

MEASUREMENTS OF SOME NITROGENOUS COMPONENTS  
OF THREE DEEP PACIFIC SEDIMENT CORES

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## ABSTRACT

Profiles of nitrate, ammonia, and phosphate concentrations of interstitial waters, and of the total and carbonate carbon, total nitrogen, and ammonium combined in the silicates have been obtained for three piston cores (10 - 16m.) of Pacific Ocean sediments. The water depths were over 5000 meters. Two of the cores were taken within two kilometers of each other. The cores contained minor amounts of calcium carbonate and smaller amounts of organic matter than was expected. The profiles for carbonate and fixed ammonium representative of clay minerals, were different for each of the three cores. The interstitial water at all depths within these cores contains nitrate and some samples deep in the cores contain nitrate concentrations comparable to that of the supernatant ocean. The handling and long term storage of the cores at 0°C appears to have adversely affected the reliability of the interstitial water data.