

The Silurian Guelph Reefs of Ontario: A Fascinating History Revealed by New 3-D Seismic Images

Bruce Bailey

Bailey Geological Services Ltd. 102 Blackthorne Crescent, London, ON N6J 4B5
bbailey9@telus.net

ABSTRACT

Recent 3-D seismic shooting in the Ontario portion of the Michigan Basin has produced a number of superb images of the Silurian Guelph pinnacle reefs, which allow a different perspective on their growth history and subsequent modification and destruction. These changes have altered the build-ups both geometrically and petrographically to produce an entire series of superb hydrocarbon traps which, upon depletion, have been successfully converted to underground natural gas storage reservoirs. This paper shows several of these new seismic images and speculates on their geological meaning.