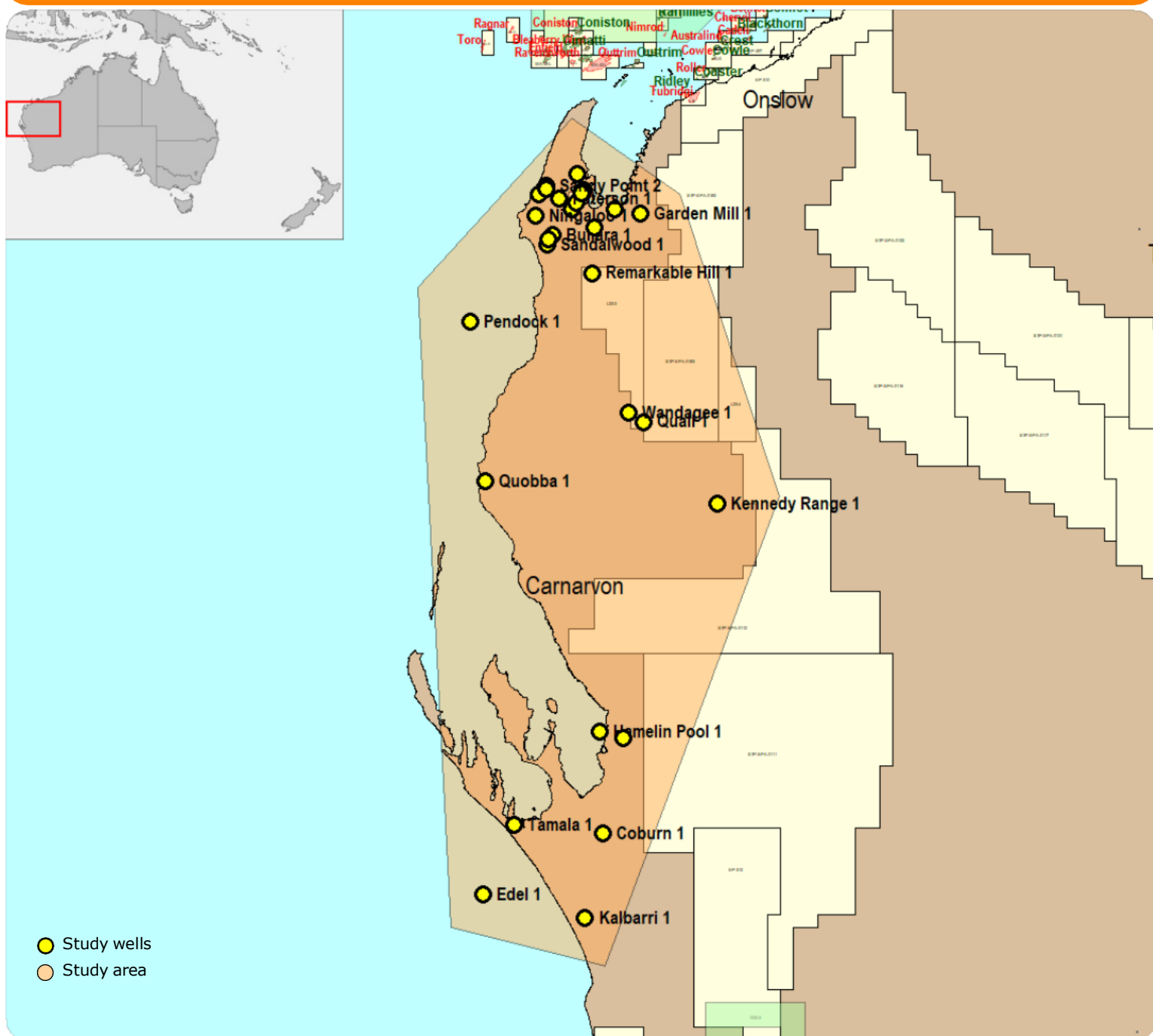


ONSHORE SOUTHERN CARNARVON MULTI-CLIENT STUDY

A petrophysics, rock physics and stochastic modelling study of 29 wells (including unconventional analysis over potential gas shale layers)



A petrophysics, rock physics and stochastic modelling study of 29 wells

Wells

Bullara-1, Coburn-1, Edel-1, Garden Mill-1, Hamelin Pool-1, Kalbarri-1, Kennedy Range-1, Midway Hill-1, Ningaloo-1, North Giralia-1, Parrot Hill-1, Paterson-1, Pendock-1, Quail-1, Quobba-1, Remarkable Hill-1, Roberts Hill-1, Rough Range-1B, Rough Range-11, Sandalwood-1, Sandy Point-1, Sandy Point-2, Tamala-1, Trealla-1A/ST1, Wandagee-1, West Giralia-1, Whaleback-1, Wingette-1, Yaringa-1

Study includes

Petrophysics report, raw and final LAS files including petro. Evaluated and final elastic curves and TOC and brittleness as part of unconventional analysis

Brine substituted curves for all main elastic parameters (sonic, shear and density)

Rock physics and stochastic modelling report including reservoir and non-reservoir trends and all possible seismic responses over the studied area

Full documentation

Petrophysics

Comprehensive petrophysical interpretation including porosity, saturation, and lithological evaluation by integrating all available data including wireline and LWD logs. Full composite interpretation plots accompanied with lithological descriptions, core analysis and well test information.

Rock physics

Statistical rock physics trends classified based on the lithology, elastic rock properties (V_p , V_s and density) or structural geology of the area (if required). The extracted rock physics trends can be used in quantitative seismic interpretation to extract geological information from the seismic data.

Stochastic forward modelling

Can answer questions such as:

- What type of AVA and amplitude response should I expect?
- Does AVA aid in the discrimination and prediction of fluid and lithology?
- What amplitude responses do we expect to see on full stack data?
- What is the range (uncertainty) in the expected response?
- Given the observed inherent scatter in end-member rock properties, can we discriminate between different lithology and fluid combinations in rock property space?
- How do all the above change with depth, fluid and lithological variations?

