Session Highlights

This workshop will provide various networking opportunities and will serve as a platform for technology exchange, sharing of lessons learnt and best practices on topics such as:

- Extended Reach Drilling – Collaboration in overcoming the limitations and potential areas for future integration/partnership in ERD technologies
- Attaining economic sense with ERDs – Combining efforts across the value chain
- Horizontal and multilateral well construction technologies – How to strike out balance with the low oil price environment
- Regional case studies - How to make complicated wells economically viable?

Horizontal, Multilateral and Extended Reach Drilling (ERD) are techniques of directional drilling, where a well is deviated from the vertical in order to reach a particular part of the reservoir. These techniques enable the driller to steer the drill stem and bit to a desired bottom hole location, and allows multiple production and injection wells to be drilled from a single surface location, such as a gravel pad or offshore production platform. This minimizes cost and the surface impact of oil and gas drilling, production, and transportation facilities. They can be used to reach a target located beneath an environmentally sensitive area and may offer the most economical way to develop offshore oil fields from onshore facilities.

The workshop will review recent advancements in the application and deployment of horizontal, multilateral and ERD technologies, and help you understand the values of these techniques including how they can be used to reduce overall project costs. Recent developments in these sophisticated techniques will also be reviewed together with further developments required to address the ever challenging needs of the industry, particularly in deepwater and HPHT. In the current low oil price environment, operators have been subscribing to low capital investment for upstream assets, such as offshore and onshore production facilities, when applying horizontal, multilateral and ERD techniques. The workshop will discuss this trend from the point of view of the operator, drilling and service contractors.

There will be a particular focus on current and new challenges for applications in complex well architectures, including selective intervention into all laterals, intelligent completions, instrumentation, hydraulic fracturing, and wellbore geomechanics for performance predictions.

Group Registrations Available: Contact us at spekl@spe.org to arrange your group
In-depth discussion on the problems/solutions and applications that could add value

Discuss new and novel applications through technical sessions and case studies

This comprehensive and focused workshop will allow participants to:

1. Share the latest technical advancements in applicable well technologies
2. Discuss new and novel applications through technical sessions and case studies
3. Exchange ideas and network with fellow participants / practitioners from other companies and countries
4. In-depth discussion on the problems/solutions and applications that could add value

**Workshop Objectives**

This session will discuss the concurrence of the different facets including reservoir engineering, production engineering, asset and project management that culminates with the monetisation of uneconomical reserves and maximum reservoir recoveries. The topic explores opportunities and ideas that will push the limits of engineering and ingenuity to enable development for challenging prospects. Coffee and Tea Break

**Session 4: Managing Hydraulic Performance, Wellbore Stability & Equivalent Circulating Density (ECD) – Integration and Partnership between Multi-Disciplines**

Session Managers: Patrick Wong Kwong Ming, K&M Technology Group; Habil Akram Rosland, Halliburton

This session will focus on the multi-disciplinary team approach required on pre-job planning and operations, with implementation of contingency measures to maximise drilling efficiencies and propagate best practices into different domain perspectives. This can be achieved through a pre-drill geomechanical approach for:

- Establishing mud weight window and prevention of wellbore instability
- Incorporates a holistic solution for optimum well construction process by ensuring the well’s hydraulics load are within the limits of the pre-drill model and contingency plans
- Proactively monitor the hydraulics load and ECD using comprehensive real-time monitoring model with a focus on geomechanical model and drilling optimisation innovations in ECD management techniques

Finally, the session will highlight the criticality of ensuring implementation of lessons learnt by maintaining post-drilled geomechanical model.

**Preliminary Workshop Schedule**

**MONDAY, 14 AUGUST 2017**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>0800 – 0850</td>
<td>Arrival of Delegates</td>
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<td>0850 – 0900</td>
<td>Safety Announcement by Hotel</td>
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<tr>
<td>0900 – 1000</td>
<td>Session 1: Welcome and Introduction</td>
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<td></td>
<td>Workshop Co-Chairpersons: Jumasri Terimo,</td>
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<td></td>
<td>PETRONAS Carigali Sdn Bhd; Iain McCourt,</td>
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<td>Merlin ERD Ltd.</td>
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<td>1000 – 1030</td>
<td>Group Photo/ Coffee and Tea Break</td>
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<tr>
<td>1030 – 1230</td>
<td>Session 2: Extended Reach Drilling - Collaboration in Overcoming the</td>
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<td>Limitations and Potential Areas for Future Integration/Partnership in</td>
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<td>Developing ERD Technology</td>
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<td></td>
<td>Session Managers: Khairul Anwar Nasrudin,</td>
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<td></td>
<td>PETRONAS Carigali Sdn Bhd; Ajita Ang Cit Keal,</td>
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<td>PETRONAS Carigali Myanmar</td>
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<td>This session will discuss the current limitation and challenges in an ERD</td>
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<td>campaign related to engineering and new technologies, where collaboration</td>
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<td>amongst the players are essential. The panelists will share their</td>
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<td>experiences through presentations on how the collaboration between</td>
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<td>operators and service companies help overcome limitations of the project</td>
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<td>while reducing operational risks. The panelists will also discuss the</td>
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<td>potential of future integration and partnerships in developing the new</td>
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<td>technologies, which can potentially contribute towards achieving low-cost</td>
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<td>ERD wells while obtaining higher hydrocarbon production with lower</td>
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<td>1230 – 1330</td>
<td>Networking Luncheon</td>
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<td>1330 – 1530</td>
<td>Session 3: Attaining Economic Sense with ERDs – Combining Efforts across</td>
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<td>Session Managers: Malik Faisal Abdullahi,</td>
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<td>PETRONAS; Angel Yeap Hooi Ping, ExxonMobil Exploration and Production</td>
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<td>1530 – 1545</td>
<td>Coffee and Tea Break</td>
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<td>1545 – 1745</td>
<td>Session 5: Breakout Session</td>
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<td>Session 6: Horizontal and Multilateral Well</td>
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<td>ERD challenges vs. overall project cost reduction – Multi-Disciplinary</td>
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<td>Session Managers: Iain McCourt, Merlin ERD Ltd.;</td>
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<td>Habil Akram Rosland, Halliburton</td>
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Sign up before 16 June 2017 for Super Early Bird Discount!
Preliminary Workshop Schedule

1745 – 1845
This will ensure best practices and avoid preventable and very costly mistakes especially in challenging ERD and multilateral environments.

Session 5: Breakout Session
Session Managers: Junasri Terimo, PETRONAS Carigali Sdn Bhd; Iain McCourt, Merlin ERD Ltd.
This interactive session will allow participants to brainstorm theories and ideas pertaining to:
- Low-cost well reality for ERD and multilateral wells – industry is at a critical juncture where collaboration is paramount to significantly reduce costs.
- ERD challenges vs. overall project cost reduction – handling stakeholders’ scepticism on ERD and complex well execution
- Lower oil price, lesser technical expertise support – why top talents/experts matters to the oil and gas industry?

1845 onwards
Welcome Dinner

TUESDAY, 15 AUGUST 2017

0900 – 1100
Session 6: Horizontal and Multilateral Well Construction Technologies – How to Strike Out Balance with the Low Oil Price Environment
Session Managers: Christopher French, Enhanced Drilling; Habil Akram Rosland, Halliburton
This session will discuss the latest well construction technologies that are and are required for drilling and completions strategies for horizontal- and multilateral wellbores. There is a real need to understand field development challenges and their primary drivers for proper well design measures to maximise efficiency in the interest of increasing productivity and reservoir exposure in a cost-effective manner. This can be achieved through focusing on the benefits from multilateral and horizontal wells that allows increased reservoir exposure, and reduced time to production and CAPEX. Drilling ERD wells demand robust technologies that take into account rig capabilities, good hydraulics systems, and drilling equipment reliability.

1100 – 1115
Coffee and Tea Break

1115 – 1315
Session 7: Completion and Intervention Technology Integration to Achieve Optimised Production
Session Managers: Siti Rodhiah bt Fazilah, PETRONAS Carigali Sdn Bhd; Ian Pollock, Rubicon Oilfield International
This session considers how a completion engineer can efficiently deliver a reservoir drainage conduit matching the capabilities of the drilling technology in terms of deployment, completion type and inflow performance management. While drilling continues to push the boundaries in terms of borehole length, unless we can efficiently deploy and ultimately manage the production, what is the point?

1315 – 1415
Networking Luncheon

1415 – 1515
Session 8: Regional Case Studies – How to Make Complicated Wells Economically Viable?
Session Managers: Khazimad Yusof, Hess E&P Malaysia BV; Thony Maratin Saba, Petrofac (Malaysia PMS04) Limited
This session will discuss regional case studies focusing on considerations operators would be making to justify the complicated and expensive ERD wells to become economically viable. The holistic discussion will provide various perspectives in terms of the facility size, well counts, drilling and completion risks, reservoir management, and how the buy-in or alignment achieved can be utilised.

1515 – 1530
Coffee and Tea Break

1530 – 1730
Session 9: Workshop Summary and Closing Remarks
Session Managers: Junasri Terimo, PETRONAS Carigali Sdn Bhd; Iain McCourt, Merlin ERD Ltd.

1730
Workshop Concludes

Poster Solicitation & Information

All participants are encouraged to prepare a poster for the Workshop. Presentations on both research and field experience are welcomed. Posters, including unconfirmed/partial results, are to be presented at an assigned time and are open for discussion. Posters will be on display for the entire Workshop period.

When preparing your poster:
- Avoid commercialism. No mention of trademarks/product name
- Poster size should be approximately 0.8m x 1.2m (W x H) or size A0 in portrait layout
- Identify topic by title, affiliation, address, and phone number
- Include a brief abstract that summarises the technology to be addressed
- Make the display as self-explanatory as possible
- Place the information in sequence: beginning with the main idea or problem, method used, results, etc. (Draw a plan keeping the size and number of illustrations in mind)
- Keep illustrations simple by using charts, graphs, drawings, and pictures to create interest and visually explain a point
- Use contrasting colours
- Use large print for narrative materials. (We suggest a minimum of 24 points or 3" high letters for the title)

Note that the Workshop Programme Committee will review all poster abstracts/materials prior to display, and reserves the right to refuse permission to display any poster considered to be commercial in nature.

If you are interested to participate, please email your proposed topic with a short abstract (between 200-300 words) to Hanna-Rose Abdul Jalil at hajalil@spe.org by 30 June 2017.

The Society of Petroleum Engineers (SPE) is a not-for-profit organisation. Income from this event will be invested back into SPE to support many other Society programmes. When you attend an SPE event, you help provide even more opportunities for industry professionals to enhance their technical and professional competence. Scholarships, certification, the Distinguished Lecturer programmes, and SPE’s energy education programmes Energy4me are just a few examples of programmes that are supported by SPE.
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.
- Note-taking by attendees is encouraged. However, to ensure free and open discussions, no formal records will be kept.

Workshop Deliverables:
- The committee will prepare a full report containing highlights of the Workshop and the report will be circulated to all attendees.
- PowerPoint presentations will be posted online and provided to attendees after the Workshop. Provision of the materials by Discussion Leaders will signify their permission for SPE to do so.

Commercialism:
In keeping with the Workshop objectives and the SPE mission, excessive commercialism in posters or presentations is not permitted. Company logos must be limited to the title slide and used only to indicate the affiliation of the presenter.

Attendance Certificate:
All attendees will receive a Workshop attendance certificate. This certificate will be provided in exchange for a completed Attendee Survey Form.

Continuing Education Units:
This Workshop qualifies for SPE Continuing Education Units (CEU) at the rate of 0.1 CEU per hour of the Workshop.

Travel/Visa:
Attendees are advised to book their airline tickets early. All travellers must be in possession of passports valid for at least six (6) months with proof of onward passage. Contact your local travel agent for information on visa requirements.

Dress Code:
Business casual clothing is recommended. The Workshop atmosphere is informal.

Registration Fee:
- Registration fee ONLY includes all workshop sessions, coffee breaks and luncheons for the registrant. Accommodation is NOT included.
- SPE will provide details of recommended hotels upon receipt of your registration.

Registration Policy:
- Registration fee MUST be paid in advance for attending the Workshop.
- Full fixed fee is charged regardless of the length of time the registrant attends the Workshop, and cannot be prorated or reduced for anyone.

Attention Nonmembers
Join Our Worldwide Membership!
Nonmember full workshop attendees can join SPE at no additional cost.
Look for your exclusive offer by email shortly after the event.

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

Supporters benefit both directly and indirectly by having their names associated with a specific workshop. While SPE prohibits any type of commercialism within the workshop room itself, the Society recognises that supporting companies offer valuable information to attendees outside the technical sessions.

SPONSORSHIP CATEGORIES
Sponsorship categories are offered on a first-come basis. Please contact SPE to enquire and verify the availability of categories. Existing supporters have the opportunity to renew the same level of support for annual workshops.

SPONSORSHIP BENEFITS
In addition to onsite recognition, SPE will recognise sponsors on the SPE website and in all printed materials for the workshop. Based on the category selected, supporting companies also receive logo visibility on promotional workshop items.

FOR MORE INFORMATION
For a detailed list of available sponsorship opportunities, including benefits and pricing, contact Hanna-Rose Abdul Jalil at hajalil@spe.org.
REGISTRATION FORM

SPE Workshop:
Making Extended Reach Drilling and Multilateral Viable in a Low Cost Environment through Collaboration and Technology
14 – 15 August 2017 | DoubleTree by Hilton Kuala Lumpur, Malaysia

SPE Member: [ ] Yes [ ] No

Membership No. ______________________________________________
Name: ___________________________________________________________________________________________________________________
(First / Forename)   (Middle)   (Last / Family Name)
Position: __________________________________________________________________________________________________________________
Company: _________________________________________________________________________________________________________________
Address: __________________________________________________________________________________________________________________
Town/City: ______________________________ Zip/PostalCode:_______________________________ Country: _________________________________
Tel:____________________________________ Fax:________________________________________ Email: ____________________________________

Would you be willing to give a brief (10-15 minutes) presentation _______(Yes/No)? If yes, please attach the topic with a short abstract of your proposed presentation. One of the Programme Committee members will contact you to discuss your presentation.

Important: Registrants for SPE Workshops are accepted on the basis of information submitted by each registrant.

Technical Disciplines (Check One)
[ ] Drilling [ ] Completions [ ] Production and Operations
[ ] Health, Safety, Security, Environment and Social Responsibility [ ] Management and Information [ ] Reservoir Description and Dynamics
[ ] Projects, Facilities and Construction

Primary Responsibility (Check One)
[ ] Drilling [ ] Economics [ ] Geology [ ] Geophysics [ ] Management
[ ] Operation [ ] Production [ ] Reservoir [ ] Surveillance [ ] Other: ____________________

List background and experience. (Use additional paper if required).

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
Please tick appropriate box Super Early Bird Registration BY 16 June 2017 Early Bird Registration BY 14 July 2017 Registration AFTER 14 July 2017

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<tr>
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<td>Workshop (14 - 15 Aug)</td>
<td>☐ US$1,500.00</td>
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<td>☐ US$1,600.00</td>
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<td>☐ US$1,700.00</td>
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GROUP REGISTRATIONS AVAILABLE - Please contact us at spekl@spe.org

Note: Fee includes workshop sessions, workbook, certificate, daily luncheons and coffee breaks. Registration fees do not include accommodation.

Payment by Telegraphic Transfer
☐ Telegraphic Transfer (Bank details will be provided on the tax invoice).

Payment by Credit Card
Credit Card Payment will be in U.S. Dollars only
[ ] American Express [ ] MasterCard [ ] Visa [ ] Diners Club

Expiration Date (mm/yy)

Card Number Security Code (3 digits on back of card / 4 digits on the front of Amex)

Credit Card Billing Address & Zip/Postal Code

Name of Card Holder

Signature

Note: Forms will not be processed and space cannot be guaranteed unless accompanied by payment for total amount due.

Cancellation Policy:
a) A processing fee of USD150.00 will be charged for cancellation received thirty (30) days prior to the first day of the workshop.
b) 25 % refund will be made for cancellation received between twenty nine (29) - fifteen (15) days prior to the first day of the workshop.
c) No refund on cancellation received fourteen (14) days prior to the first day of the workshop.
d) No refund will be issued if a registrant fails to show up on-site.

This form may be used as a company invoice.
Mail completed registration form with remittance and any supporting material to:

Society of Petroleum Engineers
Tel : 60.3.2182.3000      Fax : 60.3.2182.3030
E-mail: spekl@spe.org