

Identification and Origin of the Clay Minerals of the Basins of Rio do Peixe, Barro and Padre Marcos

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The samples analyzed for the identification of the clay minerals, were coming of the sediments cretaceous of the basins of Rio do Peixe (Fm. Souza), Barro and Padre Marcos of the interior of the Brazilian northeast. The analytic methods used for determination of the study of the clay minerals, it went X-ray diffracton . Kaulinite, illite and smectite they were the minerals identified after the treatments with the natural sample, glycolated and heated up. The texts obtained for each clay mineral identified in character semiquantitative, they are given in percentile relative. In the shales of Fm. Souza, the texts in kaulinite vary of 2% in the base at 9% in the top of the small load; of 24 to 35% for illite and 56 to 73% for the smectites, with a medium composition of: 5% K, 30% I and 65% of S. In the Barro basin, the analyzed samples present 2% of kaulinite, 12% of illite and 86% of smectite on the average. In the shales of the Padre Marcos basin, the texts present on the average, 7% of kaulinite, 25% of illite and 68% of smectite. The medium composition of the clay minerals analyzed is similar the one of the loamy sediments studied in the formations Brejo Santo and Santana of the Araripe basin, suggesting, therefore an enviroment calm depositional for the sediments in study.