



Stratigraphy of Wilcox Canyons, Tyler and Harden Counties, Texas

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EXTENDED ABSTRACT

The Hardin and Yoakum canyons are well known to Gulf Coast Wilcox geologists in Texas. Xue (1994, 1997) established the Yoakum as the maximum flooding surface (MFS) segregating the Middle from the Upper Wilcox. Many workers, including myself, assumed that the Hardin Canyon was the same age as the Yoakum. Hutchison (1987) identified the Hardin Canyon, but did not establish its relative age. This poster establishes the relationship of the Hardin Canyon to the Yoakum shale and also highlights a deeper Big Shale Canyon discussed previously at the Gulf Coast Association of Geological Societies convention (Blanke et al., 2009).

The poster encompasses Hardin and Tyler counties of southeast Texas and ties to similar canyons in the Dewitt Co., central Gulf Coast Texas area (Figure 1). Regional maps of the two areas are shown in Figure 2 and 3. The focus is the Wilcox section from shallow shelf, across the shelf edge expansion fault to the upper slope. Figure 3 shows the location of Xue's (1994) regional strike section Y-Y' in purple and the location of cross section A-A' in red. Figure 4 is a detail of the Hardin canyon isopach and identifies the shelf edge expansion fault. Figure 5 is dip cross section A-A' with Xue's Wilcox stratigraphy on the left. Local stratigraphic name and this author's correlation points are also on the left. Xue's strike section Y-Y' is tied (note the first well is his y76 or Atlantic #1 Temple, API 4224100269).

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