



FESAus Monthly Technical Meeting

“Mobility, Permeability and Productivity Measurements with Formation Testers”

Jack Harfoushian, Schlumberger

Abstract:

With today's depressed price of oil, underlying uncertainties relating to reserves estimation are subjected to more scrutiny than ever prior to final investment decision. Permeability is a key reservoir property which directly impacts well and reservoir performance, recovery factor, and therefore reserves. Although it can be inferred from petrophysical measurements, such as poro-perm correlations, NMR or sonic data, permeability is a dynamic measurement best made in-situ while flowing native reservoir fluids. Drill stem tests have been the traditional way of providing average effective permeability of the entire reservoir, which is important at initial stages in determining productivity and completion design. Formation testers have come a long way over the past few decades and can now provide representative and accurate permeability measurements over a variety of dimensions. Older generation formation testers were designed primarily to measure pore pressures, collect fluid samples and give a qualitative estimation of mobility at the tested point. This presentation will highlight some of the pitfalls of such mobility estimations, especially in thinly laminated deltaic sandstone deposits we encounter in hydrocarbon basins around Australia, and will examine methods for accurate permeability and productivity measurements with advanced formation testers.

About the Presenter:

Jack Harfoushian is a Reservoir Engineering Advisor for Schlumberger Australia, providing data acquisition support and interpretation development for formation testing and sampling services. Jack holds a Bachelor of Engineering degree from Curtin University, Australia, and a Master of Engineering degree in Reservoir Engineering from Heriot-Watt University in Scotland, UK. He has authored a number of papers and has given numerous presentations on formation testing and sampling at various conferences. Jack is a member of the SPE and SPWLA; he has been a member of SPE Distinguished Lecturers committee and currently serves as a SPE section committee member in Perth.

DATE: Tuesday 9th August 2016, 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

