

PRELIMINARY GEOCHEMICAL MAP OF THE CHACO PROVINCE, EAST OF SALTA PROVINCE AND WEST OF CORRIENTES PROVINCE, NORTH OF ARGENTINA

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Fourteen selected samples of loessial country rocks (Late Pleistocene-Holocene in age) and twenty-five selected samples of shallow marine Miocene heterolithic succession were analyzed by means of spectrometry of fluorescence X-Ray (FXR). The samples were picked out from natural outcrops at the Corrientes, Chaco and Salta Provinces, Northeastern Argentina. The mapping area was of about 275,000 km². Ten major elements were analyzed: CO₃Ca, P₂O₃, F₂O₃, TiO₂, Al₂O₃, CaO, MnO, K₂O, N₂O and Mg₂O. Fourteen trace elements were analyzed: Rb, Cs, Ga, Zr, Ta, Nb, Sr, Ba, Cr, Ni, Zn, Pb, Cu and vanadium. The geochemical analysis revealed typical signatures either loessial country rocks and surroundings marine siliciclastic outcroppings sediments.

Although, it is easily detectable a great compositional influence of recycling marine siliciclastic rocks into the loessial (very fine silty grains) rocks, some geochemical signatures (anomalies) can be distinguished between them.

Chromium, gallium, vanadium and cesium as well as TiO₂ and silica values show clear and fine differences.

Notwithstanding these scarce differences, petrogenetic relationship between loess (silty) and heterolithic Miocene succession is quite obvious on the basis of field relations.