Supplementary

Table S1. Composition and cost of MJ medium with yeast extract. Costs were estimated based on chemical prices at the Sigms-Aldrich Co. website (accessed October, 2015).

Component	mg/L	Price in Canadian $/L
KH_2PO_4	1500	0.2543
K_2HPO_4	2900	0.5641
Urea	2100	0.2541
Magnesium chloride	1000	0.0805
Calcium chloride	150.0	0.0220
Ferrous sulphate	1.3	0.0003
L-Cysteine	1000	0.5700
Resazurin	2	0.0318
Morpholinopropane sulfonic acid	10,000	4.2704
yeast extract	1000	0.2260
Pyridoxamine hydrochloride	2.0	0.1138
Biotin	0.2	0.0430
Amino benzoic acid	0.4	0.0003
Vit-B12 (Cyanocobalamin)	0.2	0.0480
Sodium citrate. 2H2O	3000	0.2505

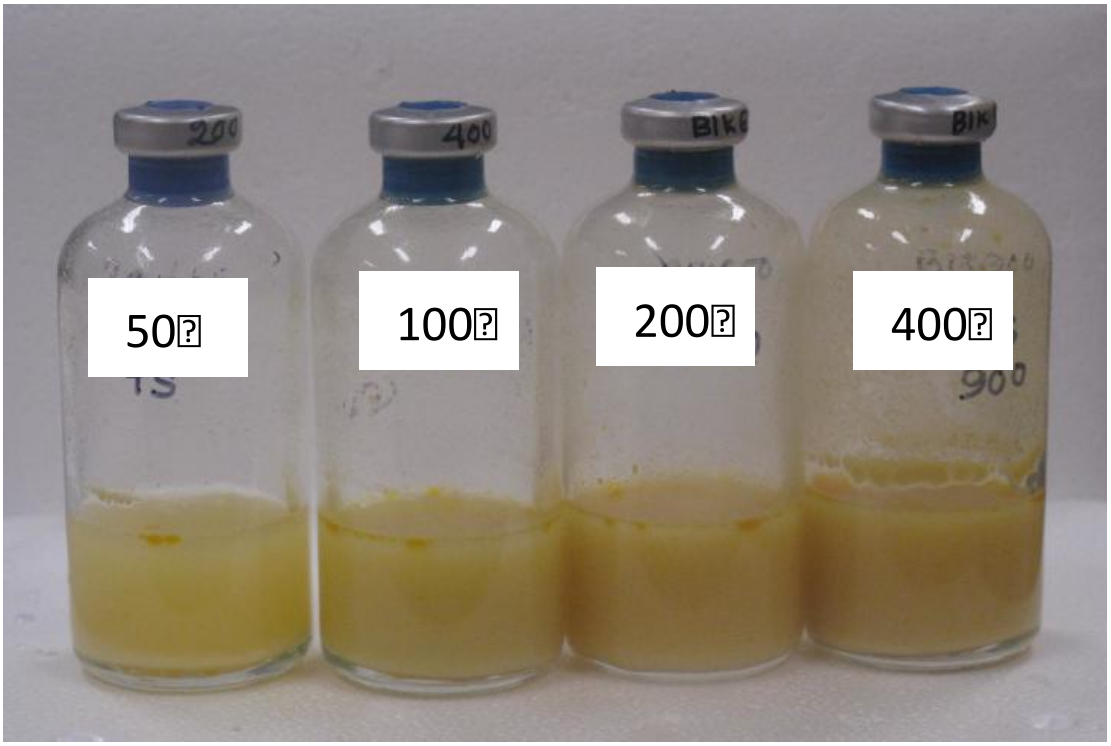

Figure S1. Thin stillage (TS) media in 60 mL serum bottles. Various (50 to 400 g/L) concentrations of TS were added to buffer solution.

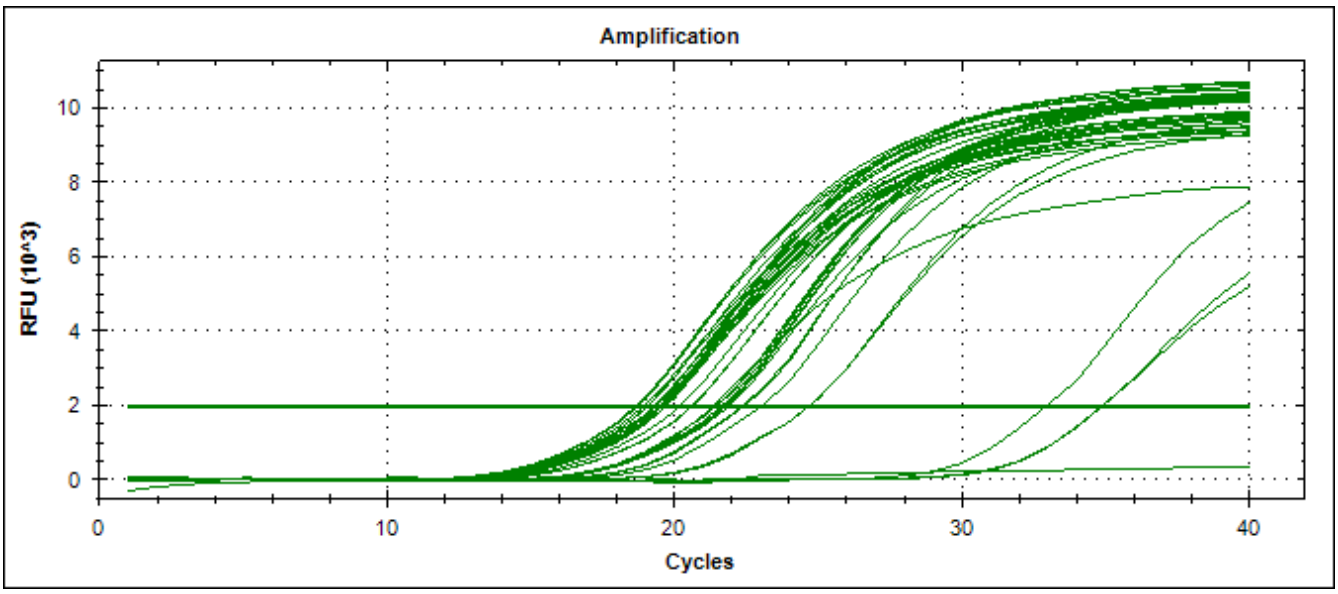

Figure S2. Amplification plot of qPCR showing correlation of cycle number vs. fluorescence for standards and samples.

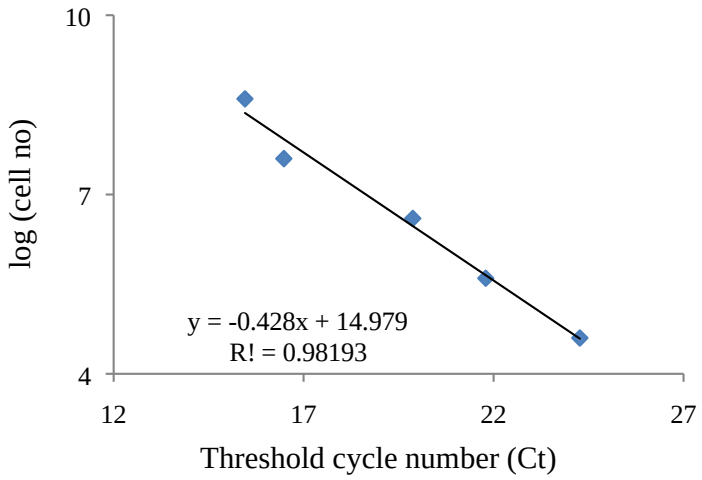

Figure S3. Quantitative PCR standard curve for *C. thermocellum* 1237. Log (10 base) of cell-number represents copies of cpn60 gene amplicons of the bacteria. DNA templates were extracted from pre-diluted cellobiose grown cells with known optical density (OD).