



NEWSLETTER March 2011

Message from the LPS President:

I hope that none of you or your colleagues has been adversely affected by the upheavals in North Africa and the Middle East. When I see pictures of people laying down their lives in cities I recently visited and worked in it certainly puts things in perspective.

We still have plenty of places left at the “Infatuation with Saturation – Water Properties and Water Saturation” seminar on the 17th March. See this newsletter for the programme and a registration form. You can turn up on the day if you wish, but if you can send in a registration form in advance we would appreciate it, so we know catering numbers. The seminar should address many common issues and is a must for all jobbing petrophysicists.

We are shifting the start time of evening lectures to **6.30pm** from this month onwards. Hopefully the later start will allow more time for members to travel in after work. The evening talks are free and include post-talk food, wine and convivial company. The next evening talk is next Monday, 7th March. Celestino Artur from BP will be talking about “Geo-stopping, the real value of at bit measurements in deep water Angola.”

We have had a request from Leeds University for help in finding suitable petrophysics-focussed MSc projects for their students. The projects start in early March and have to be completed by mid August. The students can work in your company’s offices or from the university. Over the last few years I have worked with a number of students on MSc research projects and always found it very rewarding. It is a great way of getting a small research project started and often leads to full time employment for the student within the host company. If you think you can help out please contact the VP External Relations Jeremy Farrow, jeremyfarrow@talktalk.net

Hope to see you soon at one of our events.

All the Best

Adam

Adam Moss: LPS President



Dates for Your Diary

**Monday 7th March 2011, LPS Evening Meeting, Geological Society,
London Piccadilly. 6.30pm.**

Celestino Artur, BP.

"Geo-stopping, the real value of at bit measurements in deep water Angola".

**Thursday 17th March 2011, LPS One-Day Seminar, Geological Society,
London Piccadilly.**

"Infatuation with Saturation" - Water Properties and Water Saturation.

**Monday 11th April 2011, LPS Evening Meeting, Geological Society, London
Piccadilly. 6.30pm.**

Astrid Koppernaes, Mythri Limited.

"Log prediction using Mythri's new method".

**Monday 9th May 2011, LPS Evening Meeting, Geological Society, London
Piccadilly. 6.30pm.**

Gabriela Carrasguero, Fugro-Jason.

"Rock Physics and Petrophysics Integration as part of a Seismic Reservoir
Characterisation workflow. Case Study: Norwegian Barrents Sea".



LPS Sponsorship:

Many thanks to these wonderful companies who have agreed to sponsor the LPS for 2011;

Baker Hughes, Fugro-Jason, Kirk Petrophysics, RWE-Dea, Schlumberger, Senergy, Weatherford Labs and Weatherford International.

Remember, sponsors get their logo on our website, plus an advert on the MarketPlace page and in the Newsletter. Contact Mike Millar for details.

We are also very grateful for the Open-day sponsors, BG Group, Hess and Schlumberger.



Next Evening Talk:

“Geo-stopping, the real value of at bit measurements in deep water Angola”

Celestino Artur - BP

Operating in a high cost deepwater environment the financial benefits of acquiring an array of real time data is often easy to quantify however it is not always as easy to strike the correct balance between quick decision making, engineering integrity and subsurface success, with the geological objectives often being the ones compromised. This presentation will outline how in the drilling of the Greater Plutonio Development all these demands have been managed using at bit LWD resistivity measurements.

The reactive nature, once exposed, of the shales overlying the deep water turbidite sandstone reservoirs means that it is essential to leave as little as possible exposed when setting the casing above. The reservoirs targeted are also often thin with a high proportion of the net in the upper portion meaning that there is a strong geological need to minimize the penetration into the sandbodies. With the uncertainty in the seismic dataset stopping drilling the overburden section on depth is not practical as it would likely lead to excessive penetration into the reservoir or a long length of the mudstone exposed above so a different approach is needed. With the use of at bit resistivity measurements the field has been able to be developed with overburden drilling stopped on the basis of geology actually observed - 'geo-stopping'.

This approach has preserved in excess of 100m of the best quality reservoir for production and injection and in a number of wells prevented entire reservoirs being exposed to damaging cementing operations. At the same time it has been possible to cut an average of 24 hours from the online rig activities from any of the alternative methods that may have previously been attempted in order to get close to this reservoir saving.



**London Petrophysical Society
One-day Seminar**

“Infatuation with Saturation” Water Properties and Water Saturation

**Thursday 17th March 2011
At the Geological Society, London**

Objective

**A series of presentations to review the current approach and thoughts on
water properties and water saturation**

Presentations on:

- “Forties Water Salinity”**
- “Dramatic Variations in Oil Zone and Aquifer Water Compositions in Forties and Gyda Fields”**
- “Water Salinity Changes Across the Prudhoe Bay Field”**
- “10,000 years BC. Shaly Sand Water Saturation Interpretation Without Core Data”**
- “Variable R_w Azerbaijan”**
- “ R_w in Oil Legs”**
- “SP and Variable Water Salinity”**
- “Using Dielectric and Magnetic Resonance measurements to determine water saturation”**
- “NMR Fluid Identification”**
- “Formation Damage and Water Injection – an Overview”**
- “Formation Waters as Scale Inhibitors: The Benefits of Scale Deposition in the Reservoir”**
- “Impact of Reservoir Fluids Analysis on selection and optimization of Production Chemicals”**

Confirmed Speakers From:

**BG, BP, Baker Hughes, Chevron, Independent Consultants
JPL Caltech, Schlumberger and Senergy**

**Registration Cost: £150 for LPS/PESGB/AFES/SPE Members,
£175 for Non-members (LPS is not VAT registered)**

For further information and registration details please visit www.lps.org.uk or e-mail: ian.draper@bakerhughes.com



Infatuation with Saturation Thursday 17th March 2011 Agenda

Time		Presenter	Company	Title
09:00	Registration	Ian Draper	LPS	
09:20	Introduction	Adam Moss	LPS	
09:30	Keynote	Derek Thomas	Independent	Forties Water Salinity
10:00		Max Coleman	JPS Caltech	Dramatic Variations in Oil Zone and Aquifer Water Compositions in Forties and Gyda Fields
10:30		Dick Woodhouse	Independent	Water Salinity Changes Across the Prudhoe Bay Field
11:00	Coffee			
11:30		Simon Stromberg	Senergy	10,000 years BC. Shaly Sand Water Saturation Interpretation Without Core Data
12:00		Ade Elegbede	Sasol	Rw in Shaly Oil Legs
12:30		Simon Clinch	Chevron	Rw in Oil Legs
13:00	Lunch			
14:00		Ian Pigram	BP	Variable Rw in Azerbaijan
14:30		Mike Millar	BG	SP and Variable Water Salinity
15:00		Jim White	Schlumberger	Using Dielectric and Magnetic Resonance measurements to determine water saturation
15:30	Tea			
16:00		Geoff Page	Baker	NMR Fluid Identification
16:30		Mike Byrne	Senergy	Formation Damage and Water Injection – an Overview
17:00		Ross McCartney	Oilfield Water Services	Formation Waters as Scale Inhibitors: The Benefits of Scale Deposition in the Reservoir
17:30	Wine & Savouries			

Job Advertisement:



To start as soon as possible, we are looking for a

SENIOR PETROPHYSICIST (M/F)

FOR RWE DEA AG AT THE GEO SUPPORT CENTRE/FORMATION EVALUATION, LOCATION
HAMBURG

Your tasks:

- taking responsibility for planning a well evaluation programme, using the latest technical developments and, depending on the well path, also using logging-while-drilling tools
- coordinating and supervising both wireline and logging-while-drilling measurements, supporting technical measurements for production control and cement quality
- witnessing logging operation at the well site and performing preliminary computer-based evaluations at the well site, selecting pressure test points and assisting with the positioning of sidewall cores
- assuming responsibility for giving advice on additional work programmes such as perforations, abandonment decisions or side-tracking of wells, and changes to the measuring programme based on the well and reservoir situation
- petrophysical steering of deviated wells in close consultation with geologists and the drilling department
- producing final, computer-based evaluations using the entire measurement using additional information from core, geology, fluid analyses and well tests
- defining the special core measurement programme
- evaluating petrophysical laboratory data and integrating it into log analyses
- re-interpreting well logs for the purpose of regional studies and static modelling based on new information
- integrating petrophysical results into the field-wide reservoir characterisation study and the conditioning of petrophysical study for further use in reservoir simulations
- technical review and plausibility calculation of data room material and other concession options
- analysing cased hole measurements including production and cement bound logs as well as rock-mechanical findings for advising drilling and production operations

More information about RWE and current positions on

▶ www.got-the-energy-to-lead.com