



ORAL PRESENTATION

Exploring the Triassic Oil Potential on the North West Shelf, Australia

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The exploration history of the North West Shelf suggests that the Australian petroleum systems are predominantly gas prone, typically found beneath the mid Cretaceous regional seal.

Carnarvon Petroleum regional and local seismic mapping, in conjunction with exploration drilling results, indicates that the Triassic has three oil prone petroleum systems, the Early, Middle and Late Triassic.

Fundamental to understanding the areas where these three petroleum systems will work is a thorough understanding of palaeogeographies, palaeoenvironments and stratigraphy.

Carnarvon believe the petroleum systems have a distinct palaeogeographic distribution and are not ubiquitous source rock/reservoir horizons across the North West Shelf.

Various laboratory analyses, sedimentology, seismic mapping and seismic facies work have contributed to the identification of the most encouraging areas to explore.

Additionally, the proximity of the Triassic geology of the North West Shelf to SE Asia Triassic geology, with their similar depositional setting, prior to Gondwana break-up, adds credence to the proposed theories.

Examples of the early, middle and late Triassic oil petroleum systems will be illustrated and identified in some of the major basins on the NW Shelf.

SPEAKER BIOGRAPHY

Claudia Valenti obtained a BSc in Geological Resources and an MSc in Applied Geological Sciences from University of Pavia, Italy in 2012. She moved to Australia and started working for Carnarvon Petroleum as a geoscientist in 2014. For the last five years her main focus has been interpreting the geology of the Browse, Roebuck Basin and Vulcan Sub-basin. Claudia is a member of PESA.