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BIOSTRATIGRAPHY AND PETROGRAPHY OF UPPER PALEOZOIC ROCKS OF SIERRA LAS PINTAS, NORTHERN BAJA CALIFORNIA

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Abstract

A transported crinoid fauna is herein described for the first time in the Paleozoic succession cropping out in the Sierra Las Pintas, northern Baja California, northwestern Mexico. The fossil association includes *Heterostelechus texanus* Moore and Jeffords, *Preptopremnum laeve*? Moore and Jeffords, and *Mooreanteris perforatus* Moore and Jeffords, which indicates a Middle Pennsylvanian-early Permian time-averaged age. The studied area corresponds with the northernmost outcrop of definitely late Paleozoic deep-water facies in northwestern Mexico and the southern United States. Petrographic analyses indicate that the studied metasandstones were primarily derived from high-grade metamorphic rocks and from a shallow-water platform environment dominated by crinoid meadows. These results allow the correlation of the studied metasedimentary rocks with the Carboniferous Rancho Nuevo Formation of the Sonora allochthon, which crops out in central Sonora. The Sonora allochthon includes an Early Ordovician-Late Pennsylvanian sedimentary succession that