

Miller, R.D., A. Villeda, J. Xia, and D.W. Steeples, 2005, Seismic investigation of a salt dissolution feature in Kansas: Soc. Explor. Geophys., Investigations in Geophysics no. 13, Dwain K. Butler, ed., *Near-Surface Geophysics*, p. 681-694.

Sinkholes are common hazards to property and human safety the world over. Their formation can be initiated by natural or anthropogenically induced dissolution processes. Understanding the process responsible for sinkhole formation is key to reducing the risk of their unexpected development and, if they do form, their impact on human activities. Shallow high-resolution seismic investigations have successfully imaged salt dissolution sinkholes in central Kansas over the last 20 years (Steeple et al., 1986; Knapp et al., 1989; Miller et al., 1993; Miller et al., 1997). In almost all cases, previous studies unfortunately have been relegated to indirect inference of structural processes and subsurface expression in the salt interval (mainly from interpretations of structural deformation in layers above the salt). Resolution potential and signal-to-noise ratio of seismic data from this study enables interpretation of important structural features and unique characteristics within the salt interval controlling sinkhole development.