



ORAL PRESENTATION

New Triassic tectonostratigraphic observations across the central North West Shelf, Australia

Steve Abbott¹, Chris Nicholson¹, Tom Bernecker¹, Claire Orlov¹, George Bernardel¹, Nadege Rollet¹, Duy Nguyen¹, Merrie-
Ellen Gunning¹

¹*Geoscience Australia, Australia*

Steve.abbott@ga.gov.au

The Triassic succession in the Roebuck Basin and parts of the adjacent Carnarvon, Browse, and offshore Canning basins, is the subject of a regional mapping program at Geoscience Australia. The lower part of the Triassic succession includes sediments of the Keraudren Delta in the Bedout Sub-basin, which has been identified as Australia's new offshore oil and gas province.

The study investigates the palaeogeographic evolution of the basin fill, including the distribution of carbonate, siliciclastic and volcanic lithologies. Structural and stratigraphic mapping is yielding new insights into petroleum systems elements. In addition, geochemical analyses will lead to a refined understanding of Triassic petroleum systems in the region. The results will inform future assessments of the hydrocarbon prospectivity across the central North West Shelf.

SPEAKER BIOGRAPHY

Steve Abbott earned his qualifications in sedimentary geology from Flinders (Hons, 1987) and James Cook (PhD, 1994) Universities. He joined the Energy Systems Branch at Geoscience Australia in 2013, where he works on regional tectonostratigraphic studies of the North West Shelf. Steve's past roles include mineral exploration (mainly for sedimentary uranium in central Australia), teaching and research (Southern Cross University, James Cook University, and the University of Tasmania), and regional mapping with the Northern Territory Geological Survey. Steve is President of PESA-ACT.