



# FESQ Petrophysics Course

Wednesday 29<sup>th</sup> and Thursday 30<sup>th</sup> of August

## Course Outline

*Wednesday:* Petrophysical data acquisition and tool theory

*Thursday:* Petrophysical data interpretation

## Instructor Names, Organizations

Tom Neville, Asia-Pacific Formation Evaluation Services

## Course Duration / Venue

**8:45 registration** for **9.00 am (start)** to **5.00 pm**, Cliftons Brisbane, Level 3 / 288 Edward St

*Lunch and morning / afternoon tea / coffee included*

## Registration cost

**\$600** per person

**\$200** for students

[REGISTER HERE](#)

## Who Should Attend (Target Audience)

Engineers, Geoscientists, (Grad.) Students, Researchers, Technical Managers and Engineering Technologists who are interested in understanding where petrophysical data comes from and how to use it for evaluating the key properties of reservoirs.

## Course Level (Beginner, Intermediate or Advanced)

- Beginner (Foundation)
- Intermediate

## Course Outline

### Petrophysical data acquisition

- Drilling for petrophysics and the borehole environment
- Mud logging data acquisition
- Coring and core analysis
- Wireline and LWD data acquisition

### Tool physics

- Electromagnetic
  - SP, resistivity, induction, propagation resistivity, dielectrics, magnetic resonance
- Nuclear
  - Gamma ray, density, neutron, pulsed neutron capture, neutron-induced gamma-ray spectroscopy
- Acoustic



## Petrophysical data interpretation

- Overview of the general petrophysical workflow (with a focus on standard quad-combo measurements)
  - Evaluating lithology
  - Evaluating porosity
  - Evaluating pore geometry and permeability
  - Evaluating saturation
- Integrating advanced petrophysical measurements to enhance interpretations (magnetic resonance, dielectrics, and neutron-induced gamma-ray spectroscopy)
- Integrating core data to enhance interpretations (routine and special core analysis)

### Instructor Bio



**Tom Neville** is currently Principal Consultant at Asia-Pacific Formation Evaluation Services and Technical Advisor to Qteq. After completing a BSc degree in Geology at the University of Queensland, Australia in 1989, Tom worked as an exploration and development geologist for several Australian E&P companies before joining Schlumberger as a petrophysicist in 1996. In the following twenty years Tom held a variety of technical and management positions in operations, engineering, and research with Schlumberger, including Research Director for Reservoir Geosciences at Schlumberger-Doll Research, Formation Evaluation Software Discipline Manager at Schlumberger's Beijing Geoscience Centre, and Asia/Australasia Petrophysics Advisor for Schlumberger Wireline, before returning to Australia in 2017.

Tom is co-author on over thirty peer-reviewed technical papers, conference presentations, and other publications, and won the Best Paper Award at the 2007 SPWLA Annual Symposium. Tom is also co-inventor on eleven US patents.

Tom is a member of AAPG, SEG, SPE, and SPWLA. He served on the SPWLA International Board of Directors for six years, as Vice President–Information Technology and as Regional Director for Asia/Australasia, and was a member of the SPWLA Technology Committee for five years, and has been a Technical Reviewer for SPE Reservoir Evaluation & Engineering for the past eight years. He is a highly-rated instructor with over fifteen years of experience providing training on all aspects of formation evaluation, including Schlumberger's internal Reservoir Petrophysics course, which he introduced in 2003 and led for over ten years.