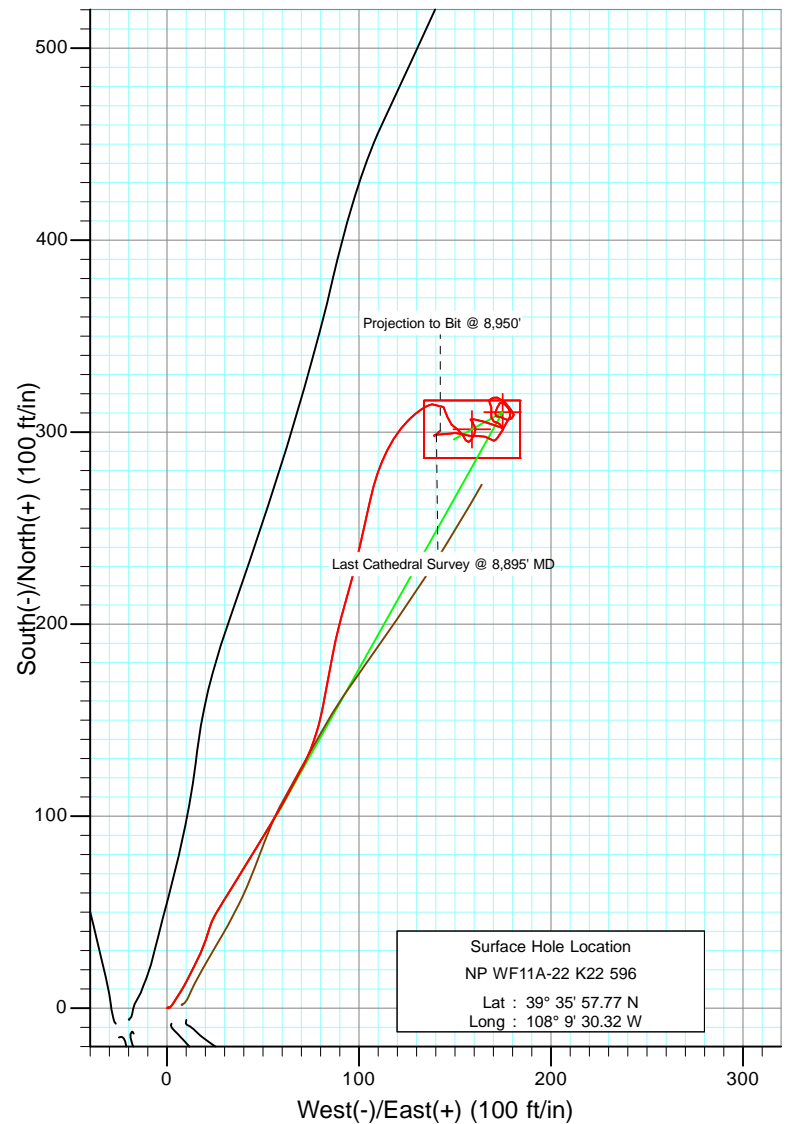
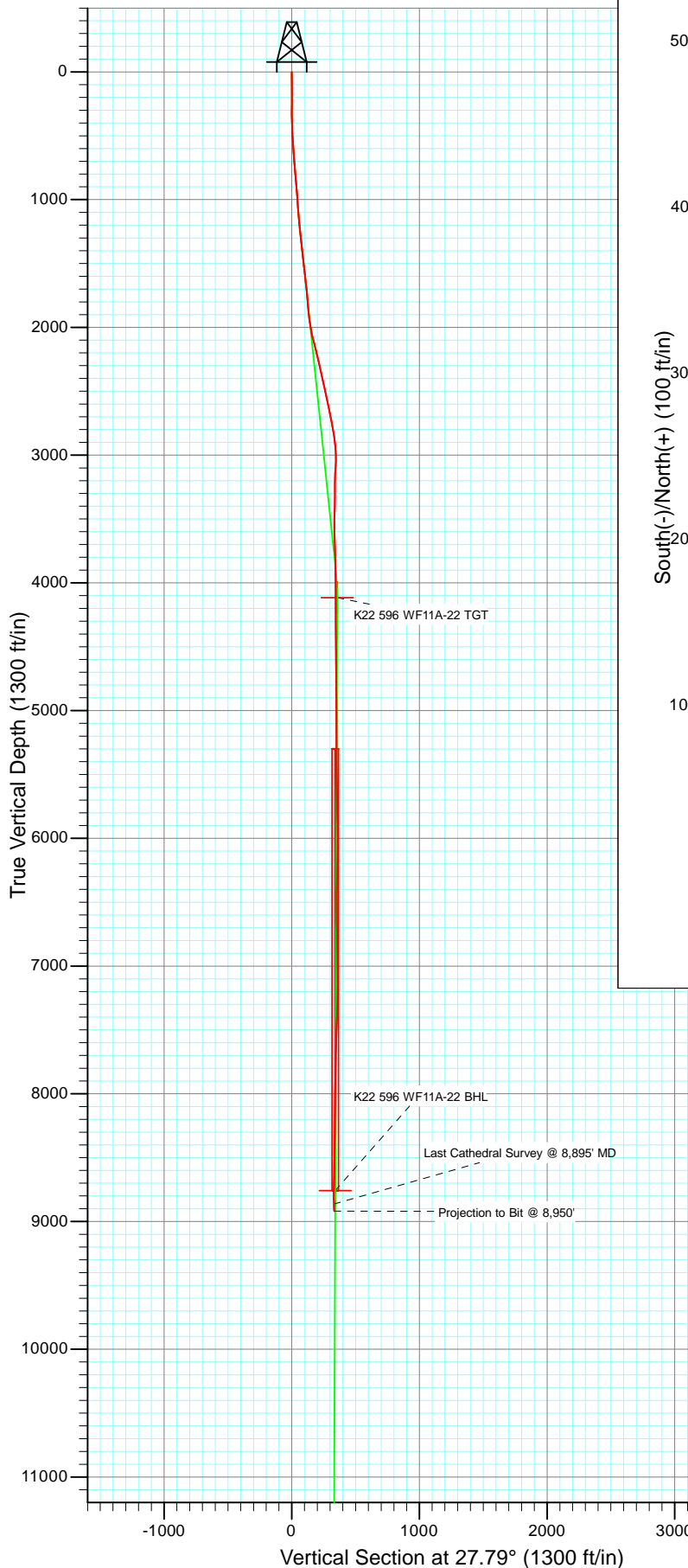




Project: North Piceance  
 Site: K22 596 Pad (S22-T5S-R96W)  
 Well: NP WF11A-22 K22 596  
 Wellbore: DD  
 Design: FINAL



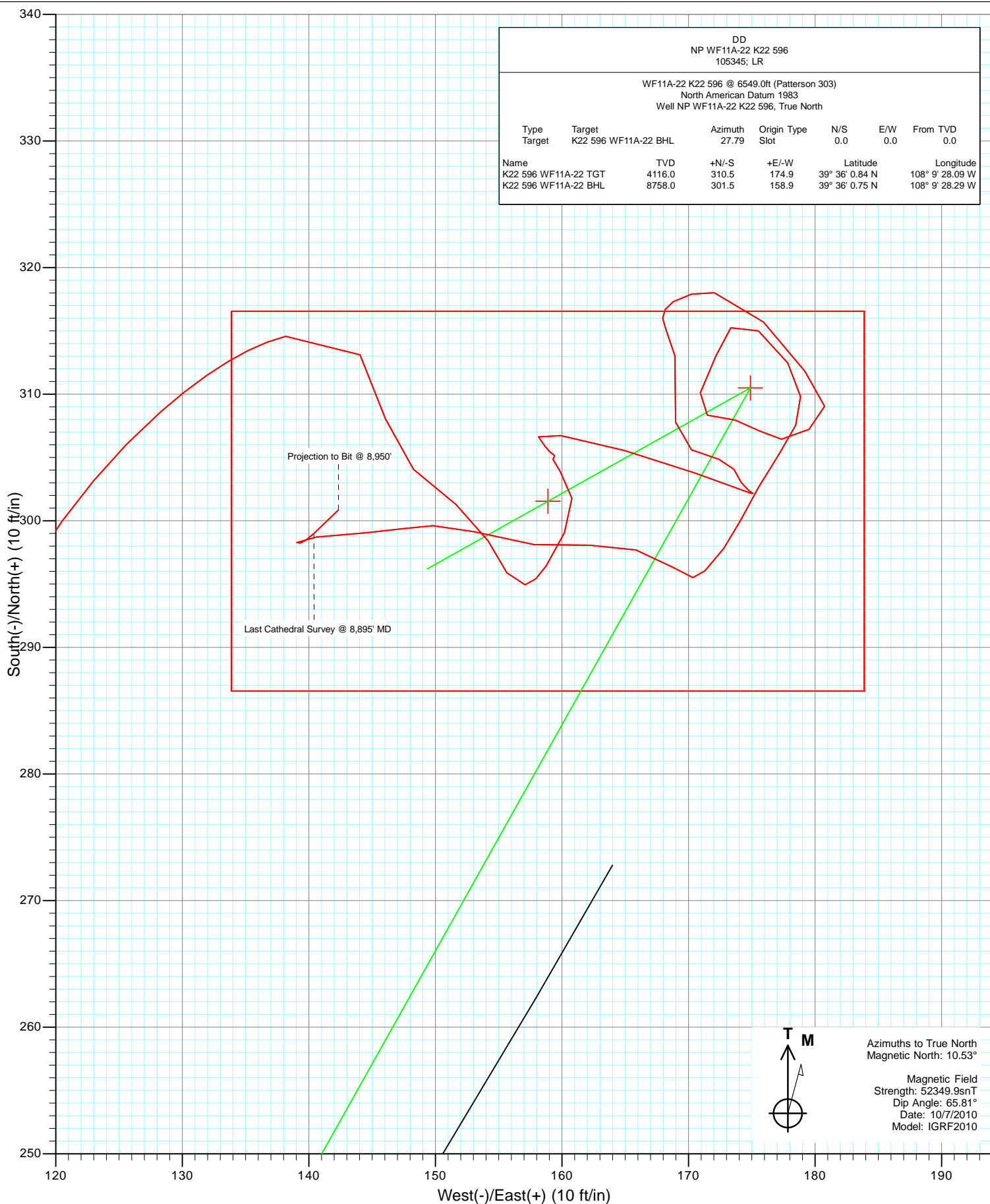
Azimuths to True North  
 Magnetic North: 10.53°

Magnetic Field  
 Strength: 52349.9snT  
 Dip Angle: 65.81°  
 Date: 10/7/2010  
 Model: IGRF2010

DD NP WF11A-22 K22 596 105345; LR						
WF11A-22 K22 596 @ 6549.0ft (Patterson 303) North American Datum 1983 Well NP WF11A-22 K22 596, True North						
Type	Target	Azimuth	Origin Type	N/S	E/W	From TVD
Target	K22 596 WF11A-22 BHL	27.79	Slot	0.0	0.0	0.0
Name	TV	+N/-S	+E/-W	Latitude	Longitude	
K22 596 WF11A-22 TGT	4116.0	310.5	174.9	39° 36' 0.84 N	108° 9' 28.09 W	
K22 596 WF11A-22 BHL	8758.0	301.5	158.9	39° 36' 0.75 N	108° 9' 28.29 W	



Project: North Piceance  
Site: K22 596 Pad (S22-T5S-R96W)  
Well: NP WF11A-22 K22 596  
Wellbore: DD  
Design: FINAL



# Cathedral Energy

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well NP WF11A-22 K22 596
<b>Project:</b>	North Piceance	<b>TVD Reference:</b>	WF11A-22 K22 596 @ 6549.0ft (Patterson 303)
<b>Site:</b>	K22 596 Pad (S22-T5S-R96W)	<b>MD Reference:</b>	WF11A-22 K22 596 @ 6549.0ft (Patterson 303)
<b>Well:</b>	NP WF11A-22 K22 596	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB

<b>Project</b>	North Piceance		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado 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 WF11A-22 K22 596					
Well Position	+N/-S	0.0 ft	Northing:	1,654,165.73 ft	Latitude:	39° 35' 57.77 N
	+E/-W	0.0 ft	Easting:	2,251,005.32 ft	Longitude:	108° 9' 30.32 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	6,527.0 ft

<b>Wellbore</b>	DD				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	10/7/2010	10.53	65.81	52,350

<b>Design</b>	DD				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	27.79	

<b>Survey Program</b>	<b>Date</b>	10/14/2010			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
164.0	8,950.0	Survey #1 (DD)	MWD	Geolink MWD	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Formations / Comments</b>	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00		
164.0	0.50	58.20	164.0	0.4	0.6	0.6	0.30	0.30		
193.0	0.30	20.00	193.0	0.5	0.7	0.8	1.11	-0.69		
224.0	0.20	134.20	224.0	0.6	0.8	0.9	1.37	-0.32		
254.0	0.30	211.90	254.0	0.5	0.8	0.8	1.08	0.33		
284.0	0.20	148.20	284.0	0.3	0.8	0.7	0.92	-0.33		
314.0	0.30	209.70	314.0	0.2	0.8	0.6	0.90	0.33		
344.0	0.40	138.10	344.0	0.1	0.8	0.4	1.39	0.33		
374.0	0.60	71.30	374.0	0.1	1.0	0.5	1.92	0.67		
405.0	1.40	50.90	405.0	0.3	1.5	1.0	2.78	2.58		
435.0	2.20	42.80	435.0	1.0	2.2	1.9	2.79	2.67		
465.0	3.00	31.20	464.9	2.1	2.9	3.2	3.18	2.67		
545.0	3.90	34.90	544.8	6.1	5.6	8.0	1.16	1.12		

# Cathedral Energy

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well NP WF11A-22 K22 596
<b>Project:</b>	North Piceance	<b>TVD Reference:</b>	WF11A-22 K22 596 @ 6549.0ft (Patterson 303)
<b>Site:</b>	K22 596 Pad (S22-T5S-R96W)	<b>MD Reference:</b>	WF11A-22 K22 596 @ 6549.0ft (Patterson 303)
<b>Well:</b>	NP WF11A-22 K22 596	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	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
590.0	4.00	31.70	589.7	8.7	7.3	11.1	0.54	0.22	
636.0	4.40	27.90	635.6	11.6	9.0	14.5	1.06	0.87	
682.0	4.10	26.90	681.4	14.7	10.5	17.9	0.67	-0.65	
773.0	5.20	27.30	772.1	21.2	13.9	25.2	1.21	1.21	
865.0	4.90	24.00	863.8	28.5	17.4	33.3	0.45	-0.33	
956.0	4.40	19.50	954.5	35.4	20.1	40.7	0.68	-0.55	
1,048.0	4.10	15.40	1,046.2	41.9	22.2	47.4	0.46	-0.33	
1,139.0	5.30	30.30	1,136.9	48.6	25.2	54.8	1.87	1.32	
1,231.0	5.80	32.10	1,228.5	56.2	29.8	63.6	0.58	0.54	
1,322.0	6.10	31.40	1,319.0	64.2	34.8	73.0	0.34	0.33	
1,414.0	6.60	31.30	1,410.4	72.9	40.1	83.2	0.54	0.54	
1,505.0	6.40	32.00	1,500.9	81.7	45.5	93.5	0.24	-0.22	
1,597.0	5.80	30.70	1,592.3	90.1	50.6	103.2	0.67	-0.65	
1,655.0	6.00	32.20	1,650.0	95.1	53.7	109.2	0.44	0.34	
1,792.0	5.40	27.80	1,786.3	106.9	60.5	122.8	0.54	-0.44	
1,884.0	5.20	28.40	1,878.0	114.4	64.5	131.3	0.23	-0.22	
1,975.0	8.70	29.00	1,968.3	124.0	69.8	142.3	3.85	3.85	
2,067.0	12.20	19.90	2,058.7	139.3	76.5	158.9	4.19	3.80	
2,158.0	15.70	10.00	2,147.1	160.5	81.9	180.1	4.64	3.85	
2,250.0	14.90	11.20	2,235.8	184.3	86.3	203.3	0.94	-0.87	
2,341.0	12.20	15.70	2,324.3	205.1	91.2	223.9	3.18	-2.97	
2,433.0	12.00	15.30	2,414.2	223.6	96.4	242.8	0.24	-0.22	
2,524.0	13.40	12.10	2,503.0	243.1	101.1	262.2	1.72	1.54	
2,616.0	12.50	12.80	2,592.6	263.2	105.5	282.0	0.99	-0.98	
2,707.0	10.90	19.60	2,681.8	280.9	110.6	300.1	2.32	-1.76	
2,799.0	10.90	32.20	2,772.1	296.5	118.1	317.4	2.58	0.00	
2,890.0	9.40	48.90	2,861.7	308.6	128.3	332.9	3.61	-1.65	
2,981.0	5.50	76.20	2,951.9	314.6	138.2	342.7	5.68	-4.29	
3,073.0	3.70	147.60	3,043.7	313.1	144.0	344.2	6.04	-1.96	
3,164.0	3.30	170.50	3,134.5	308.1	146.1	340.6	1.59	-0.44	
3,256.0	2.80	127.60	3,226.4	304.1	148.3	338.1	2.48	-0.54	
3,347.0	2.70	131.70	3,317.3	301.3	151.6	337.2	0.24	-0.11	
3,439.0	2.10	147.20	3,409.2	298.4	154.2	335.9	0.96	-0.65	
3,530.0	1.60	153.00	3,500.2	295.9	155.6	334.3	0.59	-0.55	
3,622.0	1.10	77.40	3,592.2	294.9	157.1	334.2	1.85	-0.54	
3,713.0	1.90	31.80	3,683.1	296.4	158.7	336.2	1.51	0.88	
3,804.0	1.90	26.00	3,774.1	299.1	160.2	339.2	0.21	0.00	
3,896.0	1.70	356.60	3,866.0	301.8	160.8	341.9	1.01	-0.22	
3,987.0	1.40	312.40	3,957.0	303.9	159.9	343.4	1.32	-0.33	
4,079.0	0.40	50.60	4,049.0	304.8	159.3	344.0	1.64	-1.09	
4,170.0	0.20	311.20	4,140.0	305.2	159.4	344.3	0.52	-0.22	
4,262.0	0.40	305.40	4,232.0	305.4	159.0	344.4	0.22	0.22	
4,353.0	0.40	333.40	4,323.0	305.9	158.6	344.6	0.21	0.00	
4,445.0	0.70	321.20	4,415.0	306.6	158.1	345.0	0.35	0.33	
4,536.0	2.70	99.10	4,506.0	306.7	159.9	345.9	3.58	2.20	
4,628.0	3.70	106.20	4,597.8	305.6	164.9	347.2	1.17	1.09	
4,719.0	3.70	109.10	4,688.6	303.8	170.5	348.2	0.21	0.00	
4,811.0	1.00	113.10	4,780.5	302.5	174.0	348.7	2.94	-2.93	
4,902.0	0.20	93.30	4,871.5	302.2	174.9	348.9	0.90	-0.88	
4,994.0	0.00	280.50	4,963.5	302.2	175.1	348.9	0.22	-0.22	
5,085.0	0.50	304.70	5,054.5	302.4	174.8	349.0	0.55	0.55	
5,177.0	0.60	328.10	5,146.5	303.0	174.2	349.3	0.26	0.11	
5,268.0	0.90	332.60	5,237.5	304.1	173.6	349.9	0.34	0.33	

# Cathedral Energy

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well NP WF11A-22 K22 596
<b>Project:</b>	North Piceance	<b>TVD Reference:</b>	WF11A-22 K22 596 @ 6549.0ft (Patterson 303)
<b>Site:</b>	K22 596 Pad (S22-T5S-R96W)	<b>MD Reference:</b>	WF11A-22 K22 596 @ 6549.0ft (Patterson 303)
<b>Well:</b>	NP WF11A-22 K22 596	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	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
5,360.0	1.10	280.50	5,329.5	304.9	172.4	350.1	0.97	0.22	
5,451.0	1.80	293.70	5,420.5	305.6	170.2	349.7	0.85	0.77	
5,543.0	2.00	2.60	5,512.4	307.8	169.0	351.1	2.34	0.22	
5,726.0	1.30	354.40	5,695.4	313.0	168.9	355.7	0.40	-0.38	
5,817.0	1.70	331.60	5,786.3	315.3	168.2	357.3	0.78	0.44	
5,909.0	1.90	56.20	5,878.3	317.3	168.8	359.4	2.64	0.22	
6,000.0	2.50	93.70	5,969.2	318.0	172.0	361.5	1.67	0.66	
6,092.0	3.60	139.20	6,061.1	315.7	175.9	361.3	2.79	1.20	
6,183.0	2.80	140.80	6,152.0	311.8	179.2	359.4	0.88	-0.88	
6,275.0	1.30	172.20	6,243.9	309.0	180.8	357.7	1.98	-1.63	
6,366.0	2.00	239.90	6,334.9	307.2	179.5	355.5	2.12	0.77	
6,457.0	1.00	271.60	6,425.9	306.4	177.4	353.8	1.39	-1.10	
6,549.0	1.40	303.80	6,517.8	307.1	175.6	353.6	0.84	0.43	
6,640.0	1.30	283.60	6,608.8	308.0	173.7	353.4	0.53	-0.11	
6,732.0	1.50	276.90	6,700.8	308.3	171.5	352.7	0.28	0.22	
6,823.0	2.20	21.40	6,791.8	310.1	170.9	354.0	3.25	0.77	
6,915.0	1.70	24.90	6,883.7	313.0	172.2	357.2	0.56	-0.54	
7,006.0	1.50	31.20	6,974.7	315.2	173.3	359.7	0.29	-0.22	
7,098.0	2.50	129.10	7,066.6	315.0	175.5	360.5	3.36	1.09	
7,189.0	1.90	148.70	7,157.6	312.5	177.8	359.3	1.05	-0.66	
7,281.0	1.70	170.70	7,249.5	309.8	178.9	357.5	0.78	-0.22	
7,372.0	1.40	212.80	7,340.5	307.5	178.5	355.3	1.26	-0.33	
7,464.0	1.80	208.00	7,432.5	305.3	177.2	352.7	0.46	0.43	
7,555.0	2.20	214.40	7,523.4	302.6	175.5	349.6	0.50	0.44	
7,647.0	1.50	200.30	7,615.4	300.0	174.1	346.6	0.90	-0.76	
7,738.0	1.80	219.70	7,706.3	297.8	172.8	344.0	0.69	0.33	
7,830.0	1.10	220.60	7,798.3	296.0	171.3	341.8	0.76	-0.76	
7,921.0	0.50	289.90	7,889.3	295.5	170.3	340.8	1.14	-0.66	
8,013.0	1.80	299.40	7,981.3	296.4	168.7	340.8	1.42	1.41	
8,104.0	2.20	291.30	8,072.2	297.7	165.8	340.7	0.54	0.44	
8,196.0	2.50	262.50	8,164.1	298.1	162.2	339.3	1.31	0.33	
8,287.0	3.10	277.20	8,255.0	298.1	157.8	337.3	1.02	0.66	
8,379.0	2.90	287.60	8,346.9	299.1	153.1	336.0	0.63	-0.22	
8,470.0	1.40	258.40	8,437.8	299.6	149.8	334.9	1.99	-1.65	
8,561.0	1.40	270.50	8,528.8	299.4	147.6	333.7	0.32	0.00	
8,653.0	2.50	259.90	8,620.8	299.1	144.5	331.9	1.25	1.20	
8,744.0	2.50	270.30	8,711.7	298.7	140.6	329.8	0.50	0.00	
8,836.0	0.80	133.30	8,803.6	298.3	139.0	328.7	3.41	-1.85	
8,895.0	2.80	46.40	8,862.6	299.0	140.4	330.0	4.86	3.39	Last Cathedral Survey @ 8,895' MD
8,950.0	2.80	46.40	8,917.5	300.9	142.3	332.5	0.00	0.00	Projection to Bit @ 8,950'

# Cathedral Energy

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well NP WF11A-22 K22 596
<b>Project:</b>	North Piceance	<b>TVD Reference:</b>	WF11A-22 K22 596 @ 6549.0ft (Patterson 303)
<b>Site:</b>	K22 596 Pad (S22-T5S-R96W)	<b>MD Reference:</b>	WF11A-22 K22 596 @ 6549.0ft (Patterson 303)
<b>Well:</b>	NP WF11A-22 K22 596	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	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 WF11A-22 TG1	0.00	0.00	4,116.0	310.5	174.9	1,654,470.98	2,251,189.23	39° 36' 0.84 N	108° 9' 28.09 W
- survey misses target center by 16.4ft at 4146.0ft MD (4116.0 TVD, 305.1 N, 159.5 E)									
- Point									
K22 596 WF11A-22 BHL	0.00	0.00	8,758.0	301.5	158.9	1,654,462.50	2,251,172.97	39° 36' 0.75 N	108° 9' 28.29 W
- survey misses target center by 19.9ft at 8790.0ft MD (8757.7 TVD, 298.6 N, 139.2 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)	
8,895.0	8,862.6	299.0	140.4	Last Cathedral Survey @ 8,895' MD
8,950.0	8,917.5	300.9	142.3	Projection to Bit @ 8,950'

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