

waves. Those deposits are followed by deposition of mass-flows and coarse sandstones with coarse (?near-shore) terrigenous material (K/T sandstone Unit II). Any later fine-grained phases (K/T sandstone Units III and IV), as observed in other K/T sections around the Gulf of Mexico that may also have been associated with tsunami waves, were removed during low-stand erosion, preceding the burrowed Danian transgressive surface.

The next phase is infilling of incised lowstand channels, with early, but not earliest, Danian material.

Brazos River, Texas

The many studies of the Brazos River sections have led to publication of numerous papers that convey a variety of interpretations. The controversy about the placement of the K/T boundary in the Brazos sections has already been mentioned. At low-water level of the Brazos River, the K/T sandstone complex can be traced over a considerable distance in the river bed. In the Brazos 1 section the lithologic sequence across the K/T sandstone complex has been subdivided into units A through J (Hansen et al., 1987), a subdivision that we will follow herein

(Fig. 6). The lower unit (unit A, Corsicana Fm, >15 m thick as exposed in the river bed) consists of fossiliferous upper Maastrichtian mudstones deposited at mid- to outer-shelf depths (75 to 200 m; Bourgeois et al., 1988). Occasional shell stringers in the Corsicana Formation about 10 m below the K/T boundary and the low-diversity planktic foraminiferal fauna suggest a water depth closer to the lower estimate, near storm wave base (50 to 75 m). Unit B/C (0 to 45 cm thick) is a laminated, poorly lithified, graded skeletal—shell hash—sandstone, rich in phosphate, glauconite, shell debris, and small clay clasts, resting with a scoured contact on unit A. At several places the basal part of unit B/C contains boulders of black claystone and micritic limestone.

Recently, we have found abundant green spheroids in the basal coarse-grained sandstone (unit B/C) in the Darting Minnows Creek outcrop, about 3 km southwest of the Brazos 1 outcrop (Bourgeois et al., 1988). The spheroids are dominantly composed of dull olive-green clay minerals. As at Moscow Landing, they contain numerous internal cavities filled with calcite (Fig. 5B). Those spheroids were earlier probably mis-