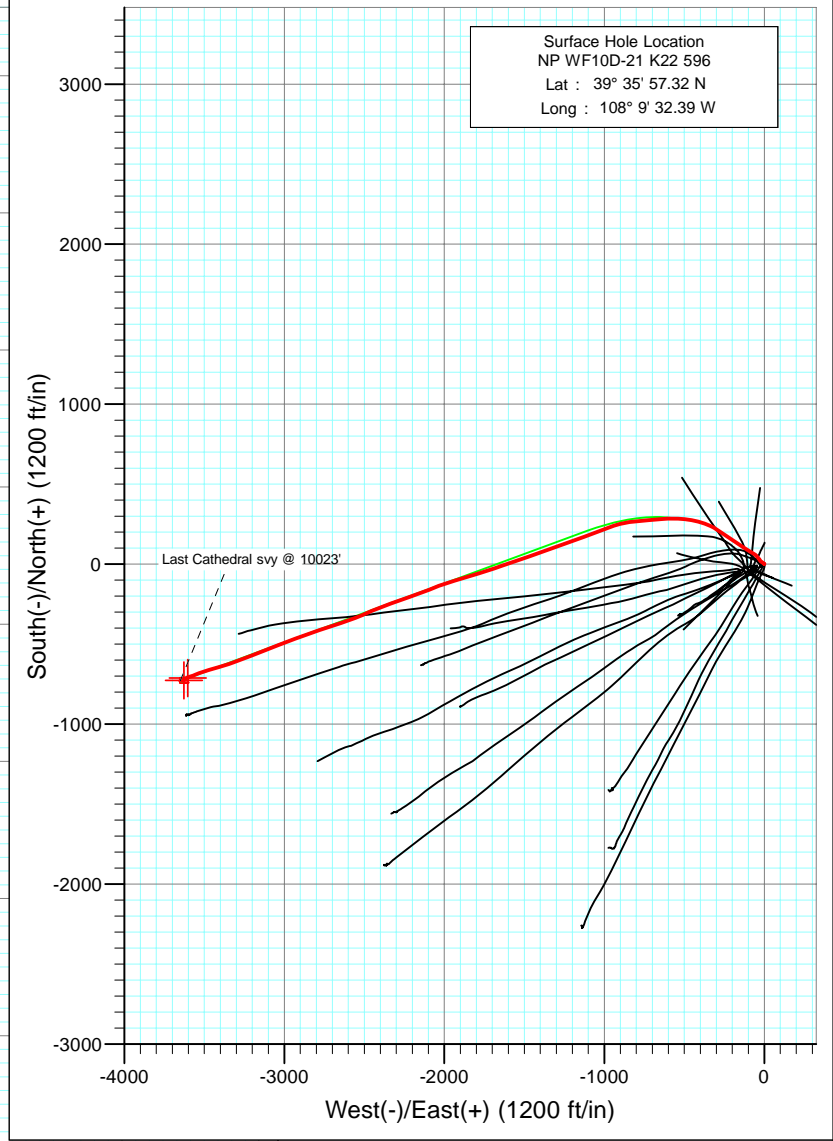
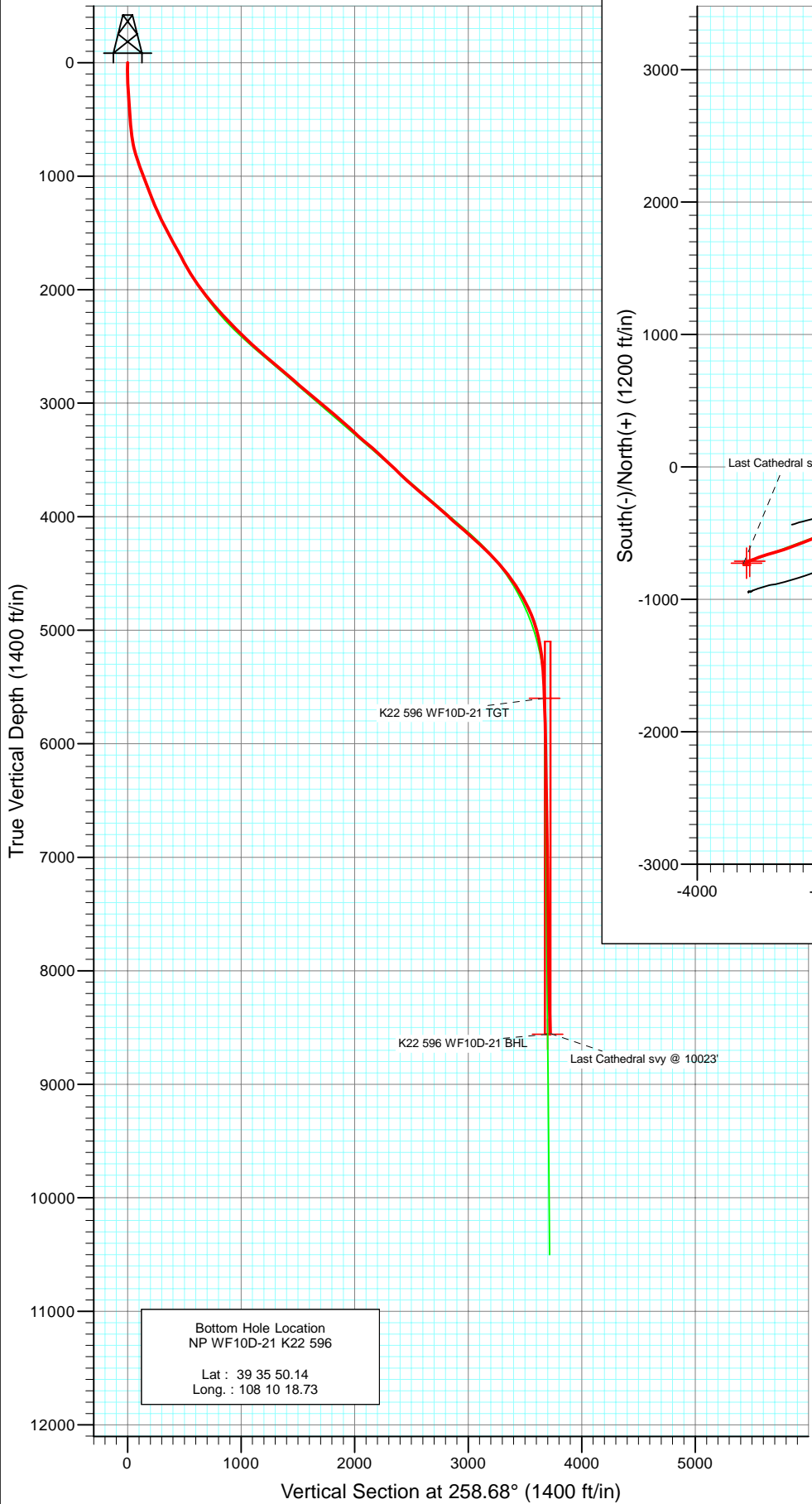


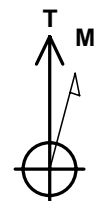


Project: North Piceance
 Site: K22 596 Pad (S22-T5S-R96W)
 Well: NP WF10D-21 K22 596
 Wellbore: DD
 Design: Final Survey



Surface Hole Location
 NP WF10D-21 K22 596
 Lat : 39° 35' 57.32 N
 Long : 108° 9' 32.39 W

Bottom Hole Location
 NP WF10D-21 K22 596
 Lat : 39 35 50.14
 Long : 108 10 18.73



Azimuths to True North
 Magnetic North: 10.59°
 Magnetic Field
 Strength: 52396.2snT
 Dip Angle: 65.82°
 Date: 4/22/2010
 Model: IGRF2010

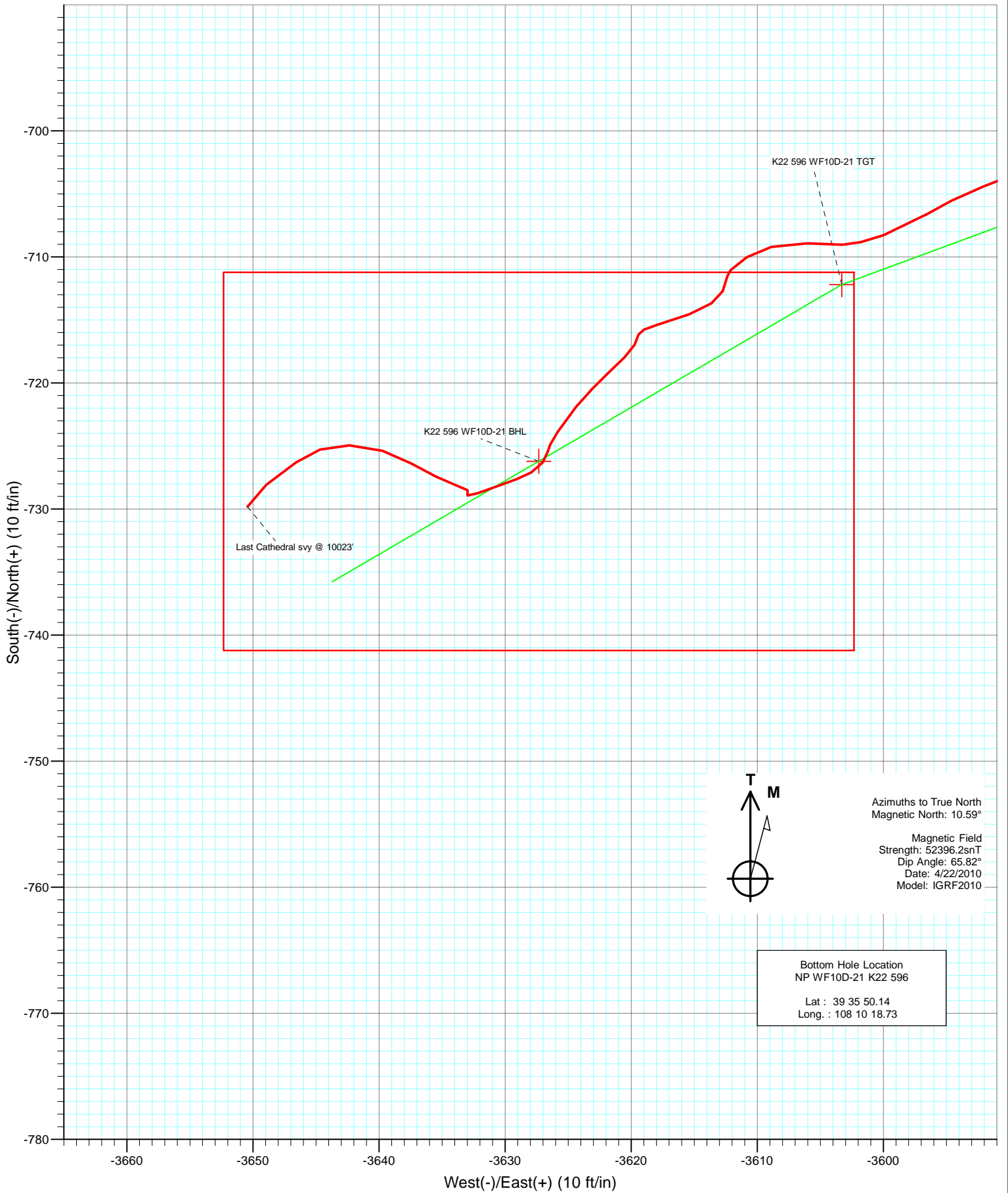
DESIGN DETAILS: DD

105053 (SH) 105174 (MH): LR
 WELL @ 6546.0ft (Patterson 303)

Target	Azimuth	Origin	N/S	E/W	From TVD
K22 596 WF10D-21 BHL	258.68	Slot	0.0	0.0	0.0



Project: North Piceance
Site: K22 596 Pad (S22-T5S-R96W)
Well: NP WF10D-21 K22 596
Wellbore: DD
Design: DD



Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference: Well NP WF10D-21 K22 596
Project: North Piceance	TVD Reference: WELL @ 6546.0ft (Patterson 303)
Site: K22 596 Pad (S22-T5S-R96W)	MD Reference: WELL @ 6546.0ft (Patterson 303)
Well: NP WF10D-21 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 WF10D-21 K22 596					
Well Position	+N/-S	0.0 ft	Northing:	1,654,124.97 ft	Latitude: 39° 35' 57.32 N
	+E/-W	0.0 ft	Easting:	2,250,842.03 ft	Longitude: 108° 9' 32.39 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level: 6,524.0 ft

Wellbore DD					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/22/2010	10.59	65.82	52,396

Design DD					
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	258.68	

Survey Program		Date 5/14/2010
From (ft)	To (ft)	Survey (Wellbore)
143.0	1,780.0	Survey #1 (DD)
1,854.0	10,023.0	Survey #2 (DD)
		Tool Name
		MWD
		MWD
		Description
		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	
143.0	1.50	329.90	143.0	1.6	-0.9	0.6	1.05	1.05	
174.0	2.30	326.80	174.0	2.5	-1.5	1.0	2.60	2.58	
205.0	3.30	311.10	204.9	3.6	-2.5	1.7	4.04	3.23	
235.0	3.90	302.70	234.9	4.7	-4.0	3.0	2.66	2.00	
266.0	5.20	299.90	265.8	6.0	-6.1	4.8	4.25	4.19	
296.0	6.90	302.50	295.6	7.6	-8.8	7.1	5.74	5.67	
327.0	7.50	308.10	326.4	9.9	-12.0	9.8	2.98	1.94	
358.0	7.30	305.90	357.1	12.3	-15.2	12.5	1.12	-0.65	
388.0	7.20	301.00	386.9	14.4	-18.3	15.1	2.09	-0.33	
419.0	6.90	309.30	417.6	16.6	-21.4	17.8	3.42	-0.97	
450.0	6.90	318.20	448.4	19.1	-24.1	19.9	3.45	0.00	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well NP WF10D-21 K22 596
Project:	North Piceance	TD Reference:	WELL @ 6546.0ft (Patterson 303)
Site:	K22 596 Pad (S22-T5S-R96W)	MD Reference:	WELL @ 6546.0ft (Patterson 303)
Well:	NP WF10D-21 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
481.0	7.80	324.70	479.2	22.2	-26.6	21.7	3.95	2.90	
511.0	8.90	329.80	508.8	25.9	-28.9	23.3	4.42	3.67	
560.0	11.20	321.70	557.1	32.9	-33.8	26.6	5.50	4.69	
606.0	12.70	319.10	602.1	40.2	-39.8	31.2	3.46	3.26	
652.0	14.10	318.30	646.8	48.2	-46.9	36.5	3.07	3.04	
698.0	15.80	311.20	691.3	56.5	-55.3	43.1	5.43	3.70	
744.0	17.90	304.80	735.3	64.7	-65.8	51.9	6.09	4.57	
789.0	20.50	302.80	777.8	72.9	-78.1	62.3	5.96	5.78	
835.0	22.10	300.00	820.7	81.6	-92.4	74.6	4.12	3.48	
881.0	23.90	301.10	863.0	90.8	-107.9	88.0	4.02	3.91	
973.0	27.20	301.40	946.0	111.3	-141.8	117.2	3.59	3.59	
1,064.0	29.10	303.20	1,026.2	134.3	-178.1	148.2	2.29	2.09	
1,156.0	29.30	305.50	1,106.5	159.6	-215.1	179.6	1.24	0.22	
1,248.0	30.30	306.70	1,186.4	186.6	-252.1	210.5	1.27	1.09	
1,339.0	30.90	303.00	1,264.7	213.0	-290.1	242.6	2.17	0.66	
1,431.0	29.70	295.40	1,344.2	235.7	-330.5	277.8	4.36	-1.30	
1,523.0	29.90	288.30	1,424.0	252.6	-372.8	316.0	3.84	0.22	
1,615.0	31.40	285.80	1,503.2	266.4	-417.7	357.3	2.14	1.63	
1,706.0	30.30	278.10	1,581.3	276.1	-463.2	400.0	4.50	-1.21	
1,780.0	30.60	275.60	1,645.1	280.5	-500.5	435.7	1.76	0.41	Last Survey @ 1780' MD
1,854.0	29.00	273.50	1,709.3	283.5	-537.1	471.0	2.58	-2.16	
1,887.0	27.90	272.30	1,738.3	284.3	-552.8	486.3	3.76	-3.33	
1,932.0	28.30	268.90	1,778.0	284.5	-574.0	507.0	3.67	0.89	
1,978.0	29.90	268.20	1,818.2	283.9	-596.4	529.0	3.56	3.48	
2,024.0	31.90	266.40	1,857.7	282.8	-620.0	552.4	4.79	4.35	
2,070.0	33.20	264.70	1,896.5	280.9	-644.6	577.0	3.46	2.83	
2,116.0	35.10	265.30	1,934.5	278.6	-670.4	602.6	4.19	4.13	
2,162.0	36.30	265.40	1,971.9	276.4	-697.1	629.3	2.61	2.61	
2,207.0	37.40	265.70	2,007.9	274.3	-724.0	656.1	2.48	2.44	
2,253.0	38.90	266.30	2,044.1	272.4	-752.4	684.3	3.36	3.26	
2,299.0	39.90	265.20	2,079.6	270.2	-781.5	713.2	2.65	2.17	
2,345.0	39.80	262.80	2,114.9	267.1	-810.8	742.6	3.35	-0.22	
2,391.0	40.60	262.00	2,150.1	263.2	-840.2	772.2	2.07	1.74	
2,437.0	41.50	258.80	2,184.8	258.1	-870.0	802.4	4.97	1.96	
2,483.0	42.30	255.10	2,219.0	251.2	-899.9	833.1	5.65	1.74	
2,528.0	42.70	252.30	2,252.2	242.7	-929.1	863.4	4.30	0.89	
2,574.0	43.20	251.10	2,285.9	232.8	-958.8	894.5	2.08	1.09	
2,620.0	44.20	249.50	2,319.1	222.1	-988.8	925.9	3.24	2.17	
2,666.0	45.30	248.90	2,351.8	210.6	-1,019.0	957.9	2.56	2.39	
2,712.0	46.10	249.70	2,383.9	199.0	-1,049.8	990.3	2.14	1.74	
2,804.0	48.30	250.00	2,446.4	175.7	-1,113.2	1,057.0	2.40	2.39	
2,895.0	47.10	249.40	2,507.7	152.4	-1,176.3	1,123.5	1.41	-1.32	
2,987.0	48.90	250.50	2,569.2	129.0	-1,240.5	1,191.1	2.15	1.96	
3,079.0	51.70	250.80	2,628.0	105.5	-1,307.3	1,261.2	3.05	3.04	
3,170.0	50.40	251.20	2,685.2	82.5	-1,374.2	1,331.3	1.47	-1.43	
3,262.0	48.00	250.00	2,745.3	59.3	-1,439.9	1,400.3	2.79	-2.61	
3,354.0	48.90	250.20	2,806.3	35.9	-1,504.7	1,468.3	0.99	0.98	
3,445.0	51.80	250.90	2,864.4	12.6	-1,570.7	1,537.7	3.24	3.19	
3,537.0	50.70	251.60	2,922.0	-10.5	-1,638.7	1,608.8	1.33	-1.20	
3,628.0	48.80	251.60	2,980.8	-32.4	-1,704.6	1,677.8	2.09	-2.09	
3,720.0	51.10	252.80	3,040.0	-53.9	-1,771.6	1,747.7	2.69	2.50	
3,812.0	50.20	253.00	3,098.3	-74.8	-1,839.6	1,818.5	0.99	-0.98	
3,903.0	49.10	253.20	3,157.2	-95.0	-1,906.0	1,887.5	1.22	-1.21	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well NP WF10D-21 K22 596
Project:	North Piceance	TVD Reference:	WELL @ 6546.0ft (Patterson 303)
Site:	K22 596 Pad (S22-T5S-R96W)	MD Reference:	WELL @ 6546.0ft (Patterson 303)
Well:	NP WF10D-21 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
3,995.0	46.50	253.30	3,219.0	-114.6	-1,971.2	1,955.4	2.83	-2.83	
4,086.0	48.10	249.20	3,280.7	-136.1	-2,034.5	2,021.6	3.75	1.76	
4,178.0	50.90	248.90	3,340.5	-161.2	-2,099.8	2,090.6	3.05	3.04	
4,270.0	49.10	249.50	3,399.6	-186.2	-2,165.7	2,160.1	2.02	-1.96	
4,361.0	46.90	250.70	3,460.5	-209.2	-2,229.3	2,227.0	2.61	-2.42	
4,452.0	47.90	250.00	3,522.1	-231.7	-2,292.4	2,293.3	1.24	1.10	
4,544.0	45.80	250.50	3,585.0	-254.4	-2,355.5	2,359.6	2.32	-2.28	
4,636.0	47.20	247.50	3,648.3	-278.4	-2,417.8	2,425.4	2.81	1.52	
4,727.0	49.60	247.00	3,708.8	-304.7	-2,480.6	2,492.1	2.67	2.64	
4,819.0	48.80	248.30	3,768.9	-331.2	-2,545.0	2,560.5	1.38	-0.87	
4,910.0	49.90	249.90	3,828.2	-355.8	-2,609.5	2,628.5	1.80	1.21	
5,002.0	51.20	252.60	3,886.6	-378.6	-2,676.7	2,699.0	2.67	1.41	
5,094.0	48.40	251.80	3,946.0	-400.1	-2,743.6	2,768.8	3.12	-3.04	
5,185.0	47.20	250.60	4,007.1	-421.8	-2,807.4	2,835.6	1.64	-1.32	
5,277.0	48.70	249.50	4,068.7	-445.1	-2,871.7	2,903.2	1.86	1.63	
5,369.0	50.60	250.40	4,128.3	-469.1	-2,937.5	2,972.5	2.20	2.07	
5,460.0	49.00	249.70	4,187.0	-492.8	-3,002.9	3,041.2	1.85	-1.76	
5,552.0	47.00	248.40	4,248.6	-517.3	-3,066.7	3,108.6	2.41	-2.17	
5,643.0	45.20	248.40	4,311.7	-541.4	-3,127.7	3,173.1	1.98	-1.98	
5,735.0	43.40	248.30	4,377.5	-565.1	-3,187.4	3,236.3	1.96	-1.96	
5,827.0	41.20	250.10	4,445.6	-587.1	-3,245.2	3,297.4	2.73	-2.39	
5,919.0	36.60	249.30	4,517.2	-607.1	-3,299.4	3,354.4	5.03	-5.00	
6,010.0	34.10	251.80	4,591.4	-624.7	-3,349.0	3,406.5	3.17	-2.75	
6,102.0	31.60	252.80	4,668.7	-639.9	-3,396.6	3,456.1	2.78	-2.72	
6,193.0	27.50	254.00	4,747.8	-652.7	-3,439.6	3,500.8	4.55	-4.51	
6,285.0	24.60	252.60	4,830.5	-664.3	-3,478.3	3,541.0	3.22	-3.15	
6,377.0	20.20	252.40	4,915.5	-674.8	-3,511.7	3,575.8	4.78	-4.78	
6,468.0	15.20	249.50	5,002.2	-683.8	-3,537.9	3,603.3	5.58	-5.49	
6,560.0	11.30	245.60	5,091.7	-691.7	-3,557.4	3,623.9	4.35	-4.24	
6,652.0	8.70	249.60	5,182.3	-697.9	-3,572.1	3,639.6	2.92	-2.83	
6,743.0	6.90	254.50	5,272.4	-701.7	-3,583.8	3,651.9	2.11	-1.98	
6,835.0	3.90	247.70	5,364.0	-704.4	-3,592.0	3,660.4	3.33	-3.26	
6,927.0	2.30	237.40	5,455.9	-706.6	-3,596.5	3,665.2	1.83	-1.74	
7,018.0	2.60	250.10	5,546.8	-708.3	-3,600.0	3,669.0	0.68	0.33	
7,110.0	1.60	267.90	5,638.7	-709.0	-3,603.2	3,672.3	1.29	-1.09	
7,202.0	1.90	275.90	5,730.7	-708.9	-3,606.0	3,675.0	0.42	0.33	
7,293.0	1.80	252.40	5,821.7	-709.2	-3,608.9	3,677.9	0.83	-0.11	
7,445.0	1.10	220.00	5,973.6	-711.0	-3,612.1	3,681.4	0.69	-0.46	
7,476.0	0.90	193.70	6,004.6	-711.5	-3,612.4	3,681.7	1.60	-0.65	
7,568.0	0.70	203.30	6,096.6	-712.7	-3,612.7	3,682.4	0.26	-0.22	
7,660.0	1.00	236.60	6,188.6	-713.7	-3,613.6	3,683.4	0.61	0.33	
7,751.0	1.50	248.30	6,279.6	-714.6	-3,615.4	3,685.3	0.61	0.55	
7,843.0	1.80	254.70	6,371.5	-715.4	-3,617.9	3,688.0	0.38	0.33	
7,934.0	0.50	195.90	6,462.5	-716.1	-3,619.4	3,689.6	1.76	-1.43	
8,026.0	0.60	206.20	6,554.5	-717.0	-3,619.7	3,690.0	0.15	0.11	
8,118.0	1.00	225.40	6,646.5	-718.0	-3,620.5	3,691.0	0.52	0.43	
8,209.0	1.20	227.20	6,737.5	-719.2	-3,621.8	3,692.5	0.22	0.22	
8,301.0	1.10	222.90	6,829.5	-720.5	-3,623.1	3,694.0	0.14	-0.11	
8,392.0	1.30	220.70	6,920.4	-721.9	-3,624.4	3,695.5	0.23	0.22	
8,484.0	1.80	213.30	7,012.4	-723.9	-3,625.8	3,697.4	0.58	0.54	
8,576.0	0.50	182.30	7,104.4	-725.5	-3,626.6	3,698.5	1.52	-1.41	
8,668.0	0.70	221.80	7,196.4	-726.3	-3,627.0	3,699.0	0.49	0.22	
8,759.0	0.80	235.40	7,287.4	-727.1	-3,627.9	3,700.1	0.22	0.11	

Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference: Well NP WF10D-21 K22 596
Project: North Piceance	TVD Reference: WELL @ 6546.0ft (Patterson 303)
Site: K22 596 Pad (S22-T5S-R96W)	MD Reference: WELL @ 6546.0ft (Patterson 303)
Well: NP WF10D-21 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
8,851.0	0.80	254.40	7,379.4	-727.6	-3,629.1	3,701.3	0.29	0.00	
8,941.0	1.00	246.90	7,469.4	-728.1	-3,630.4	3,702.7	0.26	0.22	
9,032.0	1.40	252.70	7,560.3	-728.7	-3,632.2	3,704.6	0.46	0.44	
9,124.0	0.40	61.50	7,652.3	-728.9	-3,633.0	3,705.4	1.95	-1.09	
9,216.0	0.50	314.70	7,744.3	-728.5	-3,633.0	3,705.3	0.79	0.11	
9,307.0	0.90	280.60	7,835.3	-728.1	-3,634.0	3,706.2	0.62	0.44	
9,399.0	1.20	303.00	7,927.3	-727.4	-3,635.5	3,707.5	0.55	0.33	
9,491.0	1.60	294.30	8,019.3	-726.4	-3,637.5	3,709.3	0.49	0.43	
9,582.0	1.50	293.10	8,110.2	-725.4	-3,639.7	3,711.3	0.12	-0.11	
9,674.0	1.90	268.50	8,202.2	-724.9	-3,642.3	3,713.8	0.89	0.43	
9,765.0	1.10	250.20	8,293.2	-725.3	-3,644.7	3,716.1	1.01	-0.88	
9,857.0	1.60	236.50	8,385.1	-726.3	-3,646.6	3,718.2	0.64	0.54	
9,949.0	2.10	230.00	8,477.1	-728.1	-3,648.9	3,720.9	0.59	0.54	
10,023.0	1.50	207.20	8,551.1	-729.8	-3,650.4	3,722.7	1.25	-0.81	Last Cathedral svy @ 10023'

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
K22 596 WF10D-21 TG ¹ - hit/miss target - Shape	0.00	0.00	5,599.0	-712.2	-3,603.3	1,653,518.53	2,247,219.44	39° 35' 50.28 N	108° 10' 18.42 W
- actual wellpath misses target center by 3.6ft at 7070.3ft MD (5599.1 TVD, -708.9 N, -3602.0 E)									
- Point									
K22 596 WF10D-21 BHL	0.00	0.00	8,559.0	-726.2	-3,627.3	1,653,505.22	2,247,195.01	39° 35' 50.14 N	108° 10' 18.73 W
- actual wellpath misses target center by 24.7ft at 10023.0ft MD (8551.1 TVD, -729.8 N, -3650.4 E)									
- Rectangle (sides W30.0 H50.0 D0.0)									

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
1,780.0	1,645.1	280.5	-500.5	Last Survey @ 1780' MD	
10,023.0	8,551.1	-729.8	-3,650.4	Last Cathedral svy @ 10023'	

Checked By: _____ Approved By: _____ Date: _____