



Supplementary Figure 7. Agarose gels showing the integrity of the total RNA used for metatranscriptomics sequencing (top 0-2cm sediment layer) and amplicon sequencing of 16S rRNA gene transcripts (top 0-2cm and 2-4cm sediment layers). Lane 1: Total RNA (~160ng) isolated from the top 0-2cm sediment layer, **Lane 2-4:** DNase I treated RNA (~200ng). A PCR was performed on all RNA to check for residual DNA contamination (targeting 16S rRNA genes) and 25% of all PCR products were placed on the gel. For all template RNA that was sufficiently available, dilution series were included to rule out PCR inhibition, **Lane 6-8/23-25:** PCR products of untreated template RNA from 0-2cm/2-4cm sediment layer (~100-20-1 ng/30-15-1 ng template), **Lane 9-16:** PCR products of DNase I treated RNA from 0-2cm sediment layer (triplicates, ~100-20-1 ng template), **Lane 26-27:** PCR products of DNase I treated RNA from 2-4cm sediment layer (duplicates, ~15 ng template), **Lane 28-30:** PCR products of DNase I treated RNA from 2-4cm sediment layer (~30-15-1 ng template), **Lane 20/33:** positive control (DNA isolated from 0-2cm sediment layer), **Lane 21/34:** positive control (DNA isolated from 0-5cm sediment layer Cock soda lake, sampled in 2015), **Lane 18,31:** negative control (DNase I treated), **Lane 5, 19, 22, 32:** negative control (PCR-grade water). Gene rulers have a total length of 10 kb.