

Paleomagnetism of Red Beds in the Ku-T Difunta Group, Northeastern Mexico

GUERRERO-GARCIA, J.C., HERRERO-BERVERA, E. Instituto de Geología, UNAM, Mexico City, Mexico., SOEST-HIGP, Honolulu, Hawaii, USA

Paleomagnetic work has been carried out on five red bed units in the Late Cretaceous - Paleocene Difunta Group in northeastern Mexico. Deposited in the adjacent Parras and La Popa basins in the state of Coahuila, Mexico, the chronostratigraphic correlation of units of this thick paralic sequence in both basins has proven to be rather difficult since only one formation at the base of the sequence can be mapped across the basins margins and diagnostic fossils are absent. McBride et al (1974) summarized the information available and proposed two alternatives based on field evidence, which either correlates, or not the lowermost red bed units on both basins. Paleomagnetic measurements on 375 stepwise thermally demagnetized samples from the Cerro Huerta (N), Las Imagenes (R), and Las Encinas (R) Formations in the Parras basin and the Cuchilla Tongue of the Potrerillos (R) and the Adjuntas (N) Formations in La Popa Basin (older to younger) yielded the indicated polarities. From these results it is clear that the hypothesis which correlates the older red bed units in both basins (Cerro Huerta Formation and Cuchilla Tongue) should be discarded since the units have opposite polarities, clearly indicating a different time of deposition.