South Eubank Field—Successful Development of Deeper Reserves Using 3D Seismic

Ernie Morrison Kansas Geological Survey, Wichita, Kansas

A portion of recent field development efforts in the Hugoton Embayment of western Kansas have focused on deeper Mississippian sandstone reservoirs of the Chester Series. Such efforts yielded particular success in the South Eubank field, Haskell County, Kansas. Subsurface mapping and 3D seismic information led to approximatelly 30 new producers being drilled in this field. Reservoirs are best developed in fine-grained, well-sorted Chester sandstones filling a narrow incised paleovalley system that extends north-south through the field. 3D seismic data were required to delineate the paleovalley system accurately and to locate specific drill sites. Success at South Eubank suggests that other portions of the same valley system might be similarly developed.