EAGE

EUROPEAN ASSOCIATION OF GEOSCIENTISTS & ENGINEERS

Second EAGE Workshop on Pore Pressure Prediction

19-21 MAY 2019 • AMSTERDAM, THE NETHERLANDS

First Announcement & Call for Abstracts

WWW.EAGE.ORG

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OVERVIEW

Pore and fracture pressure prediction is at the heart of the well preparation workflow. Whether we are dealing with Deepwater Wells, Frontier Exploration Wells or Deviated Wells in depleted reservoirs, it is necessary to design and deliver safe and cost-effective wells. It is important to precisely anticipate overpressures, evaluating the slope of the pressure ramp-up and predicting whether reservoir pressures are in equilibrium, below or higher than the pressure of the overlying rock depending on the geological model.

Uncertainties exist at different stages of the pore and fracture pressure estimation workflow and are related to several factors including: calibration wells (proximity, similar geologic context), sources of overpressure (are there any sources other than disequilibrium compaction?), uncertainties in seismic velocities, prognosed lithology, LOT data, reservoir connectivity/geological model, nature of faults, sources of overpressures, normal compaction profile, overburden gradient, etc.

It is key to effectively communicate the resultant uncertainties in the PPFG results so that all different parties involved take it into consideration: The geomechanics team for wellbore stability, well design engineers and drilling teams for the well design and execution and the exploration geologists for the prospect evaluation.

Improving our predictions is equally as important as quantifying the uncertainties and communicating them. This requires that we, as an industry, improve our ability to eliminate technical gaps, effectively integrate information from many subsurface disciplines, integrating the uncertainties from all the processed-derived input parameters, and also develop closer interfaces with our Well teams.

AIM OF THE WORKSHOP

Following the very successful Pore Pressure Workshop held in Pau in 2017, the objective of this second workshop is to provide a forum to share technical practices, main challenges and propose solutions. It will also discuss current and future research efforts to resolve some of the main technical challenges in the field.

The audience concerned with this domain is wide: i.e., Exploration Geologists for the 3D/basin scale knowledge, Operation Geologists for well scale analysis and follow-up, Geophysicists for seismic velocities QC, Geomechanical Engineers for the rock failure analysis and Well Engineers directly involved in well design and execution. Specialists in all of these disciplines are thus invited to this forum.

Being at the heart of the pore pressure and fracture gradient prediction process, the pore and fracture pressure team are at the interface between the Geoscience and drilling teams and therefore the aim of the workshop is really to examine the main technical challenges that we face and efforts to resolve these challenges.

TOPICS

The Technical Committee would like to invite you to submit abstracts in one of the following topics:

Pore and Fracture Pressure Uncertainties

- How do the pore pressure prediction teams quantify the uncertainty in pore pressure and fracture pressure prediction, how many curves are presented to cover the range of uncertainty, are they geological concept driven, statistical or HSE driven?
- How does the drilling team uses these curves for defining the drilling window and then well architecture and drilling mud weight programme.

Pore Pressure / Fracture Gradient Prediction in environments with more than one source of overpressure (OVP)

- Should we be bothered about other sources of overpressure other than disequilibrium compaction, locally in our basin – e.g. hydrocarbon generation, clay and sulphate diagenesis?
- If yes, how do you detect if additional source of OVP exists locally – what are the major indications/techniques utilized?
- What alternative approaches are used for pressure estimations when there are additional sources of OVP other than disequilibrium compaction – case studies
- How do we deal with the frontier domain (no calibration, unknown basin and geology, etc.) – case studies

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Monitoring of PP/FG while Drilling and Updating the Model

- Which approach or tools are used to monitor Pore Pressure and Fracture gradient while drilling.
- Is the pre-drill model updated with the acquired data or observations while drilling and how

Future Needs and New Research: What Can We Do in the Industry to Identify and Create the Next Game Changer?

SUBMISSION GUIDELINES:

The technical committee invites submissions of 1-2 page abstracts including at least one figure via the event website: events.eage.org

The abstract submission deadline is: 15 February 2019

IMPORTANT DATES

The Call for Abstracts is now open!

Abstract Submission Deadline	15 February 2019
Early Registration Deadline	15 March 2019
Late Registration Deadline	16 May 2019
Workshop on Pore Pressure Prediction	19-21 May 2019

SPONSORING

The Second EAGE Workshop on Pore Pressure Prediction offers excellent sponsoring opportunities to create high visibility. For more information about sponsoring, please refer to the 'Sponsor Guide' that is available on the workshop website or contact us at corporaterelations@eage.org.

CONTACT

For further up-to-date information, please visit the event website via events.eage.org or contact the EAGE Europe Office at +31 88 9955055 or eage.events@eage.org.

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