

of sampling (e.g., lysis of cells during core collection). Without chloramphenicol, rates may be influenced by synthesis of new denitrifying enzymes and microbial growth due to reduced O_2 tension and a newly available substrate (30). The results then represent only enzymatic potential of the sediments for denitrification, not actual in situ rates of denitrification. Thus, chloramphenicol may prove useful in quantifying realistic rates of denitrification via laboratory assays.

A relatively new method for measuring denitri

ing C and N additions). Sediment slurries also demonstrated a

