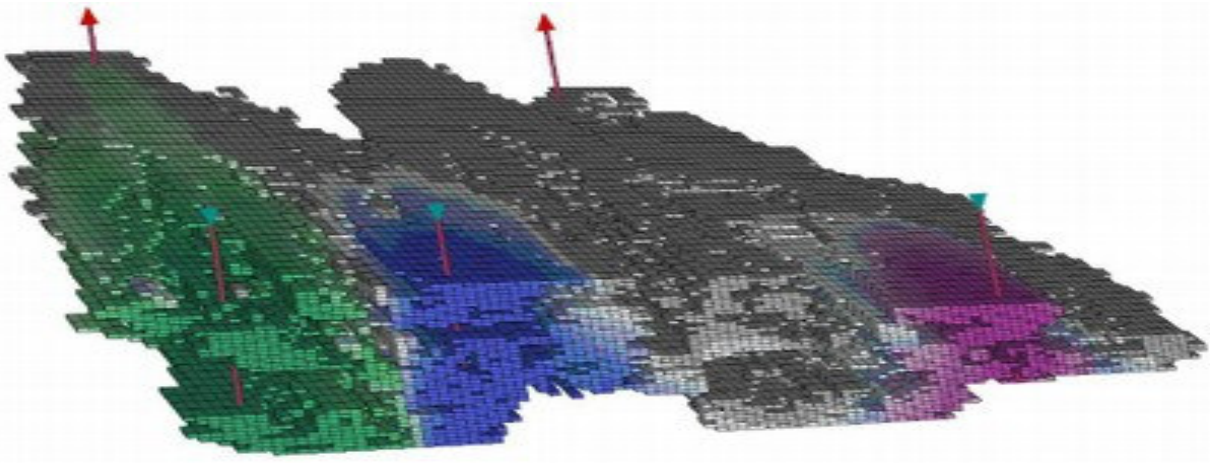
SPE APPLIED TECHNOLOGY WORKSHOP

12-15 October 2008
Media Rotana Barsha
Dubai, UAE

Tracer Technology for Improved Recovery

>>Registration deadline: 12 September 2008

>>Register by fax, email or online at www.spe.org/atws



Workshop Description

This workshop is to facilitate the networking and knowledge sharing on the use of tracers to improve oil and gas field management. We will discuss technical subjects for interwell tracer operations for reservoir characterisation, reservoir modeling and improved recovery. We will also cover single-well tracer subjects related to drilling, completions, workovers and production.

The sessions are planned and synchronized to be a road map for tracer technology applications. Technology providers and operating companies' experts will share their past experience and the latest tracer technology advances. These would definitely be beneficial for all who are or will be considering tracer projects. There will be discussions on defining realistic test goals, protocol of tracer selection, test design, field deployment and interpretation methods. A dedicated session will focus on case histories where the attendees will learn about real field applications. The workshop will conclude with a session which would open the eye for new areas of tracer utilisations.

Workshop Objectives

Tracer survey is a robust and relatively inexpensive enabling technology for acquiring reservoir information that is surprisingly underutilised in the petroleum industry. There have been many recent cases where tracer technology has significantly increased the understanding of the reservoir and production operations. Some operators have used tracer technology to successfully improve their waterfloods, well stimulation, and EOR projects, such as, chemical, CO2, gas and thermal floods.

This workshop will promote sharing of experience, best practices and lessons learned. This will help the petroleum industry maximise the success rate, and realise the true potential benefit of tracer technology.

Who Should Attend

Engineers, geoscientists, production technologists, researchers, supervisors and managers who are interested in tracer technology and its application in the oil and gas industry.

This workshop is for you if you are interested to learn or share knowledge on the use of tracer technology to understand the reservoir better, and to increase hydrocarbon production and recovery from the field.

General Information

Format:
Welcome Reception & Dinner followed by 3 days of informal discussions prompted by selected keynote presentations and discussions. Attendees will be assigned to discussion groups on a random basis for the breakout session on the second day to maximise the opportunity to interact with other participants.

Poster Sessions:
The Steering Committee encourages registrations from professionals who are able to prepare and present a poster on a relevant project. Details of the poster size and facilities will be provided in the joining instructions.

Attendance:
Registrations will be accepted on a first-come first-served 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 discipline will be encouraged.

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. However, to ensure free and open discussions, no formal records will be kept.

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 discussion leaders will signify their permission for SPE to do so.

Commercialism:
In keeping with ATW objectives and the SPE mission, execessive 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:
The registration fee is **USD 1,650** for **SPE members** and **USD 1,800** for **non-members.**

The fees includes the following:
- All workshop sessions
- Welcome reception followed by dinner on Sunday, 12 October 2008
- Daily coffee breaks and luncheons
- Workshop Workbook and Certificate of Continuing Education Units (CEU)

Note: Accommodation is NOT included in the workshop registration fee. Lodging space is limited, so you are encouraged to place your reservation early. Each registrant will receive housing information once they register for the workshop. SPE has negotiated a special discounted rate at the Media Rotana Barsha for the workshop attendees.

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, 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.

Cancellation and Refund Policy:
a) A processing fee of **USD 100** will be charged for cancellations received before the registration deadline **12 September 2008**.
b) For cancellations received after the registration deadline, **12 September 2008**, 25% refund will be made to the registrant.
c) No refund on cancellations received within seven (7) days prior to the Workshop date, i.e. on or after **5 October 2008.**
d) No refund will be issued if a registrant fails to attend the Workshop.

Workshop Venue:
Media Rotana Barsha
Sheikh Zayed Road
Al Barsha South - TECOM
P.O. Box 30880, Dubai, U.A.E.
Telephone: +971. 4. 705. 4277
Fax: +971. 4. 705. 4508
Website: www.rotana.com

Attendees' Information:
General and detailed accomodation information will be forwarded to registrants along with the registration confirmation.

Attention Non-Members Sign Up On-Site for One Year Membership and Get One Additional Year!

Call SPE Middle East, North Africa and India on +971.4.3903540 or Email dmakhija@spe.org for More Information

Tentative Technical Agenda

Sunday, 12 October

1600 - 1800 hours
Workshop Registration

1900 hours
Welcome Reception and Dinner

Monday, 13 October

Session 1: Overview - When/Why are we using Tracers?

The main goal of this session is to provide an overview of the tracer technology in the oil industry. Topics to be covered can include concept, history, terminology, main objectives of field jobs, and technology status on the use of tracers in subsurface interwell and single-well applications. During this session, controversial topics can be introduced, such as:

- Radioactive vs. non-radioactive concerns? When are we forced to use radioactive tracer?
- Partitioning tracers: What can this technology do? Do we need them?
- Any concern with environmental impact of fluorinated hydrocarbon tracers?

Session 2: Tracer Project Planning & Design

The ability to design an effective tracer program to improve recovery, incorporating all of the challenges associated with an oilfield operation, is critical to achieving a successful outcome.

This session will facilitate discussion on the key challenges and critical success factors associated with designing a successful tracer program. Leading industry experts from operating companies, research groups and oilfield service companies will act as discussion leaders to explore how best to plan and design a tracer program, and discuss why tracer technology is not more widespread within the oil and gas industry.
Some of the topics to be covered include Clear Definition of Surveillance Objectives, Tracer Selection and Evaluation, Risk Mitigation, and Value of Information. Case studies on the planning of tracer programs will be presented to illustrate the range of techniques for which tracer technology can be used within oilfield operations.

Tuesday, 14 October

Session 3: Field Implementation

The success of any tracer program is hinged on the execution phase and field implementation practices. This session will facilitate discussions on key challenges, operation pitfalls and best practices to implement a successful tracer program in the field. Leading industry experts will share lessons learned from oilfield operations around the world. Including both successful and failed campaigns, the session will focus on best practices learnt from numerous tracer projects. Some of the topics to be covered under field implementation and deployment issues include:

- Pre-test field operations
- Tracer preparation & handling
- Tracer injection methods
- Sampling, storage & analysis
- Quality and HSE issues
- Field coordination, communication & soft issues

Session 4 : Interpretation of Field Data

Tracers play an important role in the understanding of reservoir fluid flow and well productivity. In this session we focus on the interpretation of field data from both interwell and single well tracer campaigns. In some cases interwell tracer data may be underutilised and used only to confirm communication between well pairs. An integration of tracer data with other static and dynamic field data (e.g. through incorporation in the reservoir modelling workflow) may give enhanced and invaluable information with respect to reservoir management and surveillance. Another aspect relates to the increasingly complex production well designs with long reach horizontal and multilateral wells where questions are raised on clean-up and fluid inflow issues. In this respect single well tracer technology is a unique tool and correct interpretation of single well tracer data will aid in the understanding of well performance. In complex and low permeability reservoirs where well stimulation is needed, precise tracer diagnostics may lead to increased oil recovery. This session will have active discussions on field tracer data interpretation such as:

- Evaluation of communication, flow paths & sweep efficiency.
- Tracer curve analysis & quantitative use of tracer data in reservoir modelling.
- Partitioning tracer technology for mapping of residual oil saturation in EOR campaigns.
- Well clean up, inflow profiling & completion diagnostics.

Wednesday, 15 October

Session 5: Case Histories

This session will review case histories of tracer applications in the field environment. The focus of these discussions will be to share lessons learned and best practices from all phases of a tracer program. This includes program objectives, tracer screening and selection, application design, application execution and sampling, interpretation of results, and value of information. Key learnings will be shared around what worked well, what did not work, and what would be done differently. Discussion leaders will present a set of case histories that attend to the diversity of tracer program objectives from reservoir characterisation to an improved understanding of sweep efficiency in secondary or tertiary recovery projects. The session will be designed to allow for open discussion from all participants to ensure that additional learnings can be shared. The discussions should be rich with material for those considering their first tracer program and provide a networking and learning opportunity for the experienced practitioner.

Session 6: Special Applications of Tracer Technology

This session will introduce non-routine applications of tracer technology to the workshop participants. The intent is to encourage cross-pollination of ideas, promote awareness of new technologies and identify growth areas. Discussion leaders in this session will come from different areas of the industry, and will include talks on inflow monitoring in production wells, natural tracers (biomarkers), stimulation applications among others. Discussion on inflow monitoring will include technologies for identifying entry and flow rate of unwanted fluids into the well. Discussion on biomarkers will cover use of biomarkers to characterise biodegradation, constrain reservoir continuity and thermal maturation and basin models.

Tracer Technology for Improved Recovery

Registration Form

First Name:_____ Last Name:_____

Job Title: _____

Company: _____

Address: _____

Town/City: _____ Postcode:_____ Country:_____

Email:_____

Tel:_____ Fax:_____

SPE Member: ☐ Yes ☐ No If Yes, SPE Membership Number:_____

Details of relevant experience:

_____

_____

Do you wish to present a poster? (subject to selection) ☐ Yes ☐ No

Do you wish to be considered a Discussion Leader? (subject to selection) ☐ Yes ☐ No

If yes, please indicate which subject you would like to present on:

_____

List your expectation for the Workshop, so that the committee can tailor a portion of the Workshop to answering attendees' concerns. (Use additional paper if required)

_____

Registration Fees : ☐ USD 1,650 for SPE Members ☐ USD 1,800 for Non-members

Payment by Credit Card:

Credit Card (Check one) ☐ American Express ☐ MasterCard ☐ Visa

Card Number (will be billed through Society of Petroleum Engineers) Expiry Date (mm/yy)

Name of Credit Card Holder (printed):_____

Billing Address including Zip Code/Postal Code of Card:_____

Signature (required):_____ Date:_____

Payment by Bank Transfer: **IMPORTANT - For Reference: Please Quote "08ADB2" and Name of Delegate**
Make Payment to: HSBC Bank Middle East, Jebel Ali Branch, PO Box 66, Dubai, UAE
Account Name: SPE Middle East FZ-LLC Account Number: 035-129709-100 Swift Code: BBMEAEAD

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To submit your registration online, please visit the
SPE Web Site at: www.spe.org
or email this form to : formsdubai@spe.org.
or fax this form to: +971 4 366 4648

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