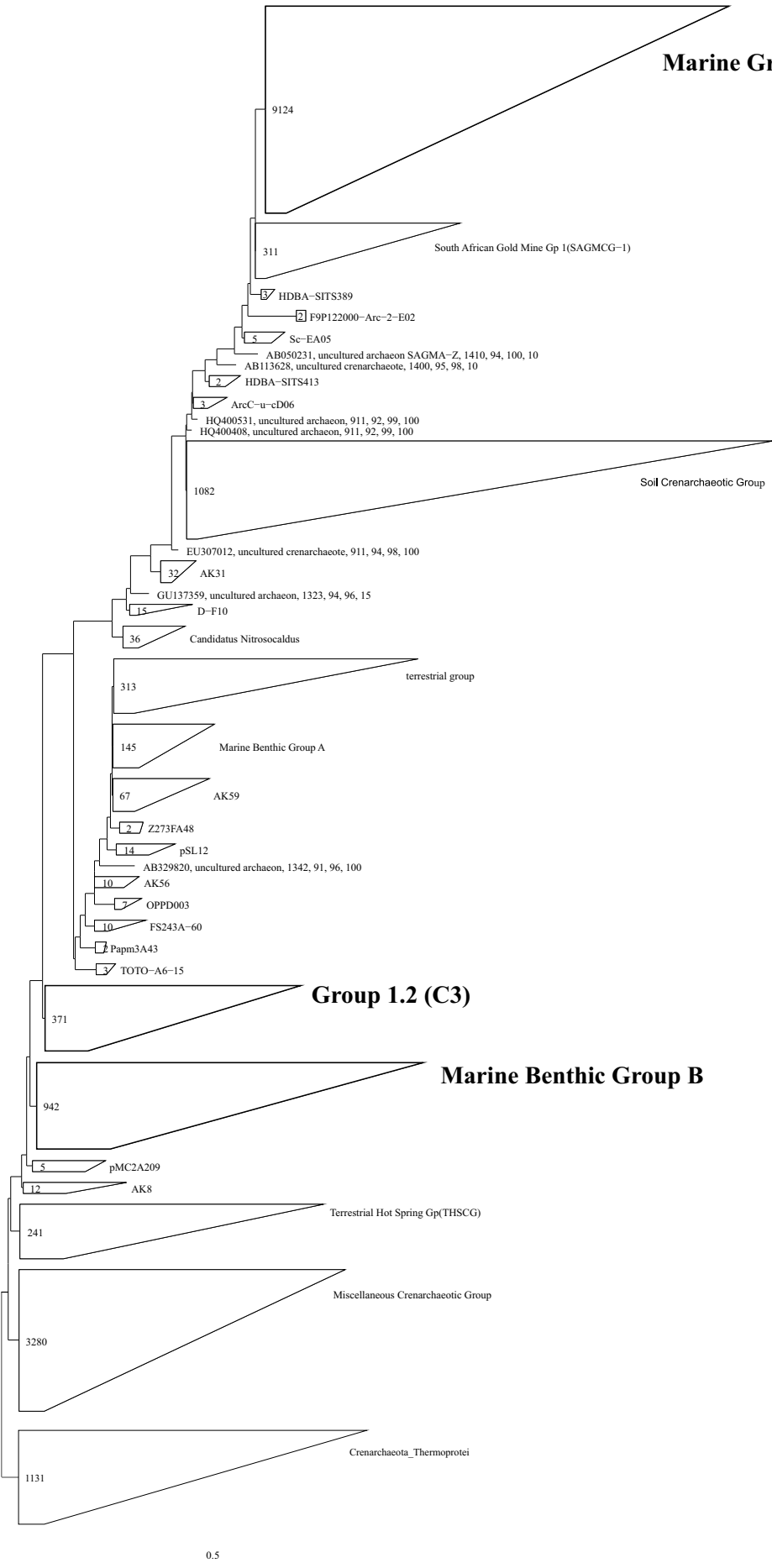


Figure S1. The concentrations ( $\mu\text{M}$ ) of ammonium ( $\bullet$ ), nitrite ( $\circ$ ), nitrate ( $\blacktriangledown$ ), phosphate ( $\triangle$ ) and silicate ( $\blacksquare$ ) in a) the surface water, b) the bottom water and c) the porewater in November, February, May and August.

Figure S2. Thaumarchaeota 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.



Thaumarchaeota

## Marine Group I





subcluster 3

subcluster 4

Figure S3C

Marine Group I



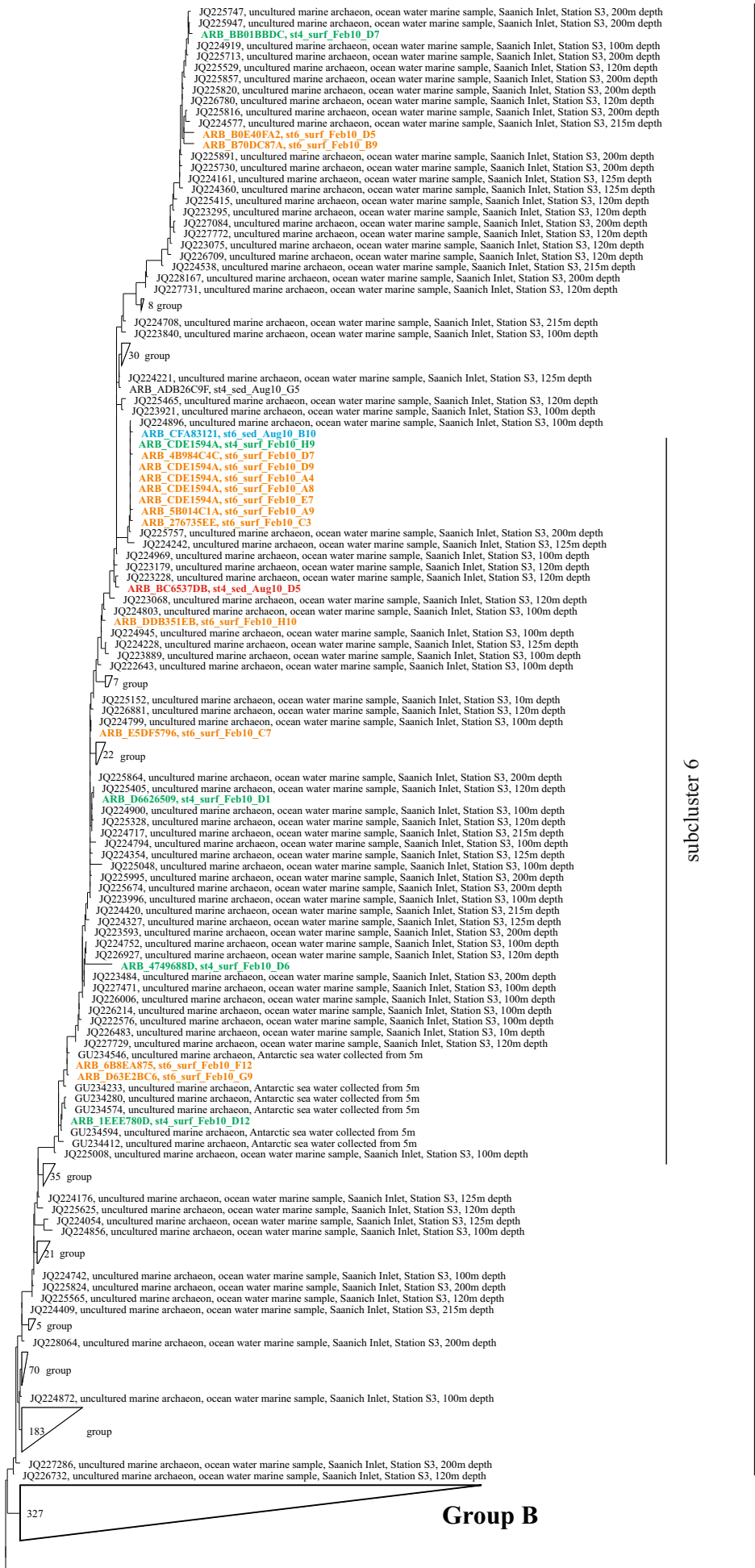
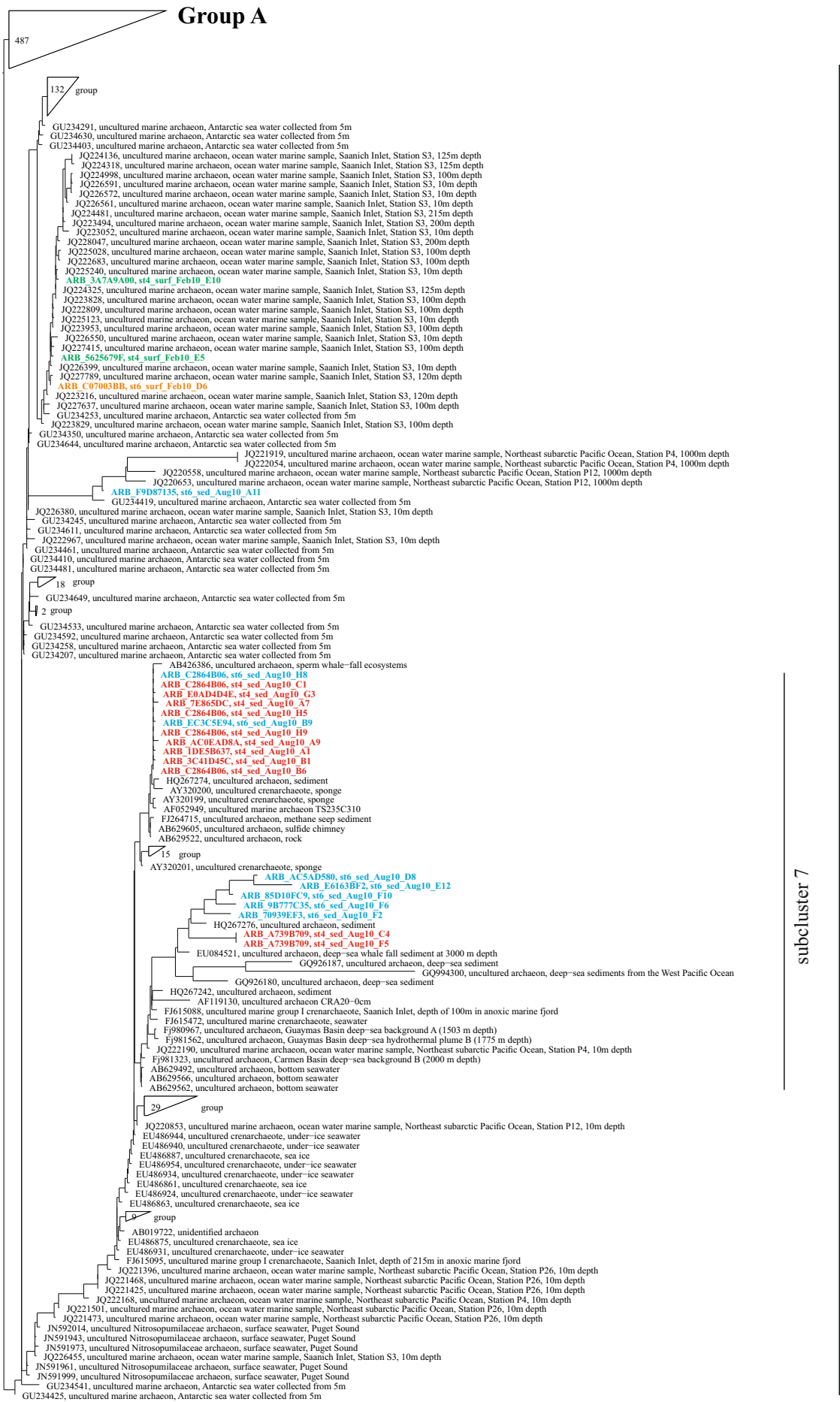


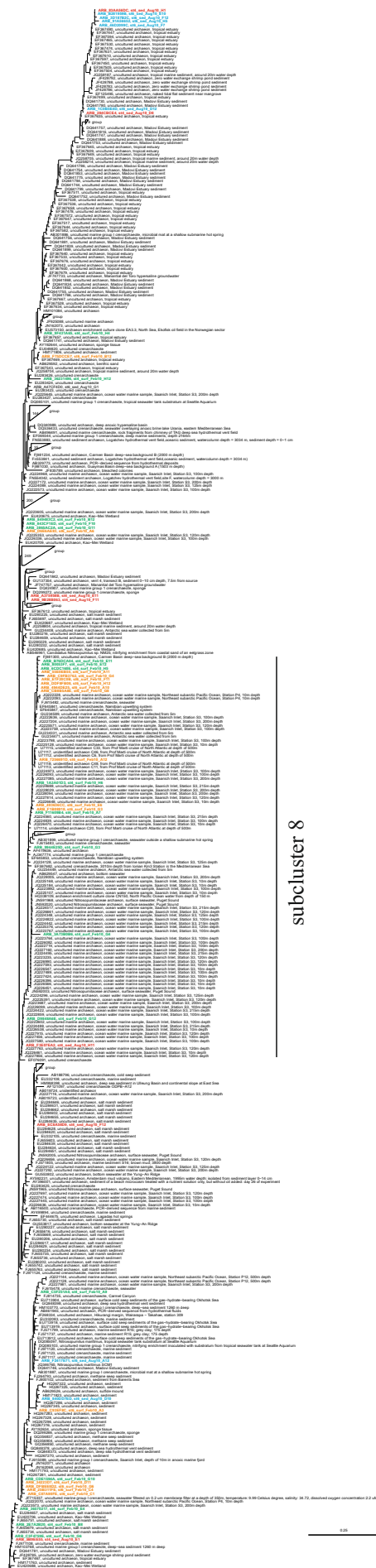
Figure S3E

Marine Group I





## Figure S3F



subcluster 8

# Candidatus Nitrosopumilus