

Reservoir Characterization and Connectivity Analysis of a Multi-TCF Gas Field: Quantifying Risk and Uncertainty through Integrated Multi-Disciplinary Analysis

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ABSTRACT

The paper presents an interdisciplinary investigation into geological and production-timescale compartmentalization at a giant gas discovery, based on sedimentological, stratigraphic, structural, reservoir engineering, and geochemical analyses, as well as numerical models that represent mixing variables over geological time. Multidisciplinary study was essential to being able to understand the potential for compartmentalization across such a large, dynamic field, sampled by a limited exploration and appraisal dataset.