



Society of Petroleum Engineers

17–19 October 2010 | Al Salam Rotana | Khartoum, Sudan

**Early Bird Registration Deadline:
17 August 2010**

SPE Applied Technology Workshop ***IOR Techniques to Maximise Sudanese Oilfields Production***



Who Should Attend

Development managers, production managers, reservoir engineers, reservoir management staff, geoscientists, geochemists, chemical engineers, petroleum engineers, EOR researchers, surface facilities engineers and manufacturers. It is also an interesting workshop for environmental engineers and university staff.

Committee Members

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Omer Abu-elbasha
PETROTEC

Co-chairperson:

Ahmed Elyas
SPOC

Co-chairperson:

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Junaidi Bin Mohamed Ali
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Rashid A. Hussein
Sudan University

Sun Wei
ZPEB

Wang Quan
CNPC

Yu Chao
CNLC

Workshop Abstract

Developers of the Sudanese oilfields face a wide spectrum of challenges. Whether the fields are virgin or mature, the challenges are mounting.

It is envisaged that planning ahead in the early stages of field development may help to reduce the cost and encourage utilising EOR techniques for maximising recovery. Yet the expected commercial benefit and the timing of implementation of such techniques have still to be gauged and properly evaluated.

In mature fields, which have missed the early EOR planning, the challenges are more pronounced. This is due to big overheads related to new wells that may be needed, and the field development system and surface facilities. The cost may be deterring management from approaching such techniques and technology. Striking the balance between the techniques and commerciality, suggests the implementation of new technology which is commercially viable.

On the other hand, secondary recovery techniques need to be reviewed concerning the specific conditions of the Sudanese oilfields with regard to depositional environment, type of oil, and reservoir energy. Water shut-off techniques, sand control and recovery of by-passed oil represent the severe problems that are worrying the production and field development staff.

Maximising oil production by a lesser number of wells reveals the importance of horizontal and multi-lateral wells, especially in a depositional environment such as the fluvial which dominates most of the Sudanese oilfields. Again striking the balance between the techniques and commerciality of such techniques should be valid as well as the criteria of drilling horizontal and multi-lateral wells should match the characteristic of such oilfields.

To address the above challenges, proper data collection, production monitoring, field measurements and routine testing are required; the objective being to build a database for effective reservoir management, performing studies and taking remedial actions on time.

All of the above challenges face the Sudanese oil industry which is still considered green despite the fast growth and number of operating companies in the country. A workshop in Khartoum that can merge the international experience with the local pioneers may be of great help to the oil industry of Sudan. Furthermore, it may lead to a wider opening and integration between the National Scientists and the SPE Members in the international arena.

www.spe.org/events/10akha

WORKSHOP

IOR Techniques to Maximise Sudanese Oilfields Production

Sponsorship Support

Sponsorship support helps offset the cost of producing workshops and allows SPE to keep the attendance price within reach of operations-level individuals, those who benefit most from these technical workshops.

Sponsors benefit both directly and indirectly by having their names associated with a specific workshop.

While SPE prohibits any type of commercialism within the conference hall itself, the society recognises that sponsoring companies offer valuable information to attendees outside the technical sessions.

Sponsorship Categories

Sponsorships are offered on a first come basis. Please contact SPE to verify the availability of a particular sponsorship. Existing sponsors have the opportunity to renew the same level of sponsorship for annual workshops. Sponsorship packages remaining are as follows:

- Gold
- Silver
- Bronze
- Luncheons - Per Day
- Coffee Breaks - Per Day
- Audio-Visual Equipment and Stationery
- Committee Gifts
- Speaker Gifts
- Welcome Reception

Sponsorship Benefits

In addition to on-site recognition; SPE will recognise sponsors on the SPE website and in all printed material for the workshop.

For More Information

For a detailed list of available sponsorships, including benefits and pricing, contact Ahmed Fahmy, at afahmy@spe.org.

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BEFORE
17 AUGUST 2010**

Workshop Sponsors

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Schedule

Sunday, 17 October 2010

1700–1900 hours Collection of Badges and Delegate Packs

Monday, 18 October 2010

0830–0930 hours Opening Ceremony

0930–1230 hours **Session 1: EOR Processes for Sudan's Heavy Oil**

The objective of this session is to highlight the EOR techniques pertaining to the oilfields of Sudan, give some flashback on international experience in the two selected topics and show the economic merits of planning ahead (early in the field life before development) to implement these techniques. This session also reveals the early screening for EOR.

1400–1700 hours **Session 2: The Merits of Horizontal and Multi-Lateral Well Drilling Oil Recovery Technique**

This session shows the importance of drilling horizontal wells in comparison with the vertical ones. The areas of implementation and the production gain, will be discussed using real field examples. The technology utilised in drilling multi-lateral wells (geo-steering) will be reviewed. Measurements while drilling (MWD) will be discussed and the completion technology will be demonstrated by a few examples.

Tuesday, 19 October 2010

0830–1230 hours **Session 3: Improving Reservoir Management by Proper Production Monitoring and Database Building**

Proper data collection, production monitoring, field measurements and routine testing are usually planned by oil companies based on a set schedule. The objective being to build a database for effective reservoir management, performing field development studies and taking remedial actions on time. Data gathering strategy, type and the integrity of the measuring devices are key elements for effective resource managements and production optimisation. The objective of this session is to discuss the common field practice and to recommended reservoir management strategy and data gathering plans.

1400–1700 hours **Session 4: Effective Water Shut-Off Techniques for Sudanese Oilfields**

Water shut-off posed a challenge to production from the Sudanese oilfields. Despite the repeated attempts using different techniques to cure the problem, water production issues still persist. This is due to the channelised nature of the fluvial depositional environment. Streaks of high permeability or the central areas of the channel deposits may provide a conduit for the less viscous water to by-pass the oil and reach the producers.

Compartmentalisation resulting from poor stacking of sand bodies or permeability variation may also result in a pronounced percentage of by-passed oil. Water shut-off techniques and recovery of by-passed oil need to be investigated to tackle this water production problem which is creating challenges for the production and field development staff. This session reviews the general problems of water production and discusses the shut-off techniques successfully applied in the oil industry.

General Information**Workshop Venue**

Al Salam Rotana
P.O. Box 12290
Khartoum, Sudan
Tel: +2491.8700.7777
Fax: +2491.8700.7788
alsalam.hotel@rotana.com

Workshop Guidelines**Format**

Two (2) days of informal discussions prompted by selected keynote presentations and discussions. Workshops maximise the exchange of ideas among attendees and presenters through brief technical presentations followed by extended Q&A periods. Focused topics attract an informed audience eager to discuss issues critical to advancing both technology and best practices. The majority of the presentations are in the form of case studies, highlighting engineering achievements and lessons learned. In order to stimulate frank discussion, no proceedings are published and the press is not invited to attend.

Documentation

- Proceedings will not be published; therefore, formal papers and handouts are not expected from speakers.
- Work in progress, new ideas, and interesting projects are sought.
- Professionally-prepared visual aids are not required; handwritten view graphs are entirely acceptable.
- Note-taking by participants is encouraged.

Poster Session

The Steering Committee encourages registrations from professionals who are able to prepare and present a poster on a relevant project. For further details kindly contact Ahmed Fahmy, business development manager at afahmy@spe.org.

Attendance

Registrations will be accepted on a first-come first-serve basis. The Steering Committee encourages attendance from those who can contribute to the workshop most effectively either in discussions or with posters. A mix of attendees in terms of geographic origin, companies and disciplines will be encouraged.

Workshop Deliverables

- The Steering Committee will appoint a "scribe" to record the discussions and to produce the full workshop report for SPE.
- This report will be circulated to all attendees as the workshop deliverable within 4–6 weeks following the workshop. The copyright of the report is with SPE.
- PowerPoint presentation materials will be posted on a specific SPE URL address after the workshop. Provision of the materials by the speakers will signify their permission for SPE to do so.

Commercialism

In keeping with ATW objectives and the SPE mission, commercialism in posters or presentations will not be permitted. Company logos must be limited to the title slide and used only to indicate the affiliation of the presenter and others involved in the work.

Attendance Certificate

All attendees will receive an attendance certificate attesting to their participation in the workshop. This certificate will be provided in exchange for a completed Workshop Questionnaire.

Continuing Education Units

Attendees at this workshop qualify for SPE Continuing Education Units (CEU) at the rate of 0.1 CEU per hour of the workshop.

Registration Information

This is a nonresidential workshop. The registration fees include all workshop sessions, coffee breaks and luncheons. The registration fees are as follows:

Before 17 August 2010:	USD 1,450 SPE Member	USD 1,550 Nonmember
After 17 August 2010:	USD 1,850 SPE Member	USD 1,950 Nonmember

Cancellation and Refund Policy

- A processing fee of USD 100 will be charged for cancellations received before the registration deadline 17 September 2010.
- For cancellations received after the registration deadline, 17 September 2010, 25% refund will be made to the registrant.
- No refund on cancellations received within seven (7) days prior to the workshop date, i.e. on or after 10 October 2010.
- No refund will be issued if a registrant fails to attend the workshop.

Registration Policy

- Registration fee MUST be paid in advance for attending the Applied Technology Workshop.
- Full fixed fee is charged regardless of the length of time that the registrant attends the workshop.
- Fixed fee cannot be prorated or reduced for anyone (workshop chairpersons/co-chairpersons, committee members, speakers, discussion leaders, students and registrants).
- Attendees are expected to attend all workshop sessions and are not permitted to attend on a partial basis.
- Delegates with no proof of advance payment are required to pay on-site by cash or cheque, present a copy of the wire transfer or submit a letter from their company guaranteeing payment of the workshop fees.

PLEASE USE INSIDE FORM FOR REGISTRATION

