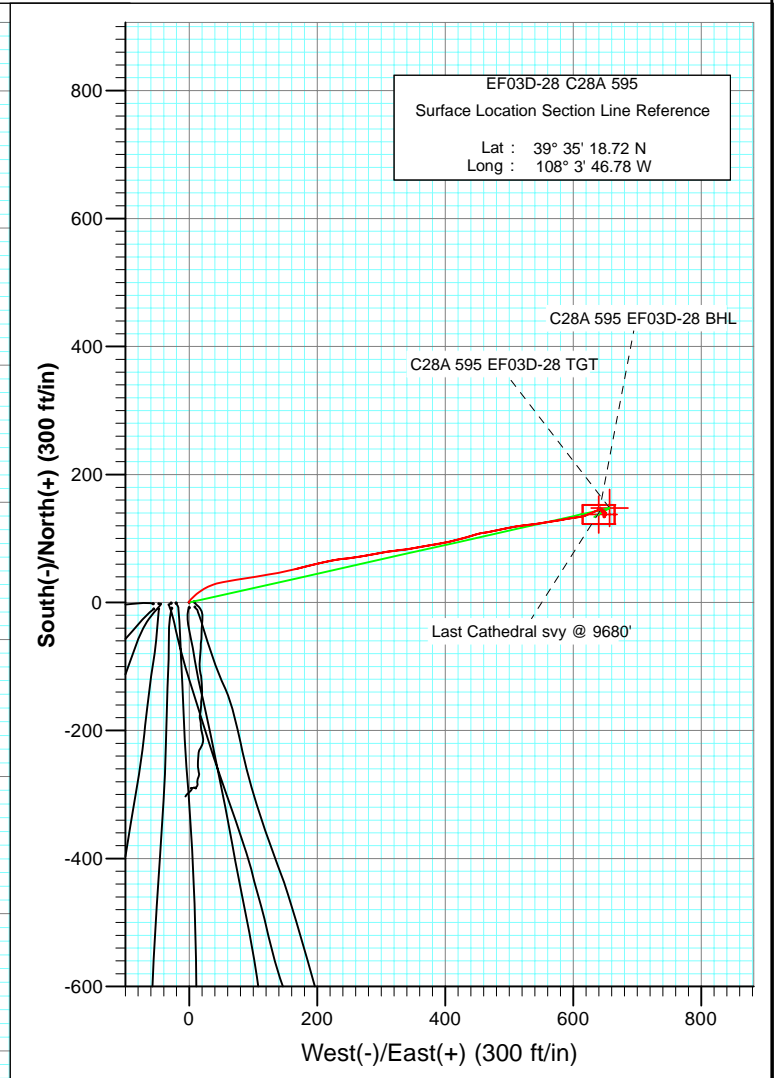
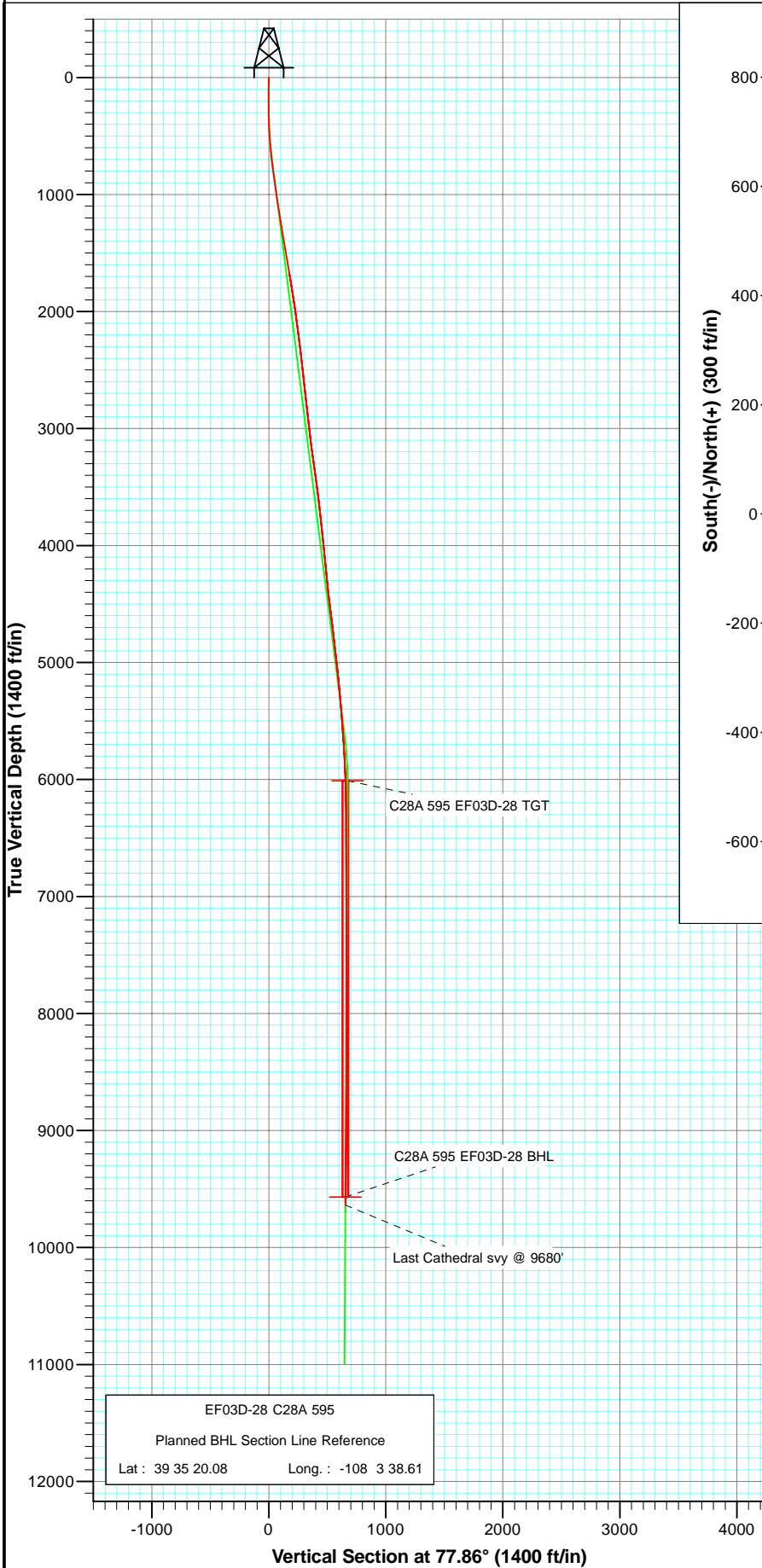




Project: North Piceance
 Site: C28A 595 (Sec28-T5S-R95W)
 Well: EF03D-28 C28A 595
 Wellbore: DD
 Plan: Final Survey



Azimuths to True North
 Magnetic North: 10.56°

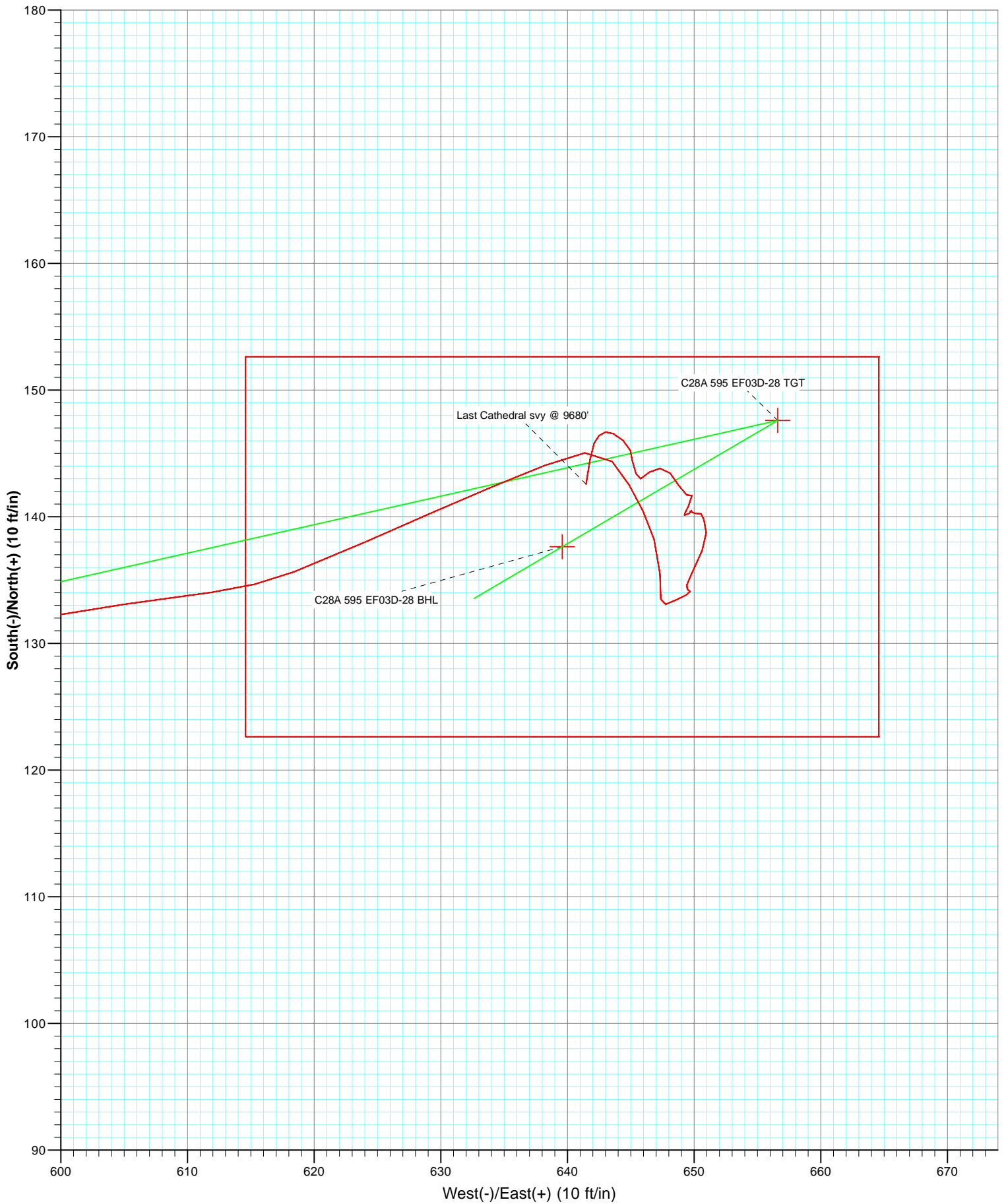
Magnetic Field
 Strength: 52468.0snT
 Dip Angle: 65.85°
 Date: 12/20/2009
 Model: IGRF200510

DESIGN DETAILS: DD
 Job# 95284 (SH) 105019 (MH); LR
 WELL @ 6190.0ft (Patterson 306)

Target	Azimuth	Origin Type	N/S	E/W	From TVD
C28A 595 EF03D-28 BHL	77.86	Slot	0.0	0.0	0.0



Project: North Piceance
Site: C28A 595 (Sec28-T5S-R95W)
Well: EF03D-28 C28A 595
Wellbore: DD
Plan: DD



Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference: Well EF03D-28 C28A 595
Project: North Piceance	TVD Reference: WELL @ 6190.0ft (Patterson 306)
Site: C28A 595 (Sec28-T5S-R95W)	MD Reference: WELL @ 6190.0ft (Patterson 306)
Well: EF03D-28 C28A 595	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 C28A 595 (Sec28-T5S-R95W)					
Site Position:	Northing: 1,649,436.23 ft	Latitude: 39° 35' 18.65 N			
From: Lat/Long	Easting: 2,277,781.44 ft	Longitude: 108° 3' 46.67 W			
Position Uncertainty: 0.0 ft	Slot Radius: 13.200 in	Grid Convergence: -1.62 °			

Well EF03D-28 C28A 595					
Well Position	+N/-S 0.0 ft	Northing: 1,649,443.53 ft	Latitude: 39° 35' 18.72 N		
	+E/-W 0.0 ft	Easting: 2,277,773.03 ft	Longitude: 108° 3' 46.78 W		
Position Uncertainty	0.0 ft	Wellhead Elevation: ft	Ground Level: 6,168.0 ft		

Wellbore DD					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/20/2009	10.56	65.85	52,468

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	77.86	

Survey Program		Date 1/24/2010
From (ft)	To (ft)	Survey (Wellbore)
199.0	1,675.0	Survey #1 (DD)
1,791.0	9,680.0	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
1,675.0	10.10	77.00	1,662.0	52.0	166.1	173.3	0.00	0.00	
1,791.0	9.20	72.70	1,776.4	57.0	184.8	192.7	0.99	-0.78	
1,883.0	8.70	79.40	1,867.3	60.5	198.7	207.0	1.26	-0.54	
1,975.0	8.20	77.90	1,958.3	63.1	212.0	220.5	0.59	-0.54	
2,066.0	8.20	77.20	2,048.3	65.9	224.6	233.5	0.11	0.00	
2,158.0	7.10	84.20	2,139.5	68.0	236.7	245.7	1.56	-1.20	
2,250.0	7.40	83.70	2,230.8	69.2	248.2	257.2	0.33	0.33	
2,342.0	7.10	80.30	2,322.1	70.8	259.7	268.8	0.57	-0.33	
2,433.0	6.80	81.60	2,412.4	72.5	270.6	279.8	0.37	-0.33	
2,525.0	6.30	81.00	2,503.8	74.1	281.0	290.3	0.55	-0.54	
2,617.0	5.90	78.70	2,595.3	75.8	290.6	300.0	0.51	-0.43	
2,708.0	5.70	76.80	2,685.8	77.8	299.6	309.2	0.30	-0.22	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well EF03D-28 C28A 595
Project:	North Piceance	TVD Reference:	WELL @ 6190.0ft (Patterson 306)
Site:	C28A 595 (Sec28-T5S-R95W)	MD Reference:	WELL @ 6190.0ft (Patterson 306)
Well:	EF03D-28 C28A 595	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
2,800.0	7.50	83.00	2,777.2	79.5	310.0	319.8	2.10	1.96	
2,892.0	6.90	83.10	2,868.5	80.9	321.4	331.3	0.65	-0.65	
2,984.0	6.20	83.90	2,959.9	82.1	331.9	341.7	0.77	-0.76	
3,075.0	5.60	81.80	3,050.4	83.3	341.1	351.0	0.70	-0.66	
3,167.0	8.00	76.80	3,141.7	85.4	351.8	361.9	2.68	2.61	
3,259.0	8.20	82.60	3,232.8	87.7	364.6	374.9	0.91	0.22	
3,350.0	7.70	80.70	3,322.9	89.5	377.0	387.4	0.62	-0.55	
3,442.0	7.60	80.60	3,414.1	91.5	389.1	399.6	0.11	-0.11	
3,533.0	7.30	78.60	3,504.3	93.6	400.7	411.4	0.44	-0.33	
3,625.0	7.00	75.50	3,595.6	96.2	411.9	422.9	0.53	-0.33	
3,717.0	6.90	73.90	3,687.0	99.1	422.6	434.0	0.24	-0.11	
3,809.0	6.60	74.30	3,778.3	102.1	433.0	444.8	0.33	-0.33	
3,900.0	6.00	76.00	3,868.8	104.7	442.6	454.8	0.69	-0.66	
3,992.0	5.60	71.80	3,960.3	107.2	451.6	464.0	0.63	-0.43	
4,084.0	5.40	83.70	4,051.9	109.1	460.1	472.8	1.26	-0.22	
4,175.0	5.00	79.20	4,142.5	110.3	468.3	481.0	0.63	-0.44	
4,267.0	6.10	79.30	4,234.1	112.0	477.0	489.9	1.20	1.20	
4,358.0	6.70	77.30	4,324.5	114.0	487.0	500.1	0.70	0.66	
4,450.0	5.70	76.70	4,416.0	116.3	496.6	510.0	1.09	-1.09	
4,542.0	6.80	81.80	4,507.4	118.1	506.5	520.0	1.34	1.20	
4,633.0	7.80	81.80	4,597.7	119.7	517.9	531.5	1.10	1.10	
4,725.0	7.00	83.20	4,688.9	121.3	529.7	543.3	0.89	-0.87	
4,817.0	6.80	82.40	4,780.2	122.7	540.6	554.4	0.24	-0.22	
4,908.0	6.60	81.60	4,870.6	124.2	551.2	564.9	0.24	-0.22	
5,000.0	6.40	80.70	4,962.0	125.8	561.4	575.3	0.24	-0.22	
5,092.0	5.90	80.40	5,053.5	127.4	571.2	585.2	0.54	-0.54	
5,184.0	5.70	80.70	5,145.0	128.9	580.3	594.5	0.22	-0.22	
5,275.0	5.30	79.60	5,235.6	130.4	588.9	603.2	0.45	-0.44	
5,367.0	5.20	80.40	5,327.2	131.9	597.2	611.6	0.13	-0.11	
5,459.0	4.60	81.70	5,418.9	133.1	605.0	619.4	0.66	-0.65	
5,550.0	4.30	82.70	5,509.6	134.0	612.0	626.5	0.34	-0.33	
5,642.0	4.00	68.80	5,601.4	135.6	618.4	633.1	1.14	-0.33	
5,734.0	3.70	65.80	5,693.2	138.0	624.1	639.2	0.39	-0.33	
5,825.0	3.40	66.60	5,784.0	140.3	629.2	644.7	0.33	-0.33	
5,917.0	3.10	66.90	5,875.8	142.4	634.0	649.8	0.33	-0.33	
6,009.0	2.50	69.10	5,967.7	144.0	638.2	654.2	0.66	-0.65	
6,100.0	1.70	77.40	6,058.7	145.0	641.4	657.5	0.94	-0.88	
6,192.0	1.60	140.00	6,150.6	144.4	643.5	659.5	1.87	-0.11	
6,281.0	1.40	148.50	6,239.6	142.5	644.9	660.4	0.34	-0.22	
6,375.0	1.40	155.80	6,333.6	140.5	646.0	661.1	0.19	0.00	
6,467.0	1.60	161.20	6,425.6	138.2	646.8	661.4	0.27	0.22	
6,561.0	1.80	178.50	6,519.5	135.5	647.3	661.3	0.58	0.21	
6,653.0	0.70	176.90	6,611.5	133.5	647.4	661.0	1.20	-1.20	
6,745.0	0.50	66.60	6,703.5	133.1	647.8	661.3	1.08	-0.22	
6,837.0	0.60	68.00	6,795.5	133.4	648.6	662.1	0.11	0.11	
6,928.0	0.50	58.50	6,886.5	133.8	649.4	663.0	0.15	-0.11	
7,020.0	0.10	350.70	6,978.5	134.1	649.7	663.4	0.51	-0.43	
7,112.0	0.30	294.40	7,070.5	134.3	649.5	663.2	0.28	0.22	
7,203.0	1.50	27.10	7,161.5	135.4	649.8	663.7	1.70	1.32	
7,295.0	1.10	20.60	7,253.4	137.3	650.6	665.0	0.46	-0.43	
7,387.0	0.70	359.90	7,345.4	138.7	651.0	665.6	0.55	-0.43	
7,479.0	0.60	339.60	7,437.4	139.7	650.8	665.6	0.27	-0.11	
7,570.0	0.10	302.40	7,528.4	140.2	650.6	665.5	0.58	-0.55	

Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference: Well EF03D-28 C28A 595
Project: North Piceance	TVD Reference: WELL @ 6190.0ft (Patterson 306)
Site: C28A 595 (Sec28-T5S-R95W)	MD Reference: WELL @ 6190.0ft (Patterson 306)
Well: EF03D-28 C28A 595	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
7,662.0	0.50	268.30	7,620.4	140.3	650.1	665.0	0.46	0.43	
7,754.0	0.20	359.20	7,712.4	140.4	649.7	664.7	0.59	-0.33	
7,846.0	0.20	130.60	7,804.4	140.5	649.8	664.8	0.40	0.00	
7,937.0	0.40	250.90	7,895.4	140.3	649.6	664.6	0.58	0.22	
8,029.0	0.10	250.30	7,987.4	140.1	649.2	664.2	0.33	-0.33	
8,121.0	1.00	28.40	8,079.4	140.8	649.5	664.6	1.17	0.98	
8,217.0	0.20	317.80	8,175.4	141.7	649.8	665.1	0.99	-0.83	
8,304.0	0.40	257.90	8,262.4	141.7	649.4	664.7	0.40	0.23	
8,396.0	1.00	340.10	8,354.4	142.4	648.8	664.3	1.11	0.65	
8,487.0	0.70	301.70	8,445.4	143.4	648.1	663.8	0.69	-0.33	
8,579.0	0.40	284.30	8,537.4	143.8	647.3	663.1	0.37	-0.33	
8,671.0	0.80	234.50	8,629.4	143.5	646.5	662.2	0.68	0.43	
8,762.0	0.30	230.40	8,720.4	143.0	645.8	661.4	0.55	-0.55	
8,854.0	0.70	342.10	8,812.4	143.4	645.4	661.1	0.93	0.43	
8,946.0	0.60	346.00	8,904.4	144.4	645.1	661.1	0.12	-0.11	
9,037.0	0.50	352.50	8,995.4	145.2	645.0	661.1	0.13	-0.11	
9,129.0	0.80	306.50	9,087.4	146.0	644.4	660.7	0.63	0.33	
9,221.0	0.40	299.10	9,179.4	146.6	643.6	660.0	0.44	-0.43	
9,312.0	0.40	264.80	9,270.3	146.7	643.0	659.5	0.26	0.00	
9,404.0	0.40	217.70	9,362.3	146.4	642.5	658.9	0.35	0.00	
9,495.0	0.50	208.10	9,453.3	145.8	642.1	658.4	0.14	0.11	
9,587.0	1.20	188.20	9,545.3	144.5	641.8	657.8	0.81	0.76	
9,680.0	1.20	190.00	9,638.3	142.6	641.5	657.1	0.04	0.00	Last Cathedral svy @ 9680'

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
C28A 595 EF03D-28 BH - hit/miss target - Shape	0.00	0.00	9,570.0	137.6	639.6	1,649,563.07	2,278,416.25	39° 35' 20.08 N	108° 3' 38.61 W
- survey misses target center by 25.7ft at 9587.0ft MD (9545.3 TVD, 144.5 N, 641.8 E)									
- Rectangle (sides W30.0 H50.0 D0.0)									
C28A 595 EF03D-28 TC - survey misses target center by 17.0ft at 6051.9ft MD (6010.6 TVD, 144.6 N, 639.8 E)	0.00	0.00	6,010.0	147.6	656.6	1,649,572.55	2,278,433.53	39° 35' 20.18 N	108° 3' 38.39 W
- Point									

Survey Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
9,680.0	9,638.3	142.6	641.5	Last Cathedral svy @ 9680'

Checked By: _____ Approved By: _____ Date: _____