



Society of Petroleum Engineers

5–8 October 2009 | Crown Plaza Hotel | Chester, UK

Apply by 20 May 2009

Production & Operations: Tools for Well Integrity Management



Who Should Attend?

The workshop is a limited attendance meeting for up to 80 people, designed for professionals in the oil and gas industry who are involved in the design, construction and operation of wells, i.e. within the following disciplines:

- Well Construction
- Production Maintenance
- Drilling Engineering
- Safety Engineers
- Well Intervention
- Asset Managers
- Production Operations
- Well Integrity Engineers

Committee Members

Steering Committee Chairperson:

Liane Smith
Intetech

Steering Committee:

Jerry Dethlefs
ConocoPhillips

Jim Horsburgh
ExxonMobil

Ashiq Hussain
ADMA

Erling Kleppa
PTC

Gary Limb
ConocoPhillips

MJ Loveland
ConocoPhillips

Dragan Milanovic
Intetech

Martin Mosley
Talisman

Mike Murrey
ExxonMobil

Lone Olstad
Marathon Oil

Phil Ormerod
BG-Group

Nina Ringoen
StatoilHydro

Nigel Snow
Maersk Oil

Ian Taylor
Shell

Workshop Description

This workshop will focus on the tools needed to manage well integrity. It will provide attendees with a clear check-list of the building blocks needed to manage annulus pressures. Well component performance requirements, data gathering, data analysis and accurate definition of the safe operating envelope for individual annuli over the well life-cycle will all be addressed. The training requirements of well operators will be defined in order to ensure that there is integrity at the stage of data collection and reporting.

“When” to take action with a well is a critical decision, both from a safety and economic perspective. A consistent approach to decision-making provides certainty within the organisation, focusing effort and spending wisely. The decision making steps will be set out to ensure all critical aspects are captured consistently. Risk analysis approaches used by different organisations and examples of risk management and risk-ranking methods will be discussed.

Sub-sea wells present unique challenges for well integrity management. The workshop will highlight the minimum standards of well monitoring required and techniques successfully applied for diagnosing the root causes of integrity problems in sub-sea wells. New technologies for well problem diagnosis and well repair will be discussed in the context of sub-sea and surface wells.

(Workshop description continued overleaf)

www.spe.org/workshops

WORKSHOP

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 technical session room 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.

Sponsorship Benefits

In addition to onsite recognition SPE will recognise sponsors on the SPE website and in all printed material for the workshop. Based on the sponsorship selected, sponsoring companies also receive logo visibility on promotional workshop material.

For More Information

For a detailed list of available sponsorships, including benefits and pricing, please contact Katharine Stevenson at kstevenson@spe.org.

Workshop Location

Chester is 40 minutes drive from the airports of Manchester or Liverpool. It is accessible by train from Manchester airport or from London.

(Workshop Description Continued)

The fundamental purpose of the well can be compromised in short timescales by poor well design or construction practice and in longer timescales by equipment failure or degradation of materials of construction generating leak paths. This workshop will end with a session which will define where it is worthwhile to pay particular attention to well integrity during well design and construction to ensure the well maintains its integrity through the operational phase, in addition to best practice tools for management of well integrity. Examples of the demonstrable benefits of well integrity management will be used to illustrate the tangible value of monitoring well integrity and acting upon the data gathered in a timely way.

Workshop Objectives and Deliverables

This workshop will aim to:

- Define the building blocks of successful annulus pressure management; the equipment items, their performance standards, field data collection requirements and methodology for data analysis.
- Demonstrate the benefits of risk analysis and share methods applied across the industry.
- Develop an approach to risk management.
- Provide a rational basis for management of subsea well integrity; what should be monitored and how; when action should be taken.
- Share approaches used to diagnose the problems of sub-sea wells.
- Learn about emerging technologies for well integrity problem diagnosis and new techniques tried for well repair.
- Define the basic elements of well integrity management training for field operators.
- Focus on well design elements that enhance or hinder well integrity status definition during the operating phase of the well life-cycle
- Illustrate the demonstrable benefits of well integrity management from field experience.

Upcoming Workshops and Conferences/Forums

4–8 April 2009	SPE Production and Operations Symposium <i>Oklahoma City, Oklahoma, USA</i>
20–22 April 2009	SPE International Symposium on Oilfield Chemistry <i>The Woodlands, Texas, USA</i>
27–29 May 2009	8th European Formation Damage Conference <i>Scheveningen, The Netherlands</i>
22–25 June 2009	SPE Scale Applied Technology Workshop <i>Barcelona, Spain</i>
8–11 September 2009	SPE Offshore Europe Oil and Gas Conference and Exhibition <i>Aberdeen, UK</i>

Schedule

Monday, 5 October, 2009

1400	Hotel Check-In
1700–1800	Registration
1800–1900	Welcome Reception
1930	Welcome Dinner

Tuesday, 6 October, 2009

0900–1030	Session 1: Annulus Pressure Management
1030–1100	Coffee Break and Posters
1100–1230	Session 1 Continued: Annulus Pressure Management
1230–1330	Lunch
1330–1500	Session 2: Risk Management
1500–1530	Coffee Break and Posters
1530–1700	Session 2 Continued: Risk Management

Wednesday, 7 October, 2009

0900–1030	Session 3: Subsea Wells
1030–1100	Coffee Break and Posters
1100–1230	Session 3 Continued: Subsea Wells
1230–1330	Lunch
1330–1500	Session 4a: Emerging Technologies
1500–1530	Coffee Break and Posters
1530–1700	Session 4b: Training

Thursday, 7 October, 2009

0900–1030	Session 5: Lessons Learned
1030–1100	Coffee Break and Posters
1100–1130	Session 5 Continued: Lessons Learned
1130–1200	Workshop Wrap-Up

Session Descriptions

Potential discussion points for the individual discussion sessions include:

Tuesday 6 October

Session 1: Annulus Pressure Management

Session Managers: Gary Limb and Lone Olstad

Annular Pressure Management is a key tool in the Well Integrity Management toolbox. This session will provide an overview of the building blocks for Annular Pressure Management, address the use of those blocks to build an effective annular pressure management programme in onshore and offshore wells (including subsea wells), and develop guidelines for determining the safe operating envelope (Maximum Allowable Annular Surface Pressure) for old wells.

Potential keywords for discussion are:

- Annular pressure monitoring & data analysis
- Roles & responsibilities for pressure management
- Pressure barriers
- Wellhead integrity
- Maximum Allowable Annular Surface Pressure

Session 2: Risk Management

Session Managers:

Jerry Dethlefs and Ashiq Hussain

Assessing and managing risk is an important component of Well Integrity Management. This session will provide exposure to qualitative and quantitative risk assessment models and processes currently being used in the industry. Through presentations and discussions, attendees can evaluate the benefits of assessing risk so that limited resources can be focused for the most leverage. A comparison of the assessment methodologies will illustrate the advantages and disadvantages of each. Cumulative risk scenarios and prioritizing mitigation efforts based on risk will be addressed.

Potential keywords for discussion are:

- Qualitative risk assessment model
- Quantitative risk assessment model
- Traffic-light system
- Risk ranking
- Cumulative risk
- Work prioritization

Wednesday, 7 October

Session 3: Subsea Wells

Session Managers: Martin Mosley and Ian Taylor

Sub-sea Specific Challenges & Risks

- Sub-sea Well Integrity Verification Strategy / Methods
- Challenges faced - some examples of issues unique to sub-sea wells
- Assurance of well containment in redundant sub-sea wells

Living with Old Technology

- Diagnosis of problems. failed / obsolete instrumentation & control systems
- Sub-sea well DHSV failure & control line integrity problems
- Working an example - managing an integrity issue

New Technology

- Deep water - robust design / enhanced equipment reliability
- Electrical systems & ESP - reliability in sub-sea wells
- Sub-sea annulus monitoring

Session 4a: Emerging Technologies – Diagnostic and Repair

Session Managers: Nigel Snow and Erling Kleppa

The technologies available for diagnosing leaks and for performing remedial repair work are constantly being updated. This session

Apply by 20 May 2009

will focus on techniques and tools that are now at the industry forefront and are currently being used to solve Well Integrity problems around the world. It will include presentations and perspective from the operators viewpoint, along with technical information from selected service providers.

Technologies being discussed will include:

Diagnostic Methods such as:

- Ultrasound Logging Techniques
- SensaLine Fibre Optic Logging
- Wireless Pressure Sensors

Remediation Methods such as:

- Current status of Patch technology
- Metal to Metal Seal Straddles
- Hot Tapping

Emerging Technology Deliverables will include:

- New diagnostic tools
- New ideas for repair or remediation

Session 4b: Training

Session Managers: Nina Ringoen and Jim Horsburgh

History with well integrity related incidents globally has demonstrated a need for adequately-trained personnel. It is important therefore to ensure that the individual at the wellsite has an understanding of the basic principles related to well integrity during the operational phase of a well's life. Operators should ensure that the supervisors and production operators have an understanding of the risks involved in well integrity problems and also recognize when failures occur and can act on them.

This session is intended to debate the minimum training and define the competence requirements for personnel involved in the operating phase of a wells lifetime.

Issues to be discussed include:

Well Integrity Training

- Who should be trained?
- What is included in the course content?
- What tools are operators utilizing?
- Do we prefer e-learning vs classroom courses?

Well Integrity Competence Achievement

- How do we define who is competent?
- How do you track competence of personnel?
- Who is competent to assess competence?
- How do we ensure competence is maintained?

Well Integrity Training and Competence Deliverables

- Establish Best Practices for Well Integrity Training and Competence.
- Publish a Key Point Checklist for checking minimum Training and Competence requirements, and make sure these are achieved and are maintained.

Thursday 8 October

Session 5: Lessons Learned

Session Managers: MJ Loveland and Phil Ormerod

This session opens with a brief summary of the "Take Home" messages that are discovered during the workshop, followed by a synopsis of several well integrity lessons learned case histories. The attending group will have an opportunity to discuss each summary and highlight the well design elements and necessary tools for an effective well integrity management system that ensures the lessons learned are not forgotten.

Workshop guidelines

FORMAT

Two and a half days of informal sessions, with a number of short presentations and breakout discussions per session, and an evening welcome reception and dinner on Monday 5 October. Full details will be provided with the registration pack which will be sent in July 2009.

ATTENDANCE

70-80 delegates from relevant disciplines with proven experience and/or knowledge of the subject areas being covered.

SCRIBE'S REPORT

The steering committee will appoint a scribe to make a full report of the workshop, summarising all presentations and discussion. This report will be circulated to all attendees. The copyright of the scribe's report will belong to SPE.

ATTENDANCE CERTIFICATE

All attendees will receive a certificate from SPE attesting to their participation.

CONTINUING EDUCATION UNITS

The workshop qualifies for SPE Continuing Education Units (CEU), at the rate of 0.1 CEU per hour of the workshop.

COST AND RESIDENCY INFORMATION

Please see the application form at the back of this brochure.

CANCELLATION POLICY

Written notice received 30 days before the starting date of the workshop entitles registrants to a 50% refund. There will be no refund for cancellations received after this time.

PLEASE USE FORM ON BACK FOR APPLICATION



APPLICATION FORM

Production & Operations: Tools for Well Integrity Management
5-8 October 2009, Crown Plaza Hotel, Chester, UK

Application Form

Important: Please print or type in black ink.

09ACHE

First Name/Forename: _____ Middle Name: _____

Last/Family Name: _____

SPE Member? Yes No Member No.: _____

Job Title: _____ Company/Organisation: _____

Street or P.O. Box Number: _____

City: _____ State/Province: _____

Zip/Postal Code: _____ Country: _____

Telephone: _____ Facsimile: _____

E-mail (required): _____

Poster Presentations/Case Studies:

The steering committee for this event are encouraging poster presentations as well Case Study examples. If you are interested in contributing to either of these, please mention below the topic with a short description: _____

Please indicate what category below most clearly describes your job area:

- | | | |
|--|---|--|
| <input type="checkbox"/> Drilling and Completion Engineers | <input type="checkbox"/> Reservoir Engineers | <input type="checkbox"/> Transportation System Operators |
| <input type="checkbox"/> Managers | <input type="checkbox"/> Regulators | <input type="checkbox"/> Gas Engineers |
| <input type="checkbox"/> Research Advisors | <input type="checkbox"/> Facility Engineers | <input type="checkbox"/> Distribution Operators |
| <input type="checkbox"/> Trading Companies | <input type="checkbox"/> Strategists | <input type="checkbox"/> State and EU Officials |
| <input type="checkbox"/> University Faculty Members | <input type="checkbox"/> Scientific Institution Members | |

Applied Technology Workshop Fee:

Residential Rate

- GBP 740 + 15% VAT = GBP851 for SPE Members GBP780 + 15% VAT = GBP897 for Nonmember

Residential Rate includes: The residential rate includes all workshop sessions, the scribe's report, all coffee breaks, three lunches, the welcome reception and the welcome dinner on Monday 5 October, hotel bed and breakfast accommodation for three nights, and dinner on 6 and 7 October.

Non-Residential Rate

- GBP450 + 15% VAT = GBP517.50 for SPE Members GBP490 + 15% VAT = GBP563.50 for Nonmember

Non-residential Rate includes: The non-residential rate includes the welcome reception and the welcome dinner on Monday 5 October, 3 lunches, all coffee breaks, all workshop sessions and the scribe's report.

Deadline for application is 20 May 2009

Mail, fax, or e-mail completed Application Form to: SPE Applied Technology Workshop

Society of Petroleum Engineers
First Floor, Threeways House, 40/44 Clipstone Street,
London, W1W 5DW, UK

Telephone: +44.20.7299.3300
Fax: +44.20.7299.3309
Email: formslondon@spe.org

If you have any questions, contact Katharine Stevenson, Conference and Exhibition Manager, at +44(0) 20 7299 3300 or kstevenson@spe.org; or Sophie Young, syoung@spe.org