Third Borehole Geology Workshop

NEW FRONTIERS IN BOREHOLE GEOLOGY FOR CHARACTERISATION, MODELLING, UPSCALING AND INTEGRATION

14-17 OCTOBER 2019 • MUSCAT, OMAN

Technical Programme
WORKSHOP OVERVIEW

Borehole data are fundamental in all types of studies aimed to measure and describe, understand and eventually predict the geology in the subsurface.

Together with core borehole images are currently the only data that can provide us a high-resolution view of the actual rock and its features in the borehole. The integration of core and borehole images with a wide range of other data types such as physicochemical measurements, conventional logging data, cuttings analysis as well as rock and fluid samples allow us to achieve a holistic and detailed understanding of the subsurface features, properties and heterogeneities at various scales to address a wide range of challenges.

In the last years, driven by technological and economic changes, borehole images as well as other borehole-based techniques are being applied in a wider range of subsurface characterization studies; these span from hydrocarbon reservoir studies and operations throughout the E&P cycle to applications in environmental impact and mineral resource, and in alternative energy sources. In this perspective the need for multidisciplinary integration and cross-discipline collaboration is stronger than ever.

The Third EAGE Borehole Geology Workshop welcomes attendance and contribution of all subsurface professionals that are working in different disciplines of the energy, resource and environmental sectors both in the industry and in academic and research institutes. The workshop will also be a ground for triggering collaboration amongst borehole geologists and professionals of other subsurface disciplines.

FIELD TRIP

Monday, 14 October 2019 07:00 – 17:00
Borehole image and outcrop aspects of fractures and fractured reservoirs in Jabal Madmar (Oman)
Observation, interpretation and calibration
By Loic Bazalgette, Mohammed Helmy and Salim Al Shuaili (PDO)

TRAINING SESSION

Wednesday, 16 October 2019
An overview of Borehole Image Structural Interpretation
Salim Al Shuaili, Petroleum Development Oman

Thursday, 17 October 2019
Forward Stratigraphic Modeling with GPM
Rania Carballares, Schlumberger

OVERVIEW OF REGISTRATION FEES

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Please note: The Registration fee includes the training sessions on 15 – 17 October 2019 and the social functions, however it does not include the fieldtrip. Upon registering, please indicate if you would like to attend the fieldtrip as seats are limited.
To qualify for the member registration fee, your EAGE membership dues for 2019 must have been paid and confirmed. The processing time for membership applications or renewals is 10 working days.
To qualify for the reduced student registration fee:
- Students must be enrolled in a full-time study programme at a recognized university or institute.
- The registration must be accompanied by a copy of a student ID card and/or official proof of enrolment.
- Please note: Student non-members can’t be older than 34 years of age (when registering)
Please note that EAGE reserves the right to cancel the event due to low participation, in this case, payment will be refunded in full.

HOW TO REGISTER

We recommend that you register for the workshop and field-trip via the online registration form on the EAGE event website.

VENUE – CROWNE PLAZA, OCEC

EAGE has negotiated room rates for delegates attending the Third Borehole Geology Workshop. Please visit the website for more information or mai@eage.org for more details.

Crowne Plaza
Hotel address: Crowne Plaza Muscat Oman Convention & Exhibition Centre, Al Jamah Al Akbar Street, Madinat Al Irfan
Phone: +968 2425 1071
Email: mahira.albalushi@ihg.com
Website: crowneplaza.com/muscatoece
Oral Presentations | Tuesday 15 October

AL ADHAM BALLROOM

08:00  Registration & Coffee
08:40  HSE Announcement
08:45  Opening Address - Ingelinn Aarnes (Baker Hughes)
09:00  Keynote Address - Dr. Wouter Smits (PDO)

Session 1: Beyond Oil and Gas: Mining and Mineral Resources, Environmental Applications, Geothermal Wells
Session Chairs: I. Aarnes (Baker Hughes), A.K. Thorsen (Baker Hughes)

09:45  BG01 - Structural and Hydrogeological Study at Oman Drilling Project-BA Site - A. Al-Hajji1, I. Callegari, E. Holtebecher, J. Matter1, P. Couet1, D. Roubinet1, R. Laprovost2, G. Lods2
1German University of Technology in Oman; 2University of Southampton

10:15  BG02 - Integration Borehole Image and WEB AVO inversion for fracture prediction in deep reservoirs - A. Pascarella1,*, P. Van der Vegte1, C. Leo1, M. Zhang1, P. Dougenis2, P. Haffinger2
1PanTerra Geoconsultants BV; 2Delft Inversion

10:45  BG03 - Borehole Image Logs applied to Sequence Stratigraphy and Geothermal Exploration in Carbonates: an Integrated Workflow(Upper Jurassic/Molasse basin). - P. Welpert1,*, T. Aigner1
1Eberhard Karls University Tübingen/germany

11:15  Discussion

11:45  Coffee Break

Session 2: The Role of the Geologist in Automation and Digital Enabling Innovations
Session Chairs: C. Buchan (Task Fronterra Geoscience), C. Shrivastava (Schlumberger)

12:15  BG04 - Particle Shape Analysis for Conglomerate Reservoir Using Borehole Resistivity Images - A. Aviantara1,*, S. Yang1,*, W. Huang1, C. Chen1, I. Le Nir1, J. Yuan1, S. Li1, H. Delius1, K. Pokhriyal2,*, C. Shrivastava1,*, A. Riva2,*, R. Berto2
1Schlumberger; 2Erlskiford GmbH; 3Schlumberger; 4Erlskiford Inc; 5Schlumberger

12:45  BG05 - Geological Data Integration in Automation Processes - A. Thorsen1,*, M. Miraglia2,*, A. Riva2,*, R. Berto2
1Schlumberger; 2Eni S.p.a.

13:15  Discussion

13:45  Lunch

14:45  BG06 - Novel Dip Picking Approach using “Expert Dip” in HAHZ Well and Influence on Structural Modelling - C. Shrivastava1,*, S. Dasi1,*, G. Sultan1, V. Vallege1, S. Bhadra1,*, C. Shrivastava1,*, V. Knop1,*, C. Shrivastava1,*, B. Grasemann2
1Schlumberger; 2Erlskiford GmbH

15:15  BG07 - Advanced techniques for image log interpretation in carbonate reservoirs: workflow, geological control factors, dynamic data integration* - G. Buongiovanii1,*, R. Berto1,*, P. Pironé1, G. Trombin1
1Eni S.p.a.

15:45  Discussion

16:15  Close of Day

18:00  Icebreaker

Oral Presentations | Wednesday 16 October

AL ADHAM BALLROOM

08:30  Session: An overview of Borehole Image Structural Interpretation - Salim Al Shuaili (Petroleum Development Oman)

Session 3: The Problem of Scale: From Core to Log to Model
Session Chairs: R. Berto (Eni S.p.a.), C. Rambousek (NiMBUC Geoscience)

09:40  BG08 - The integration of core and borehole image log data using core goniometry - J. Prosser1,*, L. Sven1
1Task Fronterra Geoscience

10:10  BG09 - Borehole Image Described the Bridge between CT to Simulator Cell - M. Helmy1,*, R. Sven1
1Shell / PDO

10:40  Coffee Break

11:10  BG10 - Analysis of subsesismic-scale folds in complex tectonosedimentary settings: A case study from the Austrian Molasse Basin - C. Rambousek1,*, M. Habermueller1, G. Wiesmayr2, B. Grasemann2, RAG Exploration & Production GmbH; 2University of Vienna

11:40  BG13 - Borehole image structural modelling and synthetic dip modelling in 3D - L. Bourke1,*, D. Salafonov1
1Task Geoscience (Asia) Pty Ltd

12:10  Discussion

12:40  Lunch

Session 4: New Acquisition Technologies and their Applications
Session Chairs: R. Carballares (Schlumberger), M. Helmy (Shell / PDO)

13:40  BG14 - Image Logs Worth Hundred Applications: Industry’s First Innovative High-Resolution Dual-Imager Logging-while-Drilling Technology Overcomes Barriers of Oil-base Mud - C. Shrivastava1,*, D. Main1,*, V. Wibowo1,*, C. Shrivastava1,*, L. Solberg1
1Schlumberger; 2Schlumberger

14:10  BG15 - Advances in Borehole Geology Interpretation using the new Dual Imager LWD Tool for Oil-Base Mud - G. Barbacini1,*, C. Shrivastava1,*, R. Berto1,*, T.A. Bianco1, F. Colombo2, M. Miraglia1, A. Riva1, V. Wibowo1,*, Khatib2,*, M. Helmy1,*, R. Svec
1Schlumberger; 2RAG Exploration & Production GmbH; 3University of Montpellier

14:40  BG16 - Integration of latest oil-base mud borehole images with lower resolution tools, Thunder Horse North field, GOM - C. Vahle1,*, B. Ruehlhick2, Z. Veselovsky2, B. Hansen2, Eriksfjord GmbH; 2Eriksfjord Inc; 3University of Montpellier

15:10  Coffee Break & Poster

15:40  BG18 - Borehole stability applications using high-resolution LWD acoustic caliper images - L. Solberg1,*, J. Titjen1, S. Morris1
1BHGE

16:10  Discussion

16:40  Close of Day

19:00  Workshop Dinner
Poster Presentations | Wednesday 16 October

AL ADHAM BALLROOM FOYER

Poster Session

*Schlumberger; †Sonatrach

Oral Presentations | Thursday 17 October

AL ADHAM BALLROOM

08:30 Session: Forward Stratigraphic Modeling with GPM - Rania Carballares (Schlumberger)

Session 5: Multidisciplinary Integration for Reservoir Management and Monitoring: Dynamic and Test Data, Geomechanics, real-Time Petrophysics and Rock Typing

Session Chairs: I. Aarnes (Baker Hughes), C. Shrivastava (Schlumberger)

09:40 BG20 - Using core photos as image logs: An example from a fractured reservoir in Algeria - J. Paludan*, M.S. Abrouche, Y. Oulad Hedda, B. Hichour, H. Taleb

†BHGE Algeria; ‡Sonatrach

10:10 BG21 - Carbonate Reservoir Rock Typing and Mapping from the Horizontal Well High Resolution Logging While Drilling Images - S. Yang*, R.H. Al Lawatia

†Schlumberger

10:40 Coffee Break & Poster


†Schlumberger; †Sarawak Shell Berhad; ‡Schlumberger

11:40 BG25 - Data Integration - Time and Discipline Dependencies - A. Thorsen*

†Baker Hughes, a GE Company

12:10 BG26 - A New Prospective in Geological Data Acquisition for Well Placement Operations - M. Mele, A. Leone

†Eni spa

12:40 Lunch

13:40 BG27 - Integration of Fullwave Sonic with Image Log for Improved Fracture Characterization. - C. Ayadiuno*, X. Sun, W. Li

†Saudi Aramco

14:10 BG28 - Combining rig site XRF data and high-resolution borehole images for identifying a problematic sandstone formation contact - F.J. Bender*, S.R. Fayers, B. Fortier

†Baker Hughes a GE Company; ‡Baker Hughes a GE company; ‡Equinor

14:40 Discussion

15:15 Closing Address (Co-Chair)

15:30 Coffee Break + Close of Day

Poster Presentation | Thursday 17 October

AL ADHAM BALLROOM FOYER

Poster Session
10:40 BG22 - The present-day stress system and tectonic evolution based on borehole image data in offshore Brunei - C. Xu

†Shell US

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CONTACT

For more information on the workshop, please visit the event’s website or contact the EAGE Middle East & Africa office via middle_east@eage.org or +971 4 369 3897.

www.eage.org

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