# Additional file

## Table S1: One way ANOVA of the effects of different mixing ratios on %CH4 (Significant at the 0.05 level)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameters | pH | ORP  (mv) | NH3-N  (mg/l) | TALK  (mg/l) | CH4  (%) | Biogas  (ml/d) | TCOD  (mg/l) | SMY  (mlCH4/g VS add) |
| P-value | .184 | .226 | .000 | .974 | .000 | .000 | .105 | .000 |

## Table S2: Pearson correlation of some variables in methanogenic reactors with different mixing ratios

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameters | pH | ORP  (mv) | NH3 -N (mg/l) | TALK (mg/l) | CH4  (%) | Biogas (ml/d) | TCOD (mg/l) | SMY  (mlCH4/g VS added) |
| pH | **1** | **-0.997\*\*** | **0.184** | **0.359\*** | **-0.046** | **-0.174** | **0.185** | **-0.123** |
| ORP(mv) |  | **1** | **-0.158** | **-0.340\*** | **0.055** | **0.174** | **-0.175** | **0.130** |
| NH3-N(mg/l) |  | **1** | **0.274** | **0.703\*\*** | **0.099** | **0.507\*\*** | **0.403\*\*** |
| TALK(mg/l) |  | **1** | **0.188** | **0.091** | **0.590\*\*** | **0.131** |
| CH4 (%) |  | **1** | **0.508\*\*** | **0.434\*\*** | **0.711\*\*** |
| Biogas (ml/d) |  | **1** | **0.033** | **0.934\*\*** |
| TCOD(mg/l) |  | | | | | | **1** | **0.168** |
| SMY(mlCH4/g VS added) |  | | | | | | | **1** |
| \*\*Correlation is significant at the 0.01 level; \*Correlation is significant at the 0.05 level ; SMY: Specific methane yield | | | | | | | | |