

Seismic Imaging at Conger: Lessons Learned in Gulf of Mexico Subsalt Imaging

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ABSTRACT

The Conger Field is a significant subsalt discovery located in the northeastern portion of Garden Banks. Production from four subsea wells has been steady and is very prolific. Conger was discovered in late 1997, with first production in November 2000. Conger is situated partially beneath salt. Reservoirs consist of multiple, geopressed, high-quality turbidite sandstones at depths ranging from 19,500 to 21,000 ft. These reservoir sandstones exhibit acoustic impedance contrasts that give rise to distinct seismic amplitude anomalies when hydrocarbon filled. However, despite the strong impedance contrasts, the seismic image is significantly distorted by overlying salt, and the subsurface evaluation heavily relied on the well data and geologic analogs. To date, production at Conger has been excellent, confirming the geologic model for the field, *i.e.*, laterally continuous sandstone reservoirs with minimal faulting.