

Best Paper Award of the 20th Formation Evaluation Symposium 2014

The best paper was selected from 22 papers presented at the 20th Formation Evaluation Symposium of Japan, held at JOGMEC-TRC on October 1st and 2nd, 2014. For this selection, the board members reviewed all papers at the previous board meeting and chose the awarded paper by the voting. The testimonial will be given to the awardees at the coming JFES Symposium of this year. The awarded paper and the authors are shown below.

PETROPHYSICAL ANALYSIS OF A TIGHT SILTSTONE RESERVOIR: MONTNEY FORMATION, WESTERN CANADA

Takashi Akai ⁽¹⁾ and James M. Wood ⁽²⁾

(1) Japan Oil, Gas and Metals National Corporation

(2) Encana Corporation

The authors measured petrophysical properties of siltstone plug cores collected from the Early Triassic Montney tight gas fairway in the Western Canada such as porosity, permeability and Total Organic Carbon (TOC) by using advanced laboratory apparatus such as NMR, micro focus X ray CT imaging and Focus Ion Beam Scanning Electron Microscope (FIB/SEM). Based on this research, following points have been clarified:

1. A significant porosity and permeability trend was obtained for plug samples measured under confining pressure conditions by use of micro focus X ray CT imaging to detect and omit samples with artificially induced internal cracks.
2. An inverse trend between porosity and TOC was observed and explained in terms of the Montney petroleum system. And, thermally degraded bitumen which plugs the paleo-porosity network was found by high resolution SEM imaging.
3. Porosity estimation was conducted by use of both dry-NMR and wet-NMR.
4. 3D pore and organic structures were visualized by use of FIB/SEM.

For tight gas reservoirs, to identify “sweet spots” is important to develop with lower cost and efficient processes. This research enables to discuss gas generation and storage mechanisms and the range of reservoir quality by use of advanced laboratory apparatus. The results of this study will lead to “sweet spots identification” of tight reservoirs. This paper is worth to receive the best paper for the JFES Symposium 2014.

(Kazuhiro Takahashi, Session Chair)

Invitation to the 90th Chapter Meeting

We are pleased to announce that the forthcoming Chapter Meeting will be held as follows. Those who are interested in attending this meeting are asked to send an e-mail registration at JFES-Newsletter@slb.com no later than **February 27th, 2015**.

Date & Time: Wednesday, March 4, 2015, 15:30 – 17:30

Venue: Mitsui Oil Exploration Co., Ltd.
Hibiya Central Bldg, 10th Floor (Presentation Room A & B)
2-9 Nishi-Shimbashi 1-chome, Minato-ku, Tokyo 105-0003, Japan
TEL: +81-3-3502-5786 FAX: +81-3-3502-7686

Program:

First talk: Petroleum exploration and development of fluvial sandstone reservoirs in the northern Phitsanulok Basin, onshore Thailand

Presenter: Katsuro Moriyama

Biography: Katsuro Moriyama has 20 years' experience as a geologist for exploration project. Katsuro worked at operator for Thailand project for 7 years as geologist and exploration manager.

Abstract: The Tertiary Phitsanulok basin is well known for the Sirikit field which is the largest onshore oil field in Thailand. Geology of the basin is similar to that of Gulf of Thailand. Moeco, who has produced oil and gas in the Gulf as a non-operator for 30years, has applied the technologies used in the Gulf, and successfully discovered oil, and is currently producing.

Second talk: Current situation of shale gas development in US

Presenter: Takeshi Onishi

Biography: Takeshi Onishi has 12 years' experience as a reservoir engineer for development projects for both conventional and unconventional oil and gas reservoirs. Takeshi worked at an operator for shale gas project in US for the last 3 years and served reservoir engineering and completion operation including hydraulic fracturing.

Abstract: As activities of shale gas development have been significantly increased, gas production from shale occupies the important position in US. Key factors for the development are horizontal drilling and hydraulic fracturing.

This presentation shows basic operation procedure of hydraulic fracturing. Technical trends for the shale gas development are also presented.

17:30 - 19:30 Icebreaker (1,000 yen)

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