

Ciudad Valles, the K/T sandstone complex crops out in several small clearings in the mesquite chapparal bushes, below cappings of Eocene basalts (23° 21.8′N, 98°59.9′W). The K/T sandstone complex is only 3 cm thick and consists of bioturbated ripples of very fine sand of Unit III. Unit I and II are absent and also could not be traced in nearby outcrops. The K/T sandstone complex overlies indurated Mendez marls of *A. mayaroensis* Zone age and is directly overlain by a 5-cm-thick silty limestone layer. This limestone layer is overlain by *G. eugubina* Zone age marls of the Velasco Formation. Although the Velasco and Mendez marls crop out at many places along the Mesa de Llera, evidence for thick K/T sandstone layers has not yet been found.

## La Ceiba, Mexico

About 7 km south of La Ceiba (20°19.8'N, 97°41.0'W), along the road from La Ceiba to Tlaxcalaltongo, the K/T sandstone complex crops out over several tens of meters and is also exposed 200 m farther to the north in a dirt road. The sandstone complex changes in thickness from 1.2 m in the roadside outcrop to 0.25 m along the dirt road (Fig. 22). The sequence consists of a channelized lower Unit I downcutting in foraminifera-rich

Mendez marls of *A. mayaroensis* Zone age. Unit I contains bubbly spherules altered to green clay minerals (smectite?), frequently filled with tar, and abundant (>50%) large detrital quartz grains and mica-crystals (Fig. 14E). Unit I also contains bioclasts of shallow-water origin (Orbitoid foraminifers, bryozoans). The thickness of Unit I varies from 1 to 25 cm. Unit II, as in other sections in northeastern Mexico, is a graded sandstone displaying climbing ripples indicating bidirectional currents. Unit III consists of fine sand ripples alternating with silt layers, overlain by Velasco shales containing a P0 Zone and *G. eugubina* Zone fauna. Only the top sandstone ripples contain burrow traces.

## Coxquihui, Mexico

Just 30 km southeast of La Ceiba, a badly weathered K/T sandstone complex crops out in the roadside, just east of the village of Coxquihui. The K/T sandstone complex is 88 cm thick and overlies 90 cm of exposed red marls of *A. mayaroensis* Zone age. The K/T sandstone complex is poorly graded and faintly layered. Two graded layers, 50 and 38 cm thick respectively, are separated by a layer in which a few cobbles of whitish Upper Cretaceous micritic limestone are intercalated in a spherule-rich