

Time Lapse Seismic in Reservoir Management

By Ian Jack of BP Exploration

On Wednesday, July 8, the Victorian branch of the ASEG held a one-day workshop on "Time Lapse Seismic in Reservoir Management". This was presented by Ian Jack of BP Exploration and was attended by about 40 geologists, geophysicists, engineers, students and members of academia.

Thanks are extended to the SEG and ASEG as well as BP for bringing Ian Jack to Australia and allowing him the time to teach this workshop. Ian showed that while there is still a lot of hype surrounding Time Lapse Seismic (TLS) there have been some very successful commercial results using this type

of methodology. One of the many good aspects of the workshop was that Ian identified criteria that need to be met before embarking on a TLS project. Not all TLS surveys are successful, as the observed differences need to be calibrated against certain rock / acquisition / processing property criteria. If your particular oil/gas field does not meet these criteria, the TLS differences will be too small to be observable above the background seismic noise. In other words, a threshold signal-to-noise ratio needs to be met.

Reported by Phil Lock (PESA Vic/Tas Committee).