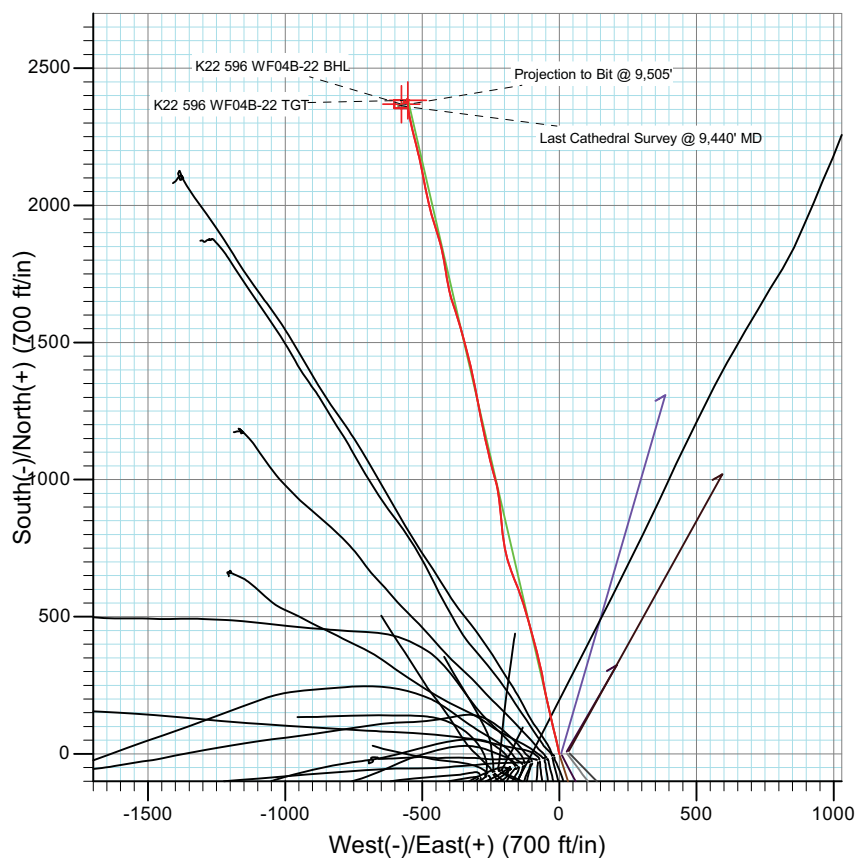
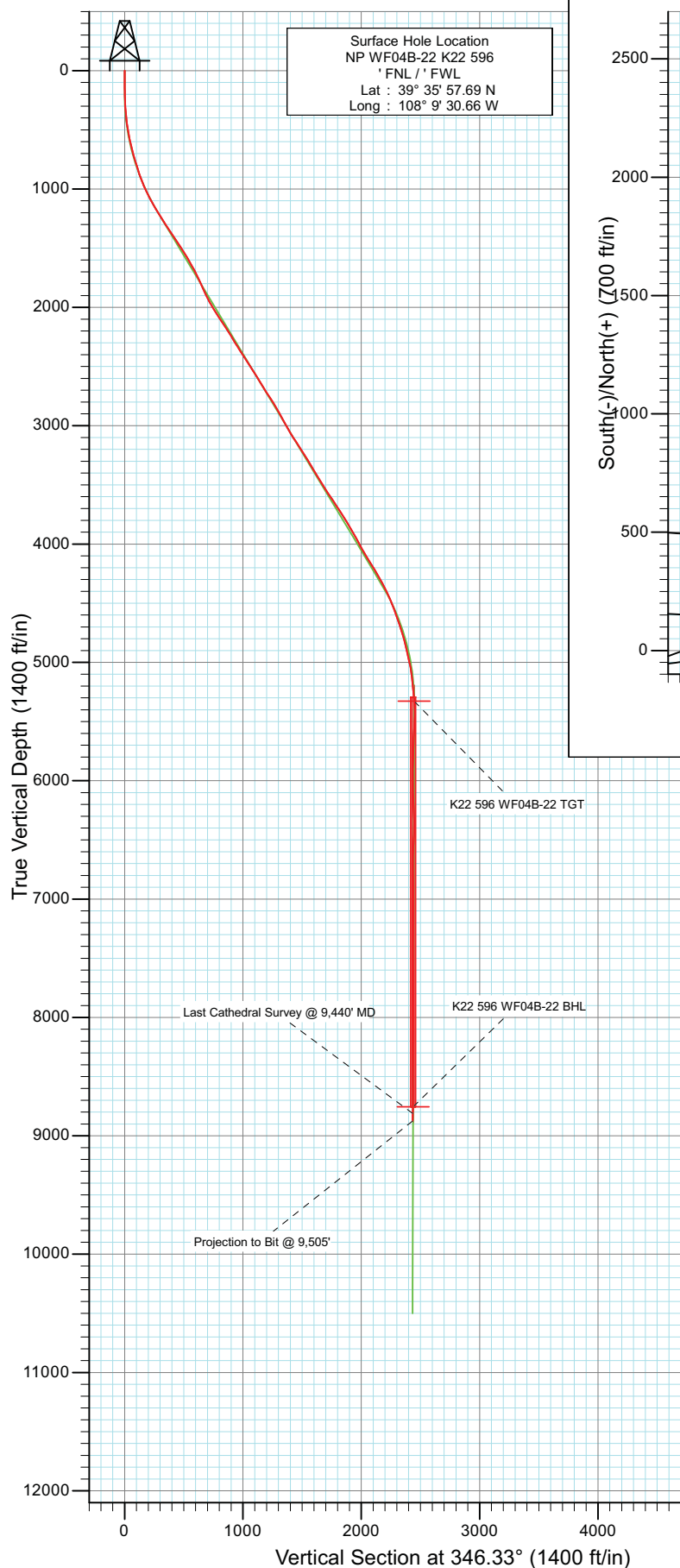




Project: North Piceance
 Site: K22 596 Pad (S22-T5S-R96W)
 Well: NP WF04B-22 K22 596
 Wellbore: DD
 Design: FINAL



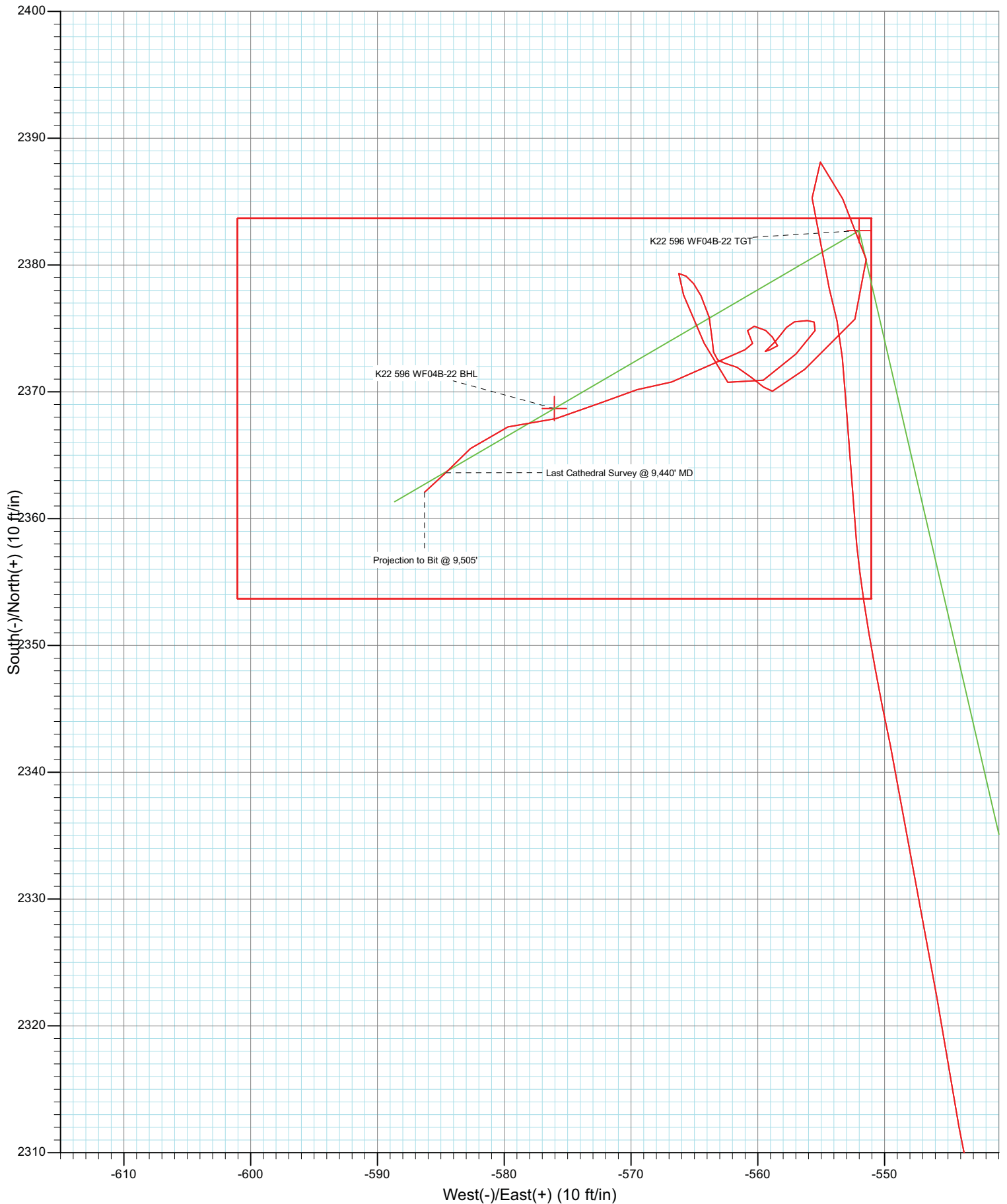
Azimuths to True North
 Magnetic North: 10.51°

Magnetic Field
 Strength: 52387.3nT
 Dip Angle: 65.83°
 Date: 9/13/2010
 Model: IGRF200510

DD NP WF04B-22 K22 596 105328 (SH), 105394 (MH); LR						
WF04B-22 K22 596 @ 6549.0ft (Original Well Elev) North American Datum 1983 Well NP WF04B-22 K22 596, True North						
Type	Target	Azimuth	Origin	Type	N/S	E/W
Target	K22 596 WF04B-22 BHL	346.33	Slot		0.0	0.0
						From TVD
						0.0
Name	TV	+N/-S	+E/-W	Latitude	Longitude	
K22 596 WF04B-22 BHL	8754.0	2368.7	-576.0	39° 36' 21.10 N	108° 9' 38.02 W	



Project: North Piceance
Site: K22 596 Pad (S22-T5S-R96W)
Well: NP WF04B-22 K22 596
Wellbore: DD
Design: FINAL



Cathedral Energy

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well NP WF04B-22 K22 596
Project:	North Piceance	TVD Reference:	WF04B-22 K22 596 @ 6549.0ft (Original Well Elev)
Site:	K22 596 Pad (S22-T5S-R96W)	MD Reference:	WF04B-22 K22 596 @ 6549.0ft (Original Well Elev)
Well:	NP WF04B-22 K22 596	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 5000.1 US Multi Users DB

Project	North Piceance		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site	K22 596 Pad (S22-T5S-R96W)				
Site Position:		Northing:	1,654,096.85 ft	Latitude:	39° 35' 57.02 N
From:	Lat/Long	Easting:	2,250,762.90 ft	Longitude:	108° 9' 33.39 W
Position Uncertainty:	0.0 ft	Slot Radius:	0.000 in	Grid Convergence:	-1.68 °

Well	NP WF04B-22 K22 596					
Well Position	+N/-S	0.0 ft	Northing:	1,654,158.41 ft	Latitude:	39° 35' 57.69 N
	+E/-W	0.0 ft	Easting:	2,250,978.49 ft	Longitude:	108° 9' 30.66 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	6,527.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	9/13/2010	10.51	65.83	52,387

Design	DD				
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	346.33	

Survey Program	Date	9/21/2010			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
147.0	9,505.0	Survey #1 (DD)	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		
147.0	0.70	323.40	147.0	0.7	-0.5	0.8	0.48	0.48		
177.0	0.90	336.40	177.0	1.1	-0.7	1.2	0.90	0.67		
206.0	1.20	336.10	206.0	1.6	-1.0	1.8	1.03	1.03		
237.0	2.00	351.60	237.0	2.4	-1.2	2.6	2.91	2.58		
267.0	2.90	347.10	266.9	3.7	-1.4	3.9	3.07	3.00		
297.0	3.90	347.30	296.9	5.4	-1.8	5.7	3.33	3.33		
327.0	3.80	349.50	326.8	7.4	-2.2	7.7	0.59	-0.33		
357.0	4.60	351.80	356.7	9.5	-2.6	9.9	2.72	2.67		
388.0	5.80	351.20	387.6	12.3	-3.0	12.7	3.87	3.87		
418.0	6.60	350.80	417.4	15.5	-3.5	15.9	2.67	2.67		
448.0	7.30	349.20	447.2	19.1	-4.1	19.5	2.42	2.33		
479.0	8.70	347.20	477.9	23.3	-5.0	23.8	4.60	4.52		

Cathedral Energy

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well NP WF04B-22 K22 596
Project:	North Piceance	TVD Reference:	WF04B-22 K22 596 @ 6549.0ft (Original Well Elev)
Site:	K22 596 Pad (S22-T5S-R96W)	MD Reference:	WF04B-22 K22 596 @ 6549.0ft (Original Well Elev)
Well:	NP WF04B-22 K22 596	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 5000.1 US 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
509.0	9.80	346.90	507.5	28.0	-6.1	28.7	3.67	3.67	
558.0	11.30	346.40	555.7	36.7	-8.2	37.6	3.07	3.06	
604.0	12.50	346.90	600.7	46.0	-10.4	47.1	2.62	2.61	
649.0	13.50	345.70	644.6	55.8	-12.8	57.2	2.30	2.22	
695.0	14.60	345.30	689.2	66.6	-15.5	68.4	2.40	2.39	
741.0	16.20	346.60	733.5	78.5	-18.5	80.6	3.56	3.48	
787.0	17.20	347.20	777.6	91.3	-21.5	93.8	2.21	2.17	
832.0	18.90	348.50	820.4	105.0	-24.4	107.8	3.88	3.78	
878.0	19.40	347.30	863.8	119.7	-27.6	122.9	1.38	1.09	
924.0	20.30	346.00	907.1	134.9	-31.2	138.5	2.18	1.96	
970.0	21.60	346.80	950.0	150.9	-35.1	154.9	2.89	2.83	
1,015.0	22.70	345.60	991.7	167.4	-39.1	171.9	2.64	2.44	
1,061.0	24.50	347.00	1,033.9	185.3	-43.5	190.3	4.10	3.91	
1,107.0	27.20	349.50	1,075.3	204.9	-47.5	210.3	6.33	5.87	
1,152.0	28.70	349.80	1,115.0	225.7	-51.3	231.4	3.35	3.33	
1,244.0	32.20	350.00	1,194.3	271.5	-59.5	277.9	3.81	3.80	
1,335.0	33.90	346.00	1,270.6	320.1	-69.8	327.5	3.04	1.87	
1,427.0	33.90	346.00	1,347.0	369.8	-82.3	378.8	0.00	0.00	
1,574.0	33.10	344.80	1,469.5	448.4	-102.7	459.9	0.71	-0.54	
1,610.0	31.80	344.30	1,499.9	467.0	-107.8	479.2	3.69	-3.61	
1,701.0	31.00	343.90	1,577.6	512.6	-120.8	526.6	0.91	-0.88	
1,755.0	29.70	341.80	1,624.2	538.6	-128.9	553.8	3.11	-2.41	
1,825.0	28.40	341.20	1,685.4	570.9	-139.6	587.7	1.90	-1.86	
1,962.0	23.60	338.00	1,808.5	627.2	-160.4	647.3	3.65	-3.50	
2,053.0	25.80	339.80	1,891.2	662.7	-174.1	685.0	2.55	2.42	
2,145.0	29.80	343.80	1,972.5	703.4	-187.4	727.8	4.80	4.35	
2,236.0	32.80	348.00	2,050.3	749.3	-198.8	775.0	4.07	3.30	
2,328.0	33.80	353.80	2,127.2	799.1	-206.8	825.3	3.63	1.09	
2,419.0	32.90	354.80	2,203.2	848.9	-211.8	874.9	1.16	-0.99	
2,511.0	31.30	354.80	2,281.2	897.6	-216.2	923.2	1.74	-1.74	
2,602.0	32.60	351.40	2,358.4	945.3	-222.0	971.0	2.44	1.43	
2,694.0	33.50	345.10	2,435.5	994.4	-232.2	1,021.1	3.86	0.98	
2,785.0	31.70	344.30	2,512.2	1,041.7	-245.2	1,070.1	2.03	-1.98	
2,877.0	32.90	347.90	2,589.9	1,089.4	-256.9	1,119.3	2.46	1.30	
2,968.0	30.90	346.60	2,667.2	1,136.3	-267.5	1,167.3	2.32	-2.20	
3,059.0	33.50	348.50	2,744.2	1,183.6	-278.0	1,215.8	3.07	2.86	
3,151.0	31.40	348.60	2,821.8	1,232.0	-287.8	1,265.1	2.28	-2.28	
3,242.0	29.60	349.00	2,900.2	1,277.3	-296.7	1,311.3	1.99	-1.98	
3,334.0	28.00	350.50	2,980.9	1,320.9	-304.6	1,355.5	1.91	-1.74	
3,425.0	30.60	348.60	3,060.2	1,364.7	-312.7	1,400.0	3.03	2.86	
3,517.0	33.80	346.30	3,138.0	1,412.5	-323.4	1,449.0	3.72	3.48	
3,608.0	32.30	345.30	3,214.3	1,460.7	-335.6	1,498.6	1.75	-1.65	
3,699.0	32.10	345.60	3,291.3	1,507.6	-347.8	1,547.1	0.28	-0.22	
3,791.0	30.10	344.00	3,370.1	1,553.5	-360.2	1,594.6	2.35	-2.17	
3,882.0	32.10	341.20	3,448.0	1,598.3	-374.3	1,641.5	2.71	2.20	
3,974.0	31.60	342.50	3,526.2	1,644.4	-389.4	1,689.9	0.92	-0.54	
4,065.0	34.90	347.70	3,602.3	1,692.6	-402.2	1,739.7	4.79	3.63	
4,157.0	33.80	351.20	3,678.2	1,743.6	-411.7	1,791.5	2.46	-1.20	
4,248.0	31.60	350.10	3,754.8	1,792.1	-419.6	1,840.5	2.50	-2.42	
4,340.0	31.90	346.80	3,833.1	1,839.5	-429.3	1,888.9	1.92	0.33	
4,431.0	28.60	342.80	3,911.7	1,883.8	-441.3	1,934.7	4.25	-3.63	
4,523.0	28.20	343.50	3,992.6	1,925.6	-454.0	1,978.4	0.57	-0.43	
4,614.0	30.60	343.60	4,071.9	1,968.5	-466.6	2,023.0	2.64	2.64	

Cathedral Energy

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well NP WF04B-22 K22 596
Project:	North Piceance	TVD Reference:	WF04B-22 K22 596 @ 6549.0ft (Original Well Elev)
Site:	K22 596 Pad (S22-T5S-R96W)	MD Reference:	WF04B-22 K22 596 @ 6549.0ft (Original Well Elev)
Well:	NP WF04B-22 K22 596	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 5000.1 US 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
4,705.0	32.30	347.80	4,149.5	2,014.5	-478.3	2,070.5	3.05	1.87	
4,797.0	31.10	348.30	4,227.8	2,061.8	-488.3	2,118.8	1.34	-1.30	
4,889.0	28.50	348.90	4,307.6	2,106.6	-497.3	2,164.5	2.84	-2.83	
4,980.0	27.10	349.30	4,388.1	2,148.3	-505.4	2,206.8	1.55	-1.54	
5,072.0	22.50	346.00	4,471.6	2,186.0	-513.5	2,245.4	5.22	-5.00	
5,163.0	20.40	346.20	4,556.3	2,218.3	-521.5	2,278.7	2.31	-2.31	
5,255.0	18.70	345.30	4,643.0	2,248.1	-529.1	2,309.5	1.88	-1.85	
5,346.0	18.60	346.00	4,729.2	2,276.3	-536.3	2,338.6	0.27	-0.11	
5,438.0	14.00	348.50	4,817.5	2,301.4	-542.1	2,364.4	5.06	-5.00	
5,529.0	12.80	350.90	4,906.0	2,322.2	-545.9	2,385.4	1.45	-1.32	
5,621.0	12.70	348.20	4,995.7	2,342.1	-549.5	2,405.7	0.66	-0.11	
5,712.0	7.60	354.30	5,085.3	2,357.9	-552.2	2,421.6	5.72	-5.60	
5,804.0	6.70	357.20	5,176.6	2,369.4	-553.1	2,432.9	1.05	-0.98	
5,895.0	4.60	343.40	5,267.1	2,378.2	-554.4	2,441.8	2.73	-2.31	
5,987.0	4.50	355.30	5,358.8	2,385.3	-555.7	2,449.0	1.03	-0.11	
6,078.0	1.50	127.90	5,449.8	2,388.1	-555.1	2,451.6	6.18	-3.30	
6,169.0	2.90	159.20	5,540.7	2,385.2	-553.3	2,448.4	1.97	1.54	
6,261.0	3.50	158.40	5,632.5	2,380.4	-551.4	2,443.3	0.65	0.65	
6,352.0	3.60	222.10	5,723.4	2,375.7	-552.3	2,439.0	4.12	0.11	
6,444.0	3.40	227.90	5,815.2	2,371.8	-556.3	2,436.1	0.44	-0.22	
6,535.0	0.70	280.50	5,906.2	2,370.1	-558.8	2,435.0	3.33	-2.97	
6,627.0	1.90	311.30	5,998.1	2,371.2	-560.5	2,436.5	1.46	1.30	
6,718.0	1.20	275.90	6,089.1	2,372.3	-562.6	2,438.0	1.27	-0.77	
6,810.0	2.20	359.70	6,181.1	2,374.1	-563.6	2,440.1	2.60	1.09	
6,901.0	2.40	333.00	6,272.0	2,377.6	-564.5	2,443.6	1.19	0.22	
6,993.0	1.10	273.40	6,364.0	2,379.3	-566.2	2,445.8	2.25	-1.41	
7,084.0	2.70	144.40	6,454.9	2,377.6	-565.9	2,444.0	3.84	1.76	
7,176.0	2.60	169.90	6,546.8	2,373.8	-564.2	2,439.9	1.28	-0.11	
7,267.0	2.30	124.80	6,637.8	2,370.8	-562.4	2,436.5	2.09	-0.33	
7,359.0	2.20	46.60	6,729.7	2,370.9	-559.6	2,436.0	3.09	-0.11	
7,450.0	2.00	56.30	6,820.7	2,373.0	-557.0	2,437.4	0.45	-0.22	
7,542.0	1.20	9.50	6,912.6	2,374.8	-555.5	2,438.8	1.60	-0.87	
7,633.0	1.00	258.10	7,003.6	2,375.6	-556.1	2,439.7	2.00	-0.22	
7,725.0	0.30	285.20	7,095.6	2,375.5	-557.1	2,439.9	0.81	-0.76	
7,816.0	0.80	218.30	7,186.6	2,375.1	-557.7	2,439.6	0.81	0.55	
7,908.0	1.00	218.20	7,278.6	2,373.9	-558.6	2,438.7	0.22	0.22	
7,999.0	0.40	244.80	7,369.6	2,373.2	-559.4	2,438.2	0.73	-0.66	
8,091.0	0.90	67.90	7,461.6	2,373.3	-559.0	2,438.2	1.41	0.54	
8,182.0	0.10	305.30	7,552.6	2,373.6	-558.4	2,438.4	1.05	-0.88	
8,274.0	0.90	331.60	7,644.6	2,374.3	-558.8	2,439.1	0.88	0.87	
8,365.0	1.40	281.60	7,735.6	2,375.2	-560.3	2,440.3	1.18	0.55	
8,456.0	1.00	135.10	7,826.6	2,374.8	-560.8	2,440.1	2.53	-0.44	
8,548.0	0.60	202.00	7,918.5	2,373.8	-560.4	2,439.0	1.02	-0.43	
8,640.0	0.50	263.80	8,010.5	2,373.3	-561.0	2,438.7	0.62	-0.11	
8,731.0	1.50	240.70	8,101.5	2,372.7	-562.4	2,438.4	1.16	1.10	
8,914.0	1.50	251.70	8,284.5	2,370.8	-566.8	2,437.6	0.16	0.00	
9,006.0	2.00	261.80	8,376.4	2,370.2	-569.5	2,437.6	0.64	0.54	
9,097.0	1.90	237.80	8,467.4	2,369.1	-572.4	2,437.3	0.90	-0.11	
9,188.0	2.90	259.10	8,558.3	2,367.9	-575.9	2,436.9	1.45	1.10	
9,280.0	1.90	261.80	8,650.2	2,367.2	-579.7	2,437.2	1.09	-1.09	
9,372.0	2.60	224.20	8,742.1	2,365.5	-582.7	2,436.2	1.73	0.76	
9,440.0	2.00	227.30	8,810.1	2,363.6	-584.6	2,434.8	0.90	-0.88	Last Cathedral Survey @ 9,440' MD
9,505.0	2.00	227.30	8,875.0	2,362.1	-586.3	2,433.7	0.00	0.00	Projection to Bit @ 9,505'

Cathedral Energy

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well NP WF04B-22 K22 596
Project:	North Piceance	TVD Reference:	WF04B-22 K22 596 @ 6549.0ft (Original Well Elev)
Site:	K22 596 Pad (S22-T5S-R96W)	MD Reference:	WF04B-22 K22 596 @ 6549.0ft (Original Well Elev)
Well:	NP WF04B-22 K22 596	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 5000.1 US Multi Users DB

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
K22 596 WF04B-22 TG1	0.00	0.00	5,327.0	2,382.7	-552.0	1,656,556.26	2,250,496.44	39° 36' 21.24 N	108° 9' 37.71 W
- survey misses target center by 3.4ft at 5955.0ft MD (5326.9 TVD, 2382.8 N, -555.4 E)									
- Point									
K22 596 WF04B-22 BHL	0.00	0.00	8,754.0	2,368.7	-576.0	1,656,542.94	2,250,472.00	39° 36' 21.10 N	108° 9' 38.02 W
- survey misses target center by 7.8ft at 9383.6ft MD (8753.7 TVD, 2365.2 N, -583.0 E)									
- Rectangle (sides W30.0 H50.0 D0.0)									

Survey Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
9,440.0	8,810.1	2,363.6	-584.6	Last Cathedral Survey @ 9,440' MD
9,505.0	8,875.0	2,362.1	-586.3	Projection to Bit @ 9,505'

Checked By: _____ Approved By: _____ Date: _____