

SEG/SPE/AAPG Workshop

6–9 June • Austin, TX

Call for Contributions

Austin, TX • 6–9 June 2010

Joint SEG/SPE/AAPG Workshop Shales: Seal, Reservoir, Source

Abstract submission deadline: 5 March 2010

Advance registration deadline: 6 May 2010



Society of Exploration Geophysicists
The international society of applied geophysics

Shales comprise a large proportion of the rocks in most sedimentary basins, and form the seal and source rocks for many conventional hydrocarbon reservoirs. However, knowledge of shale properties has lagged behind that of sandstones and carbonates, since these formations make up most conventional reservoirs. The recent upsurge of interest in gas shales (resource plays) demands that this imbalance be corrected. In such gas shale reservoirs, the shale acts as the source rock, seal and reservoir, and interest in shale gas plays is increasing rapidly. Because of their low permeability, there is also currently great interest in using shales as possible host rocks for waste storage, and in the petroleum industry shales cause billions of dollars of losses annually in exploration, development and production programs through pore pressure related kicks, blow-outs and wellbore instability. Shales have a decisive impact on fluid flow and seismic wave propagation because of their low permeability and anisotropic microstructure. Recently, much attention has been focused on shale properties because of shifts in the seismic wave travel time that have been observed in the shales surrounding producing reservoirs that are being monitored with time-lapse seismic surveys. Examples of stress arching and reduction of seismic propagation velocity immediately above and below reservoirs, and increased velocity in the sideburden due to stress concentrations at the edge of reservoirs have emphasized the critical link between the dynamic elastic response of shales and their geomechanical properties. Stress and pore pressure magnitudes, stress field orientation and compaction/diagenetic histories significantly impact the dynamic elastic response of shales, affecting velocity, seismic anisotropy and fluid identification.

Despite the obvious importance of shales, there have been relatively few laboratory or field scale studies of shale behavior and their properties remain poorly defined. Improved understanding of shale properties benefits several geophysical areas such as anisotropy quantification for improved seismic imaging, fluid identification and lithology determination, time-lapse seismic interpretation, borehole geophysics and pore pressure prediction, as well as seal evaluation, rock strength estimation and basin modeling. The purpose of this workshop is to bring together experts in the fields of geology, petrophysics, rock physics, geophysics, geomechanics, well stimulation and completion and reservoir engineering. By sharing knowledge and experiences attendees will develop a common understanding of the “state-of-the-art” in the analysis and interpretation of shale properties. Proposed session topics include:

- Shale geology
- Shale petrophysics
- Rock physics of shales
- Shale Geomechanics
- Pore pressure estimation and wellbore stability in shales
- Seismic, acoustic and resistivity anisotropy in shales
- Surface Seismic Response to Shales
- In-situ stress and hydraulic fracturing of shales
- Completion optimization and microseismic monitoring
- Interpretation of travel time shifts in 4D seismic
- The road ahead

Due to the broad and complex nature of the subject, presentations will be selected based on their relevance, technical content, and originality. There will be emphasis on discussion and debate facilitated by experts in the field.

Meeting Schedule:

- Sunday, 6 June – Registration and Ice Breaker
- Monday, 7 June through Wednesday, 9 June – Three full day sessions Monday–Wednesday with morning and afternoon sessions.

Abstracts: There are no formal proceedings from the Workshop. In an effort to encourage candor, presentations are made in an “off-the-record” spirit. However, participants are encouraged to distribute expanded abstracts of their own presentations.

Format: Abstracts should include sufficient detail for the committee to judge the quality of the paper. Abstracts should be a minimum of 1 page text plus 1 figure. Abstracts should be on 8.5 x 11 inch paper, include both text and figures with a one-or two-line title in bold font, size 12-14 points. Authors should be listed in italic font, size 10-12 points and text in Roman font, size 10-12 points. All text must stay 1 inch clear of the margins of the page. Submissions should be in Adobe Acrobat.

Meeting Venue: Hyatt Regency Hotel Downtown on the Lake will serve as the meeting venue and will have sleeping rooms available during your stay.

Submission: We recommend submitting your abstract electronically. You can email it to awatson@seg.org in PDF format. The other method of submission is through the mail. Please submit contributions to the organizers: c/o SEG/SPE/AAPG Workshop on Shales, 8801 S. Yale, Ste. 500, Tulsa, OK 74137-3575.

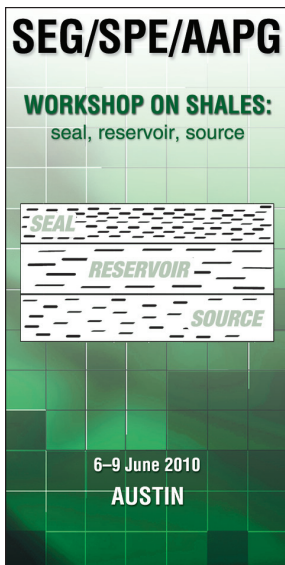
Sponsorship: Sponsorship opportunities are available by contacting Amy Watson at awatson@seg.org.

Acceptance: Direct participation of all Workshop attendees is mandatory. Participation may be through presentation or discussion contributions. An oral presentation is not a requirement in order to be accepted for registration. If the number of applicants exceeds the capacity of the conference facilities, then preference will be given to presenters.

Student Registration: Students are encouraged to submit papers. Students chosen to present will be considered to receive a discounted registration rate. All registration rates will be published at the time acceptance letters are sent out.

Organizing Committee

Robert Tatham, Co-chair (University of Texas-Austin); Colin Sayers, Co-chair (Schlumberger); Eric van Oort (Shell); Bill Almon (Chevron); Jacques Levelle (Hess); Dan Ebrom (Statoil); Manika Prasad (Colorado School of Mines); Robert Suarez-Rivera (TerraTek); John Plappert (Brigham); Jennifer Miskimins (Colorado School of Mines); Tiziana Vanorio (Stanford); Ivar Brevik (Statoil); Carl Sondergeld (University of Oklahoma); Mike Batzle (Colorado School of Mines); Ali Mese (Geomechanics E&R); Bill Agee (Landmark)



Joint SEG/SPE/AAPG Workshop Shales: Seal, Reservoir, Source

Austin, TX • 6–9 June 2009



Society of Exploration Geophysicists
The international society of applied geophysics

Amy Watson, Meeting Planner
SEG Business Office
8801 S. Yale Ave., Ste. 500
Tulsa, OK 74137-3575
+1-918-497-5529
+1-918-497-5557 (Fax)
awatson@seg.org

Deadline: 5 March 2010

PRINT IN BLACK INK OR TYPE

☐ Mr. ☐ Ms. ☐ Dr. Student: ☐ Yes ☐ No

Name _____

Company/Organization _____

Mailing Address _____

City _____ State _____

Postal Code _____ Country _____

Business Phone _____ Fax _____

E-mail _____

Select your preference: ☐ Poster (oral presentation) ☐ Oral presentation ☐ No presentation, discussion contribution only

If presenting, please complete the following information and submit abstract via email or mail.

Title _____

Signature _____

Note: The mechanical recording of any portion of this workshop in any form (photographic, electronic, etc.) is strictly prohibited. Printed reference to the Workshop presentations or discussions is not permitted without the consent of the parties involved. All participants are requested to omit public reference to the Workshop proceedings in any published work or oral presentation. Only registrants are permitted to attend Workshop sessions. Each participant agrees to the above regulations when application is accepted, as indicated by his or her signature on this form.