



FESAus Monthly Technical Meeting

“Uncertainty Modelling, Value of Information and the Petroleum Resources Management System”

Rick Aldred, Consultant

Abstract:

Asset value is generally based on ‘proven’ estimates of hydrocarbon in place and its uncertainty that separates the ‘proven’ estimate from the ‘best technical estimate’. Therefore, quantifying and reducing uncertainty is the key to demonstrating the value of data, the value of information and the value that Petrophysics bring to an asset.

There are various different methods for modelling petrophysical uncertainty and it is essential the correct method is applied. To illustrate this a simple example is presented where uncertainties in volumetrics are considered. Using an interpretation of the most basic information we see the effects of the uncertainty in terms of hydrocarbons in place. Then, as more data is added we see those uncertainties reduce and the actual value of the asset grow. We can also see how the use of inappropriate modelling techniques can overestimate uncertainty and reduce asset value.

Analysing value of information in this way provides a method for determining priorities, designing fit for purpose logging and coring programs and justifying the costs of each aspect of data acquisition and interpretation.

The presentation will also discuss the Petroleum Resource Management System and the role that the SPWLA will play in its development, now that the Society is a sponsor.

About the Presenter:

Rick Aldred is a Petrophysicist with 37 years experience, including 15 years with operating oil companies, 10 years with logging companies providing petrophysical consulting services, 10 years in petrophysical software development and 2 years as an independent consultant. In that time, he has worked in Western Europe, North Africa, the Middle East, the Indian Subcontinent, South East Asia and Australia. He currently works as a consultant based in Brisbane, specializing in building software solutions to solve complex petrophysical problems, training in advanced petrophysical applications and general petrophysical interpretation work.



DATE: Tuesday 9th May 2017, 12:00 – 1:30 PM **VENUE:** Hotel IBIS- 334 Murray Street, Perth

COST: Members \$30.00; Non Members \$40.00; Students/Retirees \$10.00

Online registration at www.fesaus.org

Note: limited seats for unregistered attendees may be available: \$50.00 cash door charge

