Supporting information

Predominance of biotic over abiotic formation of halogenated hydrocarbons in hypersaline sediments in Western Australia

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Materials and methods

GC-MS Instrumental Parameters and ITEX Method

The injection temperature was set to 200°C and the cryotrap was cooled to -165°C with a hold/transfer time of 2 minutes and a constant column flow of 1.5 mL min^{-1} He (Air Liquide, Oberhausen, Germany). The GC oven start temperature was set to 40°C for 2 minutes and then heated up to 200°C with 10°C·min^{-1} and a hold time of 5 minutes. The ion source temperature was 200°C and the MS was set to scan mode with 5.7 scans/second and a mass range from 45-200 m/z. The Combi-PAL autosampler (CTC Analytics, Zwingen, Switzerland) containing the samples was kept at 6°C. Before analysis, each sample was kept for 15 minutes at 60°C. Fifty extraction strokes with an aspirating and dispensing volume of 1 mL were performed with a flow rate of 100 µL·s^{-1}. The ITEX trap temperature was 30°C and the syringe was heated to 60°C to avoid condensation of water. The desorption temperature was 300°C with desorption flow of 50 µL s^{-1} and a total desorption volume of 200 µL.

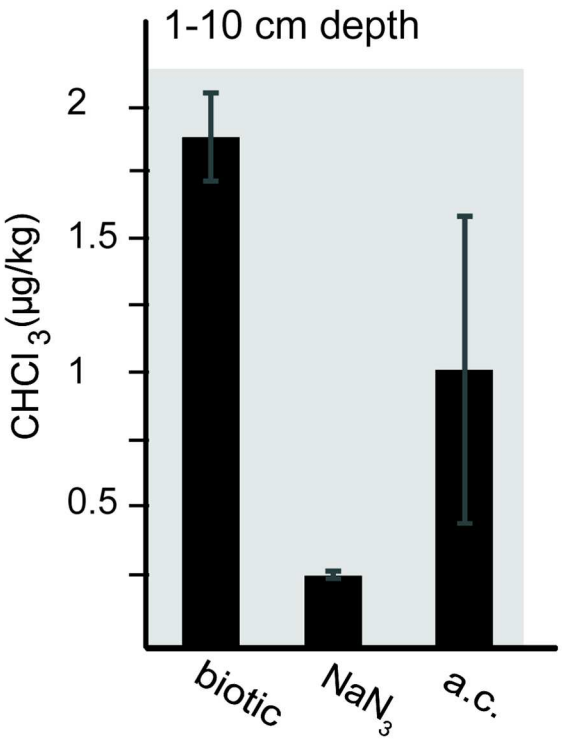

Figure S1. The effect of different sterilization techniques on trichloromethane emissions. Shown is the depth interval from 1-10 cm in Lake Strawbridge sediments within the first 60 minutes of incubation. Biotic = unsterilized sediment, NaN_3 = 150 mM sodium azide and a.c. = autoclaved sediment. Error bars indicate standard deviations from triplicate measurements. B.d.l. = below detection limit.