

- o nitrate
- nitrite
- \triangle phosphate
- silicate

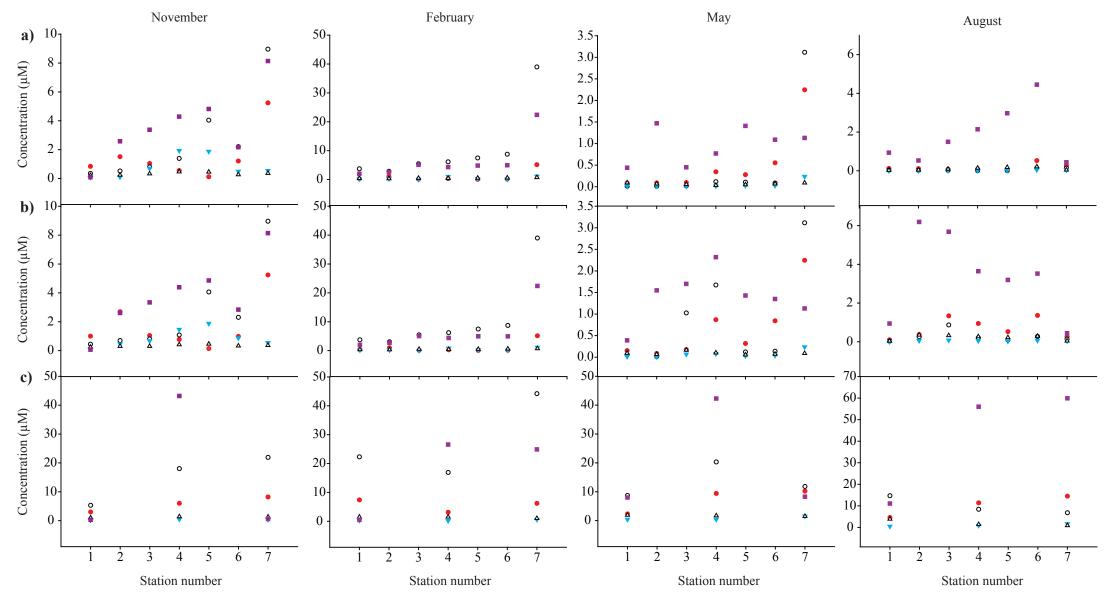


Figure S1. The concentrations (μ M) of ammonium (\bullet), nitrite (\circ), nitrate (∇), phosphate (Δ) and silicate (\blacksquare) in a) the surface water, b) the bottom water and c) the porewater in November, February, May and August.

Figure S2. Thaumarcheota 16S rRNA gene phylogenetic tree. Groups in which 16S rRNA gene sequences recovered from this study were contained are indicated in bold. Number in the clusters indicate number of included sequences. Scale bar indicates 5% estimated sequence divergence.

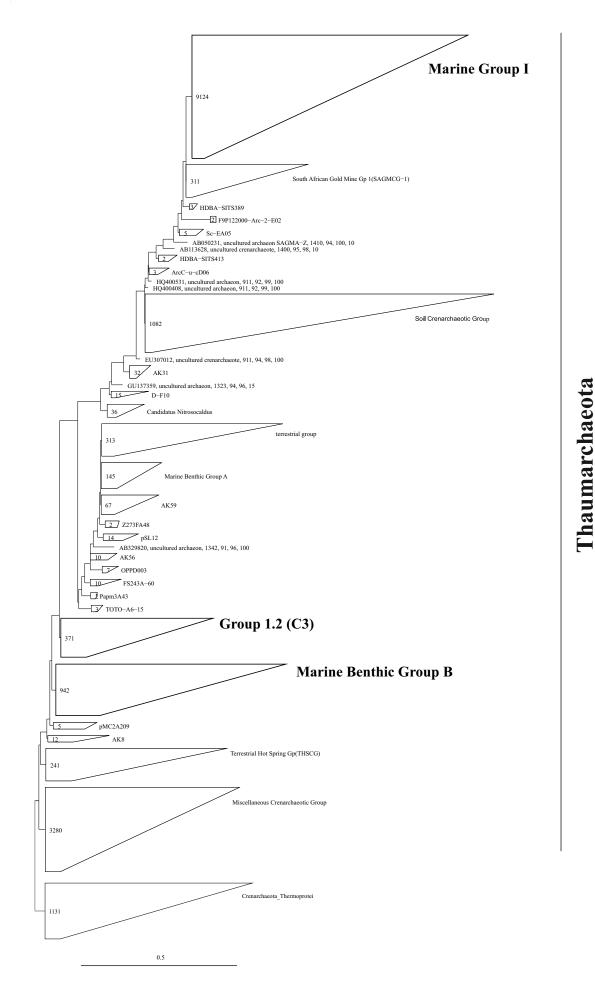


Figure S3. Phylogenetic tree of the Marine group I thaumarchaeotal group showing the affiliation of the 16S rRNA gene fragments recovered in this study. Name of the groups and subclusters are arbitrary. Figures S3 A, B, C are up to down snapshots of the Marine group I cluster as indicated by the star and oval symbols. Sample code: Station 4, surface water, February 2010 (st4_surf_Feb10), green; Station 6, surface water, February 2010 (st6_surf_Feb10), orange; Station 4, surface sediment, August 2010 (st4_sed_Aug10), red; Station 6, surface sediment, August 2010 (st6_sed_Aug10), red; Station

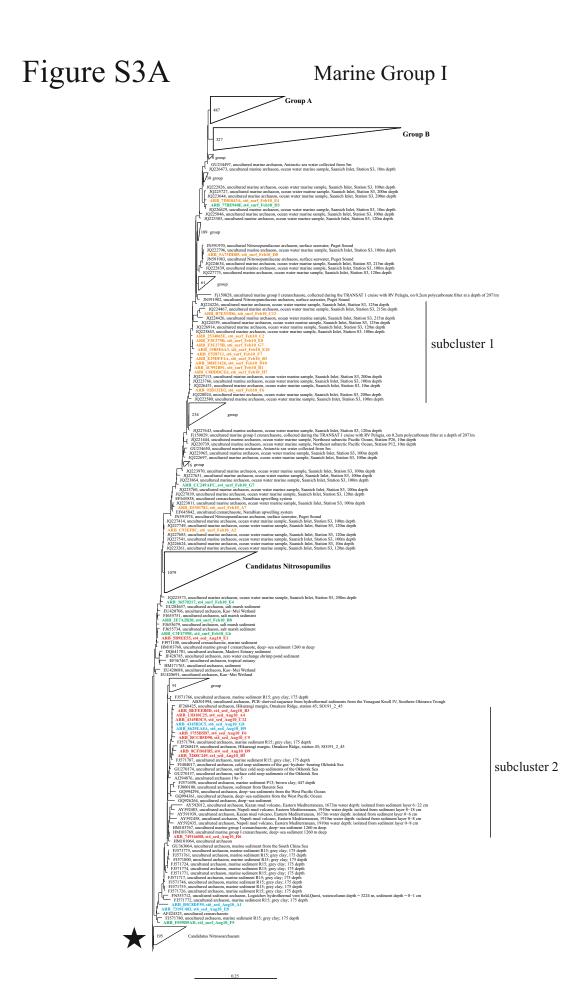


Figure S3B

Marine Group I



Marine Group I

Figure S3C



Figure S3D

Marine Group I

Group A



Figure S3E

Marine Group I

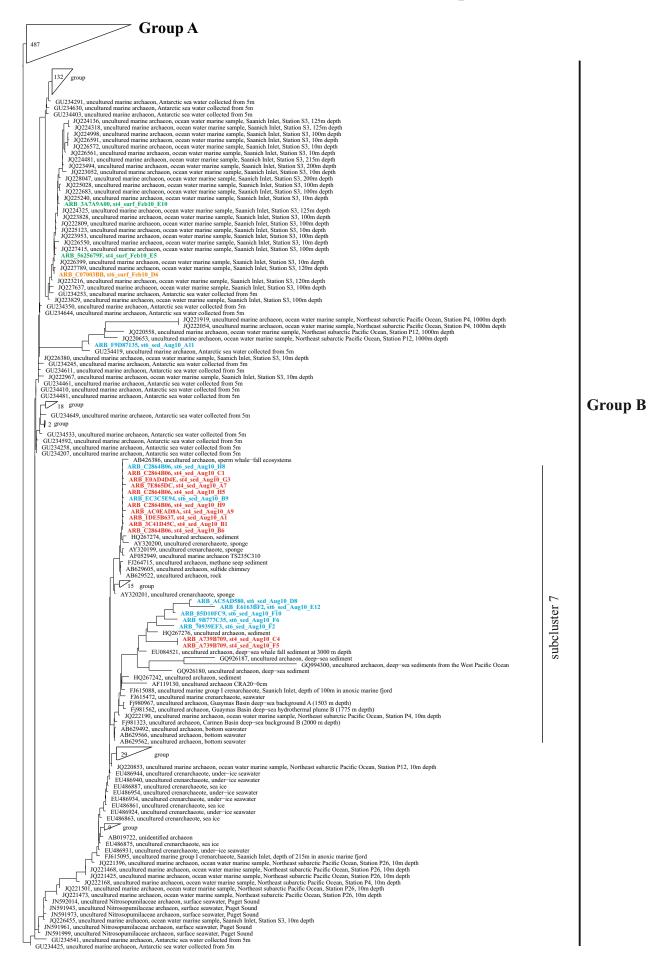
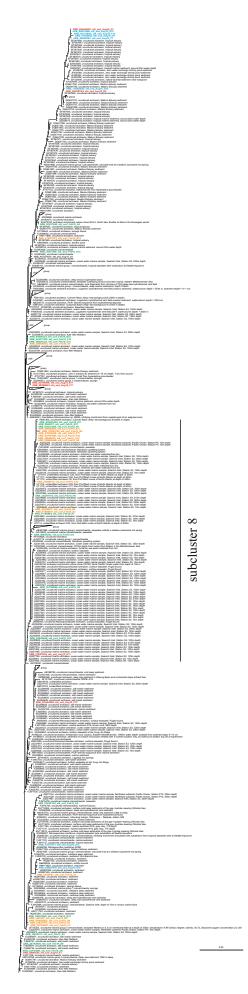


Figure S3F



Candidatus Nitrosopumilus