

# **Seismic Interpretation of a Complex Tectonic Environment, Northland Basin, New Zealand**

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## Abstract/Excerpt

An extensive suite of 2D seismic data offshore western New Zealand was interpreted to elucidate the complex tectonic setting of this region and its impact on younger depositional systems. The seismic interpretation of the southern part of the Northland Basin was successful in evaluating the geological history of the basin, indicating that extensional faulting in the Late Cretaceous and Neogene was followed by uplift, creating the structural framework for the basin and determining the location of the accumulation of younger marine sediments. The basin exhibits many structural and stratigraphic features including normal faults, north-verging reverse growth faults, and igneous intrusions.