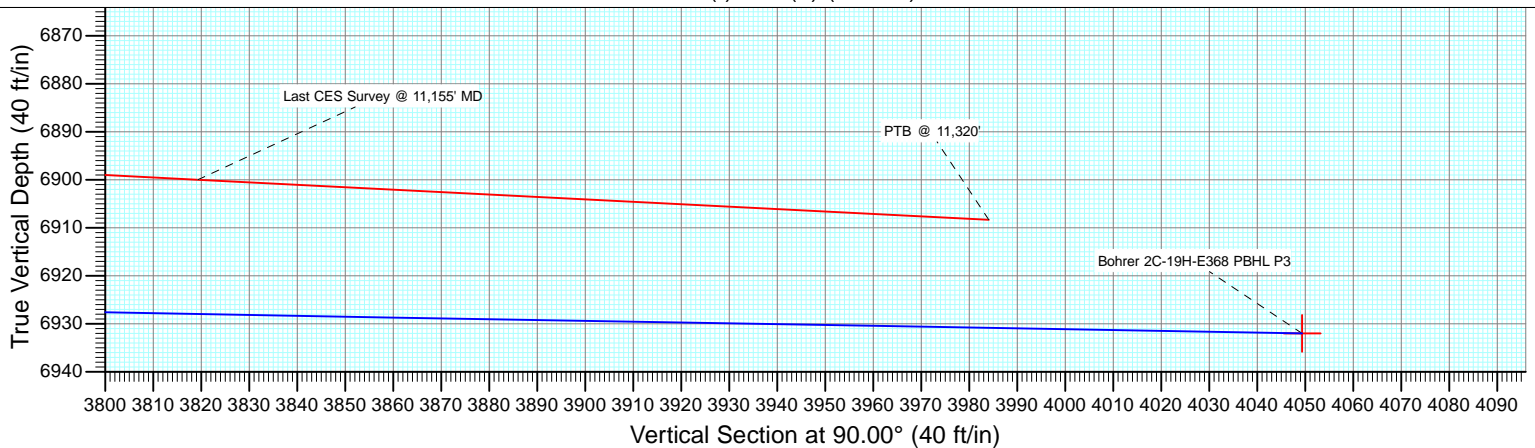
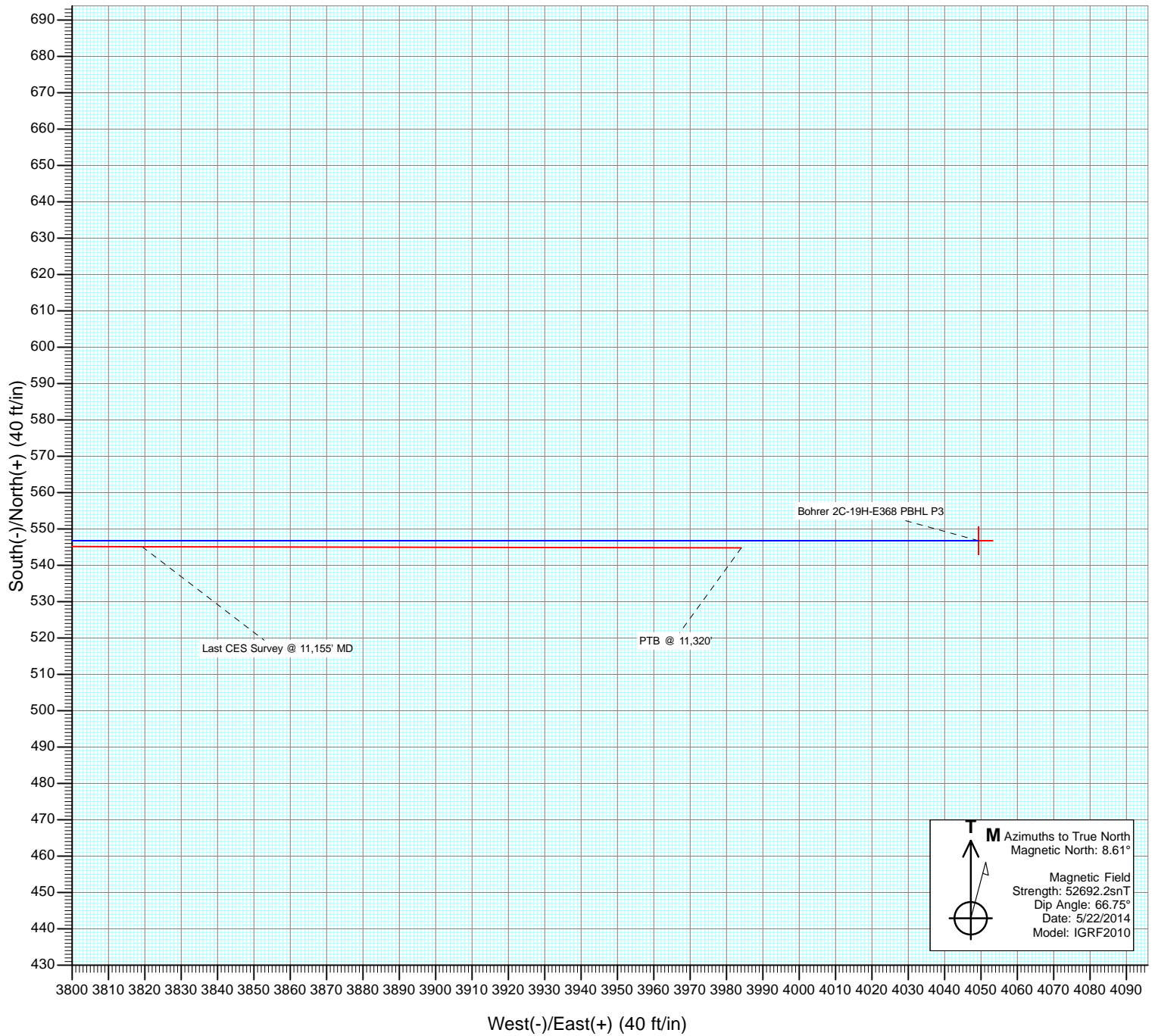


Project: DJ Wattenberg
Site: S19-T3N-R68W (Bohrer)
Well: Bohrer 2C-19H-E368
Wellbore: Hz
Design: FINAL





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



Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2C-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 2C-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 2C-19H-E368					
Well Position	+N/-S	0.0 ft	Northing:	1,321,273.47 ft	Latitude:	40.214420
	+E/-W	0.0 ft	Easting:	3,124,994.24 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	5/22/2014	8.61	66.75	52,692

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	5/30/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
145.0	11,320.0	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	0.50	351.60	145.0	0.6	-0.1	-0.1	0.34	0.34		
239.0	0.50	349.80	239.0	1.4	-0.2	-0.2	0.02	0.00		
334.0	0.10	359.50	334.0	1.9	-0.3	-0.3	0.42	-0.42		
428.0	0.60	279.40	428.0	2.1	-0.8	-0.8	0.63	0.53		
523.0	1.90	283.10	523.0	2.5	-2.8	-2.8	1.37	1.37		
617.0	1.80	292.20	616.9	3.4	-5.7	-5.7	0.33	-0.11		
712.0	2.70	299.80	711.8	5.1	-9.0	-9.0	1.00	0.95		
806.0	3.60	306.60	805.7	8.0	-13.3	-13.3	1.04	0.96		
843.0	4.00	305.60	842.6	9.4	-15.3	-15.3	1.10	1.08		
932.0	6.20	298.00	931.3	13.5	-22.1	-22.1	2.58	2.47		
1,027.0	7.30	312.60	1,025.6	20.0	-31.0	-31.0	2.14	1.16		
1,122.0	7.20	309.40	1,119.9	27.8	-40.1	-40.1	0.44	-0.11		

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2C-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 2C-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
1,216.0	7.00	305.10	1,213.1	34.9	-49.3	-49.3	0.60	-0.21	
1,311.0	6.90	305.50	1,307.4	41.5	-58.7	-58.7	0.12	-0.11	
1,406.0	6.60	297.80	1,401.8	47.4	-68.2	-68.2	1.00	-0.32	
1,498.0	7.70	304.40	1,493.1	53.3	-77.9	-77.9	1.49	1.20	
1,591.0	9.10	301.40	1,585.1	60.7	-89.4	-89.4	1.58	1.51	
1,683.0	9.40	299.60	1,675.9	68.2	-102.1	-102.1	0.45	0.33	
1,776.0	9.80	309.60	1,767.6	77.0	-114.8	-114.8	1.84	0.43	
1,867.0	9.10	306.70	1,857.3	86.2	-126.5	-126.5	0.93	-0.77	
1,960.0	8.80	305.20	1,949.2	94.7	-138.2	-138.2	0.41	-0.32	
2,053.0	10.80	304.80	2,040.8	103.8	-151.2	-151.2	2.15	2.15	
2,146.0	10.10	301.00	2,132.3	113.0	-165.4	-165.4	1.06	-0.75	
2,238.0	9.80	296.90	2,222.9	120.7	-179.3	-179.3	0.84	-0.33	
2,331.0	10.20	303.00	2,314.5	128.7	-193.2	-193.2	1.22	0.43	
2,423.0	9.40	299.10	2,405.2	136.8	-206.6	-206.6	1.13	-0.87	
2,516.0	9.80	307.60	2,496.9	145.3	-219.5	-219.5	1.58	0.43	
2,608.0	9.30	303.70	2,587.6	154.2	-231.9	-231.9	0.89	-0.54	
2,700.0	9.90	307.90	2,678.3	163.2	-244.3	-244.3	1.00	0.65	
2,792.0	9.50	304.10	2,769.0	172.3	-256.9	-256.9	0.82	-0.43	
2,887.0	9.10	300.10	2,862.7	180.5	-269.9	-269.9	0.80	-0.42	
2,982.0	9.50	306.40	2,956.5	188.9	-282.7	-282.7	1.15	0.42	
3,077.0	9.10	305.70	3,050.2	197.9	-295.1	-295.1	0.44	-0.42	
3,171.0	8.40	301.30	3,143.2	205.9	-307.0	-307.0	1.03	-0.74	
3,266.0	9.70	302.50	3,237.0	213.8	-319.7	-319.7	1.38	1.37	
3,361.0	9.60	299.00	3,330.6	221.9	-333.3	-333.3	0.63	-0.11	
3,456.0	9.80	307.10	3,424.3	230.6	-346.7	-346.7	1.45	0.21	
3,551.0	9.50	303.90	3,517.9	239.9	-359.7	-359.7	0.65	-0.32	
3,645.0	8.00	296.70	3,610.8	247.1	-372.0	-372.0	1.97	-1.60	
3,740.0	9.50	293.50	3,704.7	253.2	-385.1	-385.1	1.66	1.58	
3,835.0	9.30	308.20	3,798.5	261.1	-398.3	-398.3	2.53	-0.21	
3,929.0	9.40	316.60	3,891.2	271.4	-409.5	-409.5	1.45	0.11	
4,024.0	8.50	313.20	3,985.1	281.8	-420.0	-420.0	1.10	-0.95	
4,119.0	10.40	310.60	4,078.8	292.2	-431.6	-431.6	2.05	2.00	
4,214.0	8.90	307.90	4,172.4	302.3	-443.9	-443.9	1.65	-1.58	
4,309.0	10.90	305.60	4,266.0	312.0	-457.0	-457.0	2.15	2.11	
4,403.0	10.30	303.60	4,358.4	321.9	-471.2	-471.2	0.75	-0.64	
4,498.0	9.50	301.50	4,452.0	330.7	-485.0	-485.0	0.92	-0.84	
4,593.0	8.60	298.00	4,545.8	338.1	-498.0	-498.0	1.11	-0.95	
4,687.0	10.80	295.90	4,638.5	345.2	-512.1	-512.1	2.37	2.34	
4,783.0	10.80	299.40	4,732.8	353.6	-528.0	-528.0	0.68	0.00	
4,878.0	12.00	308.10	4,825.9	364.1	-543.5	-543.5	2.20	1.26	
4,973.0	10.20	302.20	4,919.1	374.6	-558.4	-558.4	2.24	-1.89	
5,067.0	8.70	298.60	5,011.8	382.5	-571.7	-571.7	1.71	-1.60	
5,162.0	8.80	309.80	5,105.7	390.6	-583.6	-583.6	1.79	0.11	
5,257.0	7.40	301.60	5,199.8	398.4	-594.4	-594.4	1.91	-1.47	
5,351.0	9.10	312.60	5,292.8	406.6	-605.0	-605.0	2.46	1.81	
5,446.0	7.60	305.20	5,386.8	415.3	-615.7	-615.7	1.94	-1.58	
5,541.0	9.50	309.90	5,480.7	424.0	-626.8	-626.8	2.13	2.00	
5,635.0	8.10	301.50	5,573.6	432.4	-638.4	-638.4	2.02	-1.49	
5,730.0	8.80	299.20	5,667.6	439.5	-650.5	-650.5	0.82	0.74	
5,825.0	10.40	308.10	5,761.3	448.3	-663.6	-663.6	2.29	1.68	
5,920.0	8.10	302.20	5,855.0	457.2	-676.0	-676.0	2.62	-2.42	
6,014.0	10.20	314.30	5,947.8	466.5	-687.6	-687.6	3.02	2.23	
6,077.0	8.60	309.50	6,010.0	473.4	-695.2	-695.2	2.83	-2.54	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2C-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 2C-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
6,109.0	8.10	307.40	6,041.7	476.3	-698.8	-698.8	1.83	-1.56	
6,140.0	8.50	318.50	6,072.3	479.3	-702.1	-702.1	5.32	1.29	
6,172.0	9.20	329.80	6,104.0	483.3	-704.9	-704.9	5.84	2.19	
6,204.0	10.30	344.50	6,135.5	488.3	-707.0	-707.0	8.47	3.44	
6,236.0	11.10	353.60	6,166.9	494.1	-708.1	-708.1	5.83	2.50	
6,267.0	10.50	0.10	6,197.4	499.9	-708.4	-708.4	4.38	-1.94	
6,299.0	9.70	0.00	6,228.9	505.5	-708.4	-708.4	2.50	-2.50	
6,330.0	9.30	13.40	6,259.5	510.6	-707.8	-707.8	7.23	-1.29	
6,362.0	11.50	42.60	6,291.0	515.4	-705.1	-705.1	17.61	6.87	
6,393.0	16.80	58.40	6,321.0	520.0	-699.2	-699.2	21.01	17.10	
6,425.0	21.80	59.10	6,351.2	525.5	-690.1	-690.1	15.64	15.62	
6,457.0	22.60	63.50	6,380.9	531.3	-679.5	-679.5	5.76	2.50	
6,488.0	24.00	71.10	6,409.3	536.0	-668.2	-668.2	10.69	4.52	
6,521.0	25.50	77.30	6,439.3	539.8	-654.9	-654.9	9.08	4.55	
6,552.0	28.30	82.60	6,467.0	542.2	-641.1	-641.1	11.88	9.03	
6,584.0	31.10	86.40	6,494.8	543.7	-625.4	-625.4	10.54	8.75	
6,616.0	34.30	89.70	6,521.7	544.2	-608.1	-608.1	11.44	10.00	
6,648.0	37.30	89.30	6,547.6	544.4	-589.4	-589.4	9.40	9.37	
6,679.0	39.90	88.50	6,571.9	544.8	-570.0	-570.0	8.54	8.39	
6,711.0	41.80	87.20	6,596.1	545.6	-549.1	-549.1	6.50	5.94	
6,743.0	43.70	87.60	6,619.6	546.5	-527.4	-527.4	6.00	5.94	
6,774.0	46.40	89.60	6,641.5	547.1	-505.5	-505.5	9.83	8.71	
6,806.0	50.60	91.90	6,662.7	546.7	-481.5	-481.5	14.18	13.12	
6,837.0	54.50	93.60	6,681.5	545.6	-457.0	-457.0	13.31	12.58	
6,869.0	57.30	93.20	6,699.4	544.0	-430.5	-430.5	8.81	8.75	
6,901.0	59.00	93.10	6,716.3	542.5	-403.4	-403.4	5.32	5.31	
6,932.0	60.70	92.50	6,731.9	541.2	-376.6	-376.6	5.73	5.48	
6,964.0	62.00	91.10	6,747.2	540.3	-348.5	-348.5	5.59	4.06	
6,996.0	63.40	89.80	6,761.9	540.1	-320.1	-320.1	5.67	4.37	
7,027.0	65.20	89.00	6,775.4	540.4	-292.2	-292.2	6.25	5.81	
7,059.0	66.90	89.00	6,788.4	540.9	-262.9	-262.9	5.31	5.31	
7,090.0	68.40	89.60	6,800.1	541.2	-234.3	-234.3	5.16	4.84	
7,122.0	70.10	89.80	6,811.5	541.4	-204.3	-204.3	5.34	5.31	
7,153.0	72.00	90.10	6,821.5	541.4	-175.0	-175.0	6.20	6.13	
7,184.0	74.20	89.80	6,830.6	541.4	-145.4	-145.4	7.16	7.10	
7,216.0	75.90	89.90	6,838.8	541.5	-114.4	-114.4	5.32	5.31	
7,248.0	78.10	89.60	6,846.0	541.7	-83.3	-83.3	6.94	6.87	
7,280.0	80.90	89.60	6,851.8	541.9	-51.8	-51.8	8.75	8.75	
7,311.0	83.70	89.00	6,856.0	542.3	-21.1	-21.1	9.23	9.03	
7,343.0	86.20	88.90	6,858.8	542.8	10.8	10.8	7.82	7.81	
7,459.0	87.90	89.60	6,864.8	544.4	126.6	126.6	1.58	1.47	
7,554.0	88.60	89.60	6,867.7	545.0	221.6	221.6	0.74	0.74	
7,649.0	89.10	89.00	6,869.6	546.2	316.5	316.5	0.82	0.53	
7,743.0	89.30	88.20	6,870.9	548.5	410.5	410.5	0.88	0.21	
7,839.0	88.40	89.90	6,872.8	550.1	506.5	506.5	2.00	-0.94	
7,934.0	87.90	91.20	6,875.9	549.2	601.4	601.4	1.47	-0.53	
8,028.0	89.60	94.00	6,877.9	544.9	695.3	695.3	3.48	1.81	
8,123.0	88.40	93.60	6,879.6	538.6	790.0	790.0	1.33	-1.26	
8,217.0	89.20	95.40	6,881.6	531.2	883.7	883.7	2.10	0.85	
8,312.0	90.70	94.60	6,881.7	522.9	978.4	978.4	1.79	1.58	
8,407.0	91.20	93.00	6,880.1	516.7	1,073.1	1,073.1	1.76	0.53	
8,502.0	91.10	89.80	6,878.2	514.3	1,168.1	1,168.1	3.37	-0.11	
8,596.0	91.60	89.00	6,876.0	515.3	1,262.0	1,262.0	1.00	0.53	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2C-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 2C-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
8,691.0	90.50	87.60	6,874.2	518.1	1,357.0	1,357.0	1.87	-1.16	
8,786.0	90.90	87.00	6,873.1	522.6	1,451.9	1,451.9	0.76	0.42	
8,880.0	91.50	86.50	6,871.1	527.9	1,545.7	1,545.7	0.83	0.64	
8,975.0	90.30	86.50	6,869.6	533.7	1,640.5	1,640.5	1.26	-1.26	
9,070.0	89.70	87.60	6,869.6	538.6	1,735.4	1,735.4	1.32	-0.63	
9,164.0	88.70	87.20	6,870.9	542.9	1,829.3	1,829.3	1.15	-1.06	
9,259.0	89.40	88.10	6,872.5	546.8	1,924.2	1,924.2	1.20	0.74	
9,353.0	89.20	90.30	6,873.6	548.1	2,018.2	2,018.2	2.35	-0.21	
9,448.0	89.20	91.50	6,875.0	546.6	2,113.1	2,113.1	1.26	0.00	
9,543.0	89.80	91.50	6,875.8	544.1	2,208.1	2,208.1	0.63	0.63	
9,638.0	88.70	90.00	6,877.0	542.9	2,303.1	2,303.1	1.96	-1.16	
9,733.0	90.30	89.70	6,877.9	543.1	2,398.1	2,398.1	1.71	1.68	
9,828.0	90.40	89.60	6,877.3	543.7	2,493.1	2,493.1	0.15	0.11	
9,922.0	89.20	88.40	6,877.6	545.3	2,587.0	2,587.0	1.81	-1.28	
10,017.0	91.00	89.30	6,877.4	547.2	2,682.0	2,682.0	2.12	1.89	
10,112.0	91.20	89.10	6,875.6	548.6	2,777.0	2,777.0	0.30	0.21	
10,207.0	91.10	88.90	6,873.7	550.2	2,872.0	2,872.0	0.24	-0.11	
10,302.0	90.00	89.70	6,872.8	551.4	2,967.0	2,967.0	1.43	-1.16	
10,397.0	89.90	90.70	6,872.9	551.1	3,062.0	3,062.0	1.06	-0.11	
10,491.0	89.50	92.10	6,873.4	548.8	3,155.9	3,155.9	1.55	-0.43	
10,586.0	88.10	90.30	6,875.4	546.8	3,250.9	3,250.9	2.40	-1.47	
10,682.0	88.10	90.20	6,878.5	546.4	3,346.8	3,346.8	0.10	0.00	
10,776.0	87.60	89.50	6,882.1	546.6	3,440.8	3,440.8	0.91	-0.53	
10,871.0	86.90	90.00	6,886.6	547.0	3,535.7	3,535.7	0.91	-0.74	
10,966.0	87.70	90.80	6,891.1	546.4	3,630.5	3,630.5	1.19	0.84	
11,061.0	87.20	90.30	6,895.3	545.4	3,725.4	3,725.4	0.74	-0.53	
11,155.0	87.10	90.10	6,900.0	545.1	3,819.3	3,819.3	0.24	-0.11	Last CES Survey @ 11,155' MD
11,320.0	87.10	90.10	6,908.4	544.8	3,984.1	3,984.1	0.00	0.00	PTB @ 11,320'

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Bohrer 2C-19H-E368 PE	0.00	0.00	6,860.0	546.8	4,049.4	1,321,840.67	3,129,040.80	40.215920	-105.037950
- hit/miss target									
- Shape									
- actual wellpath misses target center by 81.3ft at 11320.0ft MD (6908.4 TVD, 544.8 N, 3984.1 E)									
- Point									
Bohrer 2C-19H-E368 PE	0.00	0.00	6,932.0	546.8	4,049.4	1,321,840.67	3,129,040.80	40.215920	-105.037950
- hit/miss target									
- Shape									
- actual wellpath misses target center by 69.5ft at 11320.0ft MD (6908.4 TVD, 544.8 N, 3984.1 E)									
- Point									

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
11,155.0	6,900.0	545.1	3,819.3	Last CES Survey @ 11,155' MD	
11,320.0	6,908.4	544.8	3,984.1	PTB @ 11,320'	

Checked By: _____ Approved By: _____ Date: _____

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S19-T3N-R68W (Bohrer)

Bohrer 2C-19H-E368

Hz

Design: FINAL

Survey Report - Geographic

30 May, 2014

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2C-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 2C-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 2C-19H-E368					
Well Position	+N/-S	0.0 ft	Northing:	1,321,273.47 ft	Latitude:	40.214420
	+E/-W	0.0 ft	Easting:	3,124,994.24 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	5/22/2014	8.61	66.75	52,692

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	5/30/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
145.0	11,320.0	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	1,321,273.47	3,124,994.24	40.214420	-105.052450	
145.0	0.50	351.60	145.0	0.6	-0.1	1,321,274.09	3,124,994.14	40.214422	-105.052451	
239.0	0.50	349.80	239.0	1.4	-0.2	1,321,274.90	3,124,994.01	40.214424	-105.052451	
334.0	0.10	359.50	334.0	1.9	-0.3	1,321,275.39	3,124,993.93	40.214425	-105.052451	
428.0	0.60	279.40	428.0	2.1	-0.8	1,321,275.55	3,124,993.44	40.214426	-105.052453	
523.0	1.90	283.10	523.0	2.5	-2.8	1,321,275.98	3,124,991.42	40.214427	-105.052460	
617.0	1.80	292.20	616.9	3.4	-5.7	1,321,276.88	3,124,988.53	40.214429	-105.052471	
712.0	2.70	299.80	711.8	5.1	-9.0	1,321,278.54	3,124,985.19	40.214434	-105.052483	
806.0	3.60	306.60	805.7	8.0	-13.3	1,321,281.38	3,124,980.89	40.214442	-105.052498	
843.0	4.00	305.60	842.6	9.4	-15.3	1,321,282.81	3,124,978.90	40.214446	-105.052505	
932.0	6.20	298.00	931.3	13.5	-22.1	1,321,286.84	3,124,972.11	40.214457	-105.052529	
1,027.0	7.30	312.60	1,025.6	20.0	-31.0	1,321,293.29	3,124,963.11	40.214475	-105.052561	

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2C-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 2C-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
1,122.0	7.20	309.40	1,119.9	27.8	-40.1	1,321,301.11	3,124,954.02	40.214496	-105.052594
1,216.0	7.00	305.10	1,213.1	34.9	-49.3	1,321,308.09	3,124,944.75	40.214516	-105.052627
1,311.0	6.90	305.50	1,307.4	41.5	-58.7	1,321,314.69	3,124,935.33	40.214534	-105.052660
1,406.0	6.60	297.80	1,401.8	47.4	-68.2	1,321,320.50	3,124,925.83	40.214550	-105.052694
1,498.0	7.70	304.40	1,493.1	53.3	-77.9	1,321,326.40	3,124,916.04	40.214566	-105.052729
1,591.0	9.10	301.40	1,585.1	60.7	-89.4	1,321,333.69	3,124,904.58	40.214587	-105.052770
1,683.0	9.40	299.60	1,675.9	68.2	-102.1	1,321,341.13	3,124,891.80	40.214607	-105.052816
1,776.0	9.80	309.60	1,767.6	77.0	-114.8	1,321,349.86	3,124,879.05	40.214631	-105.052861
1,867.0	9.10	306.70	1,857.3	86.2	-126.5	1,321,359.04	3,124,867.27	40.214657	-105.052903
1,960.0	8.80	305.20	1,949.2	94.7	-138.2	1,321,367.48	3,124,855.52	40.214680	-105.052945
2,053.0	10.80	304.80	2,040.8	103.8	-151.2	1,321,376.49	3,124,842.50	40.214705	-105.052992
2,146.0	10.10	301.00	2,132.3	113.0	-165.4	1,321,385.59	3,124,828.31	40.214730	-105.053042
2,238.0	9.80	296.90	2,222.9	120.7	-179.3	1,321,393.21	3,124,814.38	40.214751	-105.053092
2,331.0	10.20	303.00	2,314.5	128.7	-193.2	1,321,401.21	3,124,800.37	40.214773	-105.053142
2,423.0	9.40	299.10	2,405.2	136.8	-206.6	1,321,409.23	3,124,786.93	40.214796	-105.053190
2,516.0	9.80	307.60	2,496.9	145.3	-219.5	1,321,417.69	3,124,773.98	40.214819	-105.053236
2,608.0	9.30	303.70	2,587.6	154.2	-231.9	1,321,426.53	3,124,761.55	40.214843	-105.053281
2,700.0	9.90	307.90	2,678.3	163.2	-244.3	1,321,435.45	3,124,749.08	40.214868	-105.053325
2,792.0	9.50	304.10	2,769.0	172.3	-256.9	1,321,444.50	3,124,736.51	40.214893	-105.053370
2,887.0	9.10	300.10	2,862.7	180.5	-269.9	1,321,452.60	3,124,723.47	40.214916	-105.053417
2,982.0	9.50	306.40	2,956.5	188.9	-282.7	1,321,460.95	3,124,710.62	40.214939	-105.053462
3,077.0	9.10	305.70	3,050.2	197.9	-295.1	1,321,469.93	3,124,698.16	40.214963	-105.053507
3,171.0	8.40	301.30	3,143.2	205.9	-307.0	1,321,477.77	3,124,686.22	40.214985	-105.053549
3,266.0	9.70	302.50	3,237.0	213.8	-319.7	1,321,485.61	3,124,673.50	40.215007	-105.053595
3,361.0	9.60	299.00	3,330.6	221.9	-333.3	1,321,493.68	3,124,659.78	40.215029	-105.053644
3,456.0	9.80	307.10	3,424.3	230.6	-346.7	1,321,502.33	3,124,646.36	40.215053	-105.053692
3,551.0	9.50	303.90	3,517.9	239.9	-359.7	1,321,511.52	3,124,633.36	40.215079	-105.053738
3,645.0	8.00	296.70	3,610.8	247.1	-372.0	1,321,518.72	3,124,621.04	40.215098	-105.053782
3,740.0	9.50	293.50	3,704.7	253.2	-385.1	1,321,524.75	3,124,607.91	40.215115	-105.053829
3,835.0	9.30	308.20	3,798.5	261.1	-398.3	1,321,532.56	3,124,594.65	40.215137	-105.053876
3,929.0	9.40	316.60	3,891.2	271.4	-409.5	1,321,542.78	3,124,583.35	40.215165	-105.053917
4,024.0	8.50	313.20	3,985.1	281.8	-420.0	1,321,553.17	3,124,572.85	40.215194	-105.053954
4,119.0	10.40	310.60	4,078.8	292.2	-431.6	1,321,563.50	3,124,561.17	40.215222	-105.053996
4,214.0	8.90	307.90	4,172.4	302.3	-443.9	1,321,573.53	3,124,548.81	40.215250	-105.054040
4,309.0	10.90	305.60	4,266.0	312.0	-457.0	1,321,583.21	3,124,535.66	40.215277	-105.054087
4,403.0	10.30	303.60	4,358.4	321.9	-471.2	1,321,592.96	3,124,521.38	40.215304	-105.054138
4,498.0	9.50	301.50	4,452.0	330.7	-485.0	1,321,601.69	3,124,507.58	40.215328	-105.054187
4,593.0	8.60	298.00	4,545.8	338.1	-498.0	1,321,609.05	3,124,494.59	40.215348	-105.054233
4,687.0	10.80	295.90	4,638.5	345.2	-512.1	1,321,616.13	3,124,480.42	40.215368	-105.054284
4,783.0	10.80	299.40	4,732.8	353.6	-528.0	1,321,624.39	3,124,464.45	40.215391	-105.054341
4,878.0	12.00	308.10	4,825.9	364.1	-543.5	1,321,634.78	3,124,448.87	40.215419	-105.054397
4,973.0	10.20	302.20	4,919.1	374.6	-558.4	1,321,645.28	3,124,433.93	40.215448	-105.054450
5,067.0	8.70	298.60	5,011.8	382.5	-571.7	1,321,653.05	3,124,420.60	40.215470	-105.054497
5,162.0	8.80	309.80	5,105.7	390.6	-583.6	1,321,661.08	3,124,408.67	40.215492	-105.054540
5,257.0	7.40	301.60	5,199.8	398.4	-594.4	1,321,668.89	3,124,397.83	40.215514	-105.054579
5,351.0	9.10	312.60	5,292.8	406.6	-605.0	1,321,677.04	3,124,387.16	40.215536	-105.054617
5,446.0	7.60	305.20	5,386.8	415.3	-615.7	1,321,685.69	3,124,376.46	40.215560	-105.054655
5,541.0	9.50	309.90	5,480.7	424.0	-626.8	1,321,694.29	3,124,365.26	40.215584	-105.054695
5,635.0	8.10	301.50	5,573.6	432.4	-638.4	1,321,702.66	3,124,353.62	40.215607	-105.054736
5,730.0	8.80	299.20	5,667.6	439.5	-650.5	1,321,709.64	3,124,341.54	40.215626	-105.054780
5,825.0	10.40	308.10	5,761.3	448.3	-663.6	1,321,718.42	3,124,328.40	40.215651	-105.054826
5,920.0	8.10	302.20	5,855.0	457.2	-676.0	1,321,727.21	3,124,315.94	40.215675	-105.054871
6,014.0	10.20	314.30	5,947.8	466.5	-687.6	1,321,736.50	3,124,304.33	40.215701	-105.054912
6,077.0	8.60	309.50	6,010.0	473.4	-695.2	1,321,743.35	3,124,296.67	40.215720	-105.054940
6,109.0	8.10	307.40	6,041.7	476.3	-698.8	1,321,746.22	3,124,293.02	40.215727	-105.054953

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2C-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 2C-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
6,140.0	8.50	318.50	6,072.3	479.3	-702.1	1,321,749.25	3,124,289.75	40.215736	-105.054964
6,172.0	9.20	329.80	6,104.0	483.3	-704.9	1,321,753.22	3,124,286.88	40.215747	-105.054974
6,204.0	10.30	344.50	6,135.5	488.3	-707.0	1,321,758.18	3,124,284.80	40.215760	-105.054982
6,236.0	11.10	353.60	6,166.9	494.1	-708.1	1,321,763.99	3,124,283.66	40.215776	-105.054986
6,267.0	10.50	0.10	6,197.4	499.9	-708.4	1,321,769.78	3,124,283.30	40.215792	-105.054987
6,299.0	9.70	0.00	6,228.9	505.5	-708.4	1,321,775.39	3,124,283.28	40.215808	-105.054987
6,330.0	9.30	13.40	6,259.5	510.6	-707.8	1,321,780.44	3,124,283.84	40.215822	-105.054985
6,362.0	11.50	42.60	6,291.0	515.4	-705.1	1,321,785.32	3,124,286.57	40.215835	-105.054975
6,393.0	16.80	58.40	6,321.0	520.0	-699.2	1,321,789.98	3,124,292.46	40.215848	-105.054954
6,425.0	21.80	59.10	6,351.2	525.5	-690.1	1,321,795.50	3,124,301.48	40.215863	-105.054921
6,457.0	22.60	63.50	6,380.9	531.3	-679.5	1,321,801.35	3,124,312.05	40.215879	-105.054883
6,488.0	24.00	71.10	6,409.3	536.0	-668.2	1,321,806.11	3,124,323.33	40.215891	-105.054843
6,521.0	25.50	77.30	6,439.3	539.8	-654.9	1,321,809.91	3,124,336.59	40.215902	-105.054795
6,552.0	28.30	82.60	6,467.0	542.2	-641.1	1,321,812.40	3,124,350.38	40.215908	-105.054746
6,584.0	31.10	86.40	6,494.8	543.7	-625.4	1,321,813.97	3,124,366.14	40.215912	-105.054690
6,616.0	34.30	89.70	6,521.7	544.2	-608.1	1,321,814.63	3,124,383.41	40.215914	-105.054628
6,648.0	37.30	89.30	6,547.6	544.4	-589.4	1,321,814.89	3,124,402.13	40.215914	-105.054561
6,679.0	39.90	88.50	6,571.9	544.8	-570.0	1,321,815.36	3,124,421.46	40.215915	-105.054491
6,711.0	41.80	87.20	6,596.1	545.6	-549.1	1,321,816.25	3,124,442.37	40.215918	-105.054417
6,743.0	43.70	87.60	6,619.6	546.5	-527.4	1,321,817.35	3,124,464.06	40.215920	-105.054339
6,774.0	46.40	89.60	6,641.5	547.1	-505.5	1,321,817.99	3,124,485.99	40.215922	-105.054260
6,806.0	50.60	91.90	6,662.7	546.7	-481.5	1,321,817.78	3,124,509.94	40.215921	-105.054175
6,837.0	54.50	93.60	6,681.5	545.6	-457.0	1,321,816.71	3,124,534.53	40.215918	-105.054087
6,869.0	57.30	93.20	6,699.4	544.0	-430.5	1,321,815.27	3,124,560.98	40.215913	-105.053992
6,901.0	59.00	93.10	6,716.3	542.5	-403.4	1,321,813.92	3,124,588.13	40.215909	-105.053895
6,932.0	60.70	92.50	6,731.9	541.2	-376.6	1,321,812.75	3,124,614.91	40.215906	-105.053799
6,964.0	62.00	91.10	6,747.2	540.3	-348.5	1,321,812.01	3,124,642.98	40.215903	-105.053698
6,996.0	63.40	89.80	6,761.9	540.1	-320.1	1,321,811.93	3,124,671.41	40.215903	-105.053596
7,027.0	65.20	89.00	6,775.4	540.4	-292.2	1,321,812.36	3,124,699.34	40.215903	-105.053496
7,059.0	66.90	89.00	6,788.4	540.9	-262.9	1,321,813.02	3,124,728.58	40.215905	-105.053392
7,090.0	68.40	89.60	6,800.1	541.2	-234.3	1,321,813.52	3,124,757.24	40.215906	-105.053289
7,122.0	70.10	89.80	6,811.5	541.4	-204.3	1,321,813.82	3,124,787.17	40.215906	-105.053182
7,153.0	72.00	90.10	6,821.5	541.4	-175.0	1,321,814.00	3,124,816.48	40.215906	-105.053077
7,184.0	74.20	89.80	6,830.6	541.4	-145.4	1,321,814.17	3,124,846.14	40.215906	-105.052971
7,216.0	75.90	89.90	6,838.8	541.5	-114.4	1,321,814.41	3,124,877.06	40.215907	-105.052860
7,248.0	78.10	89.60	6,846.0	541.7	-83.3	1,321,814.70	3,124,908.23	40.215907	-105.052748
7,280.0	80.90	89.60	6,851.8	541.9	-51.8	1,321,815.08	3,124,939.69	40.215908	-105.052636
7,311.0	83.70	89.00	6,856.0	542.3	-21.1	1,321,815.61	3,124,970.41	40.215909	-105.052526
7,343.0	86.20	88.90	6,858.8	542.8	10.8	1,321,816.36	3,125,002.27	40.215910	-105.052412
7,459.0	87.90	89.60	6,864.8	544.4	126.6	1,321,818.46	3,125,118.09	40.215914	-105.051997
7,554.0	88.60	89.60	6,867.7	545.0	221.6	1,321,819.60	3,125,213.04	40.215916	-105.051657
7,649.0	89.10	89.00	6,869.6	546.2	316.5	1,321,821.24	3,125,308.01	40.215919	-105.051317
7,743.0	89.30	88.20	6,870.9	548.5	410.5	1,321,824.01	3,125,401.96	40.215926	-105.050980
7,839.0	88.40	89.90	6,872.8	550.1	506.5	1,321,826.09	3,125,497.91	40.215930	-105.050637
7,934.0	87.90	91.20	6,875.9	549.2	601.4	1,321,825.65	3,125,592.86	40.215928	-105.050297
8,028.0	89.60	94.00	6,877.9	544.9	695.3	1,321,821.87	3,125,686.74	40.215916	-105.049961
8,123.0	88.40	93.60	6,879.6	538.6	790.0	1,321,816.05	3,125,781.55	40.215899	-105.049621
8,217.0	89.20	95.40	6,881.6	531.2	883.7	1,321,809.15	3,125,875.27	40.215878	-105.049286
8,312.0	90.70	94.60	6,881.7	522.9	978.4	1,321,801.35	3,125,969.95	40.215856	-105.048947
8,407.0	91.20	93.00	6,880.1	516.7	1,073.1	1,321,795.53	3,126,064.75	40.215838	-105.048608
8,502.0	91.10	89.80	6,878.2	514.3	1,168.1	1,321,793.69	3,126,159.70	40.215832	-105.048268
8,596.0	91.60	89.00	6,876.0	515.3	1,262.0	1,321,795.15	3,126,253.66	40.215835	-105.047931
8,691.0	90.50	87.60	6,874.2	518.1	1,357.0	1,321,798.44	3,126,348.59	40.215842	-105.047591
8,786.0	90.90	87.00	6,873.1	522.6	1,451.9	1,321,803.40	3,126,443.45	40.215855	-105.047251
8,880.0	91.50	86.50	6,871.1	527.9	1,545.7	1,321,809.20	3,126,537.25	40.215869	-105.046915

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Bohrer 2C-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 2C-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
8,975.0	90.30	86.50	6,869.6	533.7	1,640.5	1,321,815.48	3,126,632.03	40.215885	-105.046576
9,070.0	89.70	87.60	6,869.6	538.6	1,735.4	1,321,820.84	3,126,726.87	40.215898	-105.046236
9,164.0	88.70	87.20	6,870.9	542.9	1,829.3	1,321,825.58	3,126,820.74	40.215910	-105.045900
9,259.0	89.40	88.10	6,872.5	546.8	1,924.2	1,321,829.95	3,126,915.63	40.215921	-105.045560
9,353.0	89.20	90.30	6,873.6	548.1	2,018.2	1,321,831.74	3,127,009.60	40.215924	-105.045224
9,448.0	89.20	91.50	6,875.0	546.6	2,113.1	1,321,830.73	3,127,104.58	40.215920	-105.044884
9,543.0	89.80	91.50	6,875.8	544.1	2,208.1	1,321,828.72	3,127,199.56	40.215913	-105.044544
9,638.0	88.70	90.00	6,877.0	542.9	2,303.1	1,321,827.96	3,127,294.54	40.215910	-105.044203
9,733.0	90.30	89.70	6,877.9	543.1	2,398.1	1,321,828.69	3,127,389.53	40.215911	-105.043863
9,828.0	90.40	89.60	6,877.3	543.7	2,493.1	1,321,829.75	3,127,484.53	40.215912	-105.043523
9,922.0	89.20	88.40	6,877.6	545.3	2,587.0	1,321,831.86	3,127,578.50	40.215917	-105.043187
10,017.0	91.00	89.30	6,877.4	547.2	2,682.0	1,321,834.25	3,127,673.46	40.215922	-105.042846
10,112.0	91.20	89.10	6,875.6	548.6	2,777.0	1,321,836.05	3,127,768.45	40.215926	-105.042506
10,207.0	91.10	88.90	6,873.7	550.2	2,872.0	1,321,838.19	3,127,863.40	40.215930	-105.042166
10,302.0	90.00	89.70	6,872.8	551.4	2,967.0	1,321,839.83	3,127,958.38	40.215933	-105.041826
10,397.0	89.90	90.70	6,872.9	551.1	3,062.0	1,321,839.98	3,128,053.38	40.215932	-105.041486
10,491.0	89.50	92.10	6,873.4	548.8	3,155.9	1,321,838.15	3,128,147.36	40.215926	-105.041149
10,586.0	88.10	90.30	6,875.4	546.8	3,250.9	1,321,836.64	3,128,242.32	40.215920	-105.040809
10,682.0	88.10	90.20	6,878.5	546.4	3,346.8	1,321,836.71	3,128,338.27	40.215919	-105.040466
10,776.0	87.60	89.50	6,882.1	546.6	3,440.8	1,321,837.43	3,128,432.20	40.215920	-105.040130
10,871.0	86.90	90.00	6,886.6	547.0	3,535.7	1,321,838.32	3,128,527.09	40.215921	-105.039790
10,966.0	87.70	90.80	6,891.1	546.4	3,630.5	1,321,838.14	3,128,621.98	40.215919	-105.039450
11,061.0	87.20	90.30	6,895.3	545.4	3,725.4	1,321,837.71	3,128,716.88	40.215917	-105.039110
11,155.0	87.10	90.10	6,900.0	545.1	3,819.3	1,321,837.85	3,128,810.75	40.215916	-105.038774
Last CES Survey @ 11,155' MD									
11,320.0	87.10	90.10	6,908.4	544.8	3,984.1	1,321,838.40	3,128,975.53	40.215915	-105.038184
PTB @ 11,320'									

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 2C-19H-E368 PE	0.00	0.00	6,932.0	546.8	4,049.4	1,321,840.67	3,129,040.80	40.215920	-105.037950
- actual wellpath misses target center by 69.5ft at 11320.0ft MD (6908.4 TVD, 544.8 N, 3984.1 E)									
- Point									

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
11,155.0	6,900.0	545.1	3,819.3	Last CES Survey @ 11,155' MD	
11,320.0	6,908.4	544.8	3,984.1	PTB @ 11,320'	

Checked By: _____ Approved By: _____ Date: _____