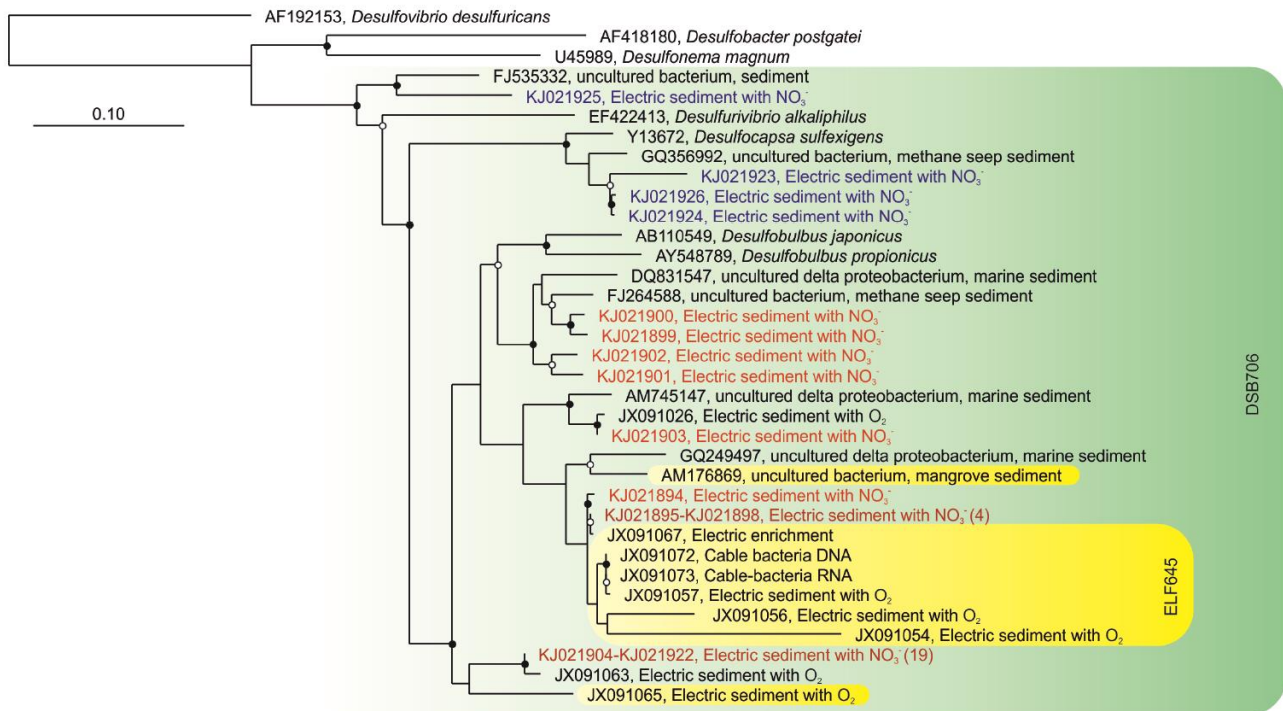


Supplementary Information:

Electric coupling between distant nitrate reduction and sulfide oxidation in marine sediment

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Figure S1.



Phylogenetic affiliation of 16S rRNA gene sequences retrieved during this study from anoxic, nitrate-amended sediment with electric coupling of nitrate reduction and sulfide oxidation (blue and red sequences). Numbers in brackets indicate the number of clones. GenBank accession numbers for all sequences are displayed in front. All sequences from the present study are deposited in GenBank/EMBL/DDBJ under accession numbers KJ021894-KJ021926.

Sequences were aligned using the SINA online tool (Pruesse et al., 2012) and added to the Silva Release 115 SSU Ref database (Quast et al., 2013) using ARB. The tree was calculated by the maximum likelihood method implemented in ARB (Ludwig et al., 2004); filled and open circles indicate bootstrap support (by rapid bootstrap analysis implemented in ARB; 1000 iterations) $\geq 80\%$ and $\geq 50\%$, respectively.

Sequences carrying the target site for probes DSB706 or ELF645 are indicated by the green or yellow shading, respectively. Sequences displayed in red were obtained with primer pair ELF645F (5' - CTT GGC TTG AGT ATC

AGA GG – 3') and DSBB+1297R (Kjeldsen et al., 2007); it is thus not possible to confirm whether they have a perfect match to probe ELF645. Sequences displayed in blue were obtained with primer pair 8F (Loy et al., 2002) and DSBB+1297R.

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