**Table S2.** Molecular identification of band of archaea during recovery by self-recovery, dilution with BE 8:2, 0.14% w/v NaOH, 0.50% w/v Ca(OH)2 and 8.0% w/v palm oil ash from DGGE analysis.

|  |  |  |  |
| --- | --- | --- | --- |
| Band | Organism | %Identity | Best match in GenBank(Accession Number) |
| 1 | *Methanococcoides* sp. | 94 | NR\_029122.1 |
| 2 | *Methanosaeta* sp. | 99 | NR\_102903.1 |
| 3 | *Methanosaeta* sp. | 99 | NR\_102903.1 |
| 4 | *Methanosarcina* sp. | 92 | NR\_109423.1 |
| 5 | *Methanosarcina* sp. | 90 | NR\_074110.1 |
| 6 | *Methanosaeta* sp. | 99 | NR\_102903.1 |
| 7 | *Methanosaeta* sp. | 99 | NR\_102903.1 |
| 8 | *Methanosarcina* sp. | 97 | NR\_118371.1 |
| 9 | *Methanosarcina* sp. | 94 | NR\_074110.1 |
| 10 | *Methanosarcina* sp. | 98 | NR\_074110.1 |