



NEWSLETTER March 2010

Message from the LPS President:

The year is marching on at a fast pace and we are quickly ticking event off the LPS calendar. A very big thank-you to Wei-Chun Chu from Pioneer Natural Resources for the presentation on “The use of wireline formation testers with downhole fluid analysers in thin beds” at the February meeting.

On the 15th March Richard Holland from Weatherford has kindly agreed to talk on “Image Petrophysics – A Fresh Look at Image Logs” at our next evening meeting. See this newsletter for an abstract.

The last five years have seen a huge increase in exploration and drilling in what can be considered as unconventional gas reservoirs. Knowledge of petrophysics within tight gas, coal seam gas and shale gas reservoirs will become vital for many of us. To help disseminate this knowledge we are planning a one day seminar on “Petrophysics in Unconventional Gas Reservoirs” seminar. See this newsletter for the preliminary programme and registration form. The ten talks should provide an excellent ‘primer’ to this emerging area of petrophysics.

One of the primary aims of the LPS is to promote petrophysics within English and Welsh universities. To further these aims, the LPS provide financial support in the form of Bursaries for students, and Grants for students and university departments. The scheme is named after Iain Hillier, who served on the LPS committee for many years and made an outstanding contribution to its work. Last year we distributed over £5000 in academic funding. We are accepting applications for 2010. Please see the website for more details:

<http://www.lps.org.uk>

All the best

Adam Moss: LPS President



London Petrophysical Society
Registered Charity Number 1020083
A Chapter of SPWLA

Dates for Your Diary

Monday 15th March, LPS Evening Meeting, Geological Society, London, Piccadilly. 6pm. Richard Holland – Weatherford, “A new look at Imager Logs (CMI)”

Tuesday 23rd March, LPS One Day Seminar, Geological Society, London, Piccadilly – “Petrophysics in Unconventional Gas Reservoirs.”

Monday 26th April, LPS Evening Meeting, Geological Society, London, Piccadilly. 6pm. George Williamson – Baker Hughes, “Coring and Core Handling”



Next Evening Talk

Image Petrophysics – A Fresh Look at Image Logs

Richard Holland

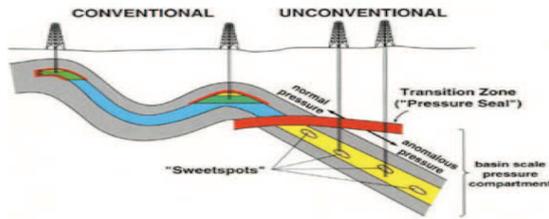
Abstract:

Borehole images based on high resolution measurements of resistivity, conductivity and acoustic properties have been used for many years to investigate depositional and structural attributes of reservoir rocks and surrounding formations. In conventional log analysis empirical transforms are frequently used to convert standard measurements into quantities that have more direct relevance to reservoir quality: porosity, permeability and volumetrics for example. Image Petrophysics applies the same principles to high data density borehole images, and uses neural networks to recognise patterns that can be trained against core and production history data to highlight intervals with (for example) the greatest production potential.

A typical image petrophysics workflow starts with estimating porosity and V_{clay} from the image and the standard open-hole logs, followed by grain size, sorting, porosity and permeability distributions from the Kozeny-Carman and Coates-Timur relationships. These provide azimuthal property variations on the image scale (which is typically 2mm vertical and about 4mm circumferential).

Biography:

Richard graduated from the Robert Gordon University with an MSc in Offshore Engineering. Since 2005 he has worked as a Log Analyst for Weatherford Subsurface Evaluation Services producing log based analyses in the open and cased-hole environments.



The London Petrophysical Society announces a one day seminar focused on:

Petrophysics in Unconventional Gas Reservoirs

Tuesday 23rd March at the Geological Society, London

Unconventional Gas Reservoir Petrophysics and Geology – Two talks from Leicester University

Some Uncertainties in Reservoir Characterization of Tight Gas Sands – Leeds University

Cased Hole Saturation Measurements in Unconventional Gas Reservoirs – Baker Hughes

LaserStrat® - Well Site Chemostratigraphy - Unlock the Potential of your Cuttings; its application to well bore positioning, mineralogy and rock mechanics – Halliburton

Pressure Build Up and Fall off Analysis Using Wireline Formation Testing in Coal Bed Methane – Schlumberger

Enhancing Productivity and Formation Evaluation in Shale Gas Plays Through Surface Gas and Geochemical Logging - Weatherford

Formation Evaluation of a Low Permeability Carboniferous Gas Reservoir, UKCS Southern North Sea – Centrica

The Ensign Field: Lessons Learned from a Tight Gas Reservoir – Centrica

Integrating Core and Log Data in Tight Gas Reservoirs – BG Group

£150 for LPS/PESGB/AFES/SPE Members
£175 for Non-members

LPS is not VAT registered.

For further information and registration forms visit: <http://www.lps.org.uk> or e-mail:

robert.webber@bg-group.com

