Issue 05 | September 2015

SPEREVIEW LONDON

Fracking: Future Conflict... or Opportunities for Success?

Weathering the Storm: Preparing for a Regime of Sustained Low Oil Prices

SPE YP: Innovative Technical, Social and University Liaison Activities

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ABOUT US
The Society of Petroleum Engineers (SPE) is a not-for-profit professional association whose members are engaged in energy resourcesdevelopment and production. SPE serves more than 110,000 members in 141 countries worldwide. SPE is a key resource for technical knowledge related to the oil and gas exploration and production industry and provides services through its publications, events, training courses and online resources at www.spe.org
The SPE provides services through its global events, publications and website at www.spe.org. SPE Review is published 10 times per year by the London sections of the Society of Petroleum Engineers. It is sent by e-mail to over 4,000 SPE members. If you have read this issue and would like to join the SPE and receive your own copy of SPE Review London, as well as many other benefits – or you know a friend or colleague who would like to join – please visit www.spe.org for an application form.

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http://london.spe.org/home

Future Basics

As the warm summer weather draws to a close, it's time for the London section to get back to business in September.

However, holding on to those summer memories just a little longer, we take a look at some of the **SPE London YPs' activities** over the past year, including, of course, the Spring/Summer Party of 2015. Text and photographs start on page 6.

Looking ahead to perhaps stormier weather, KPMG will host an informal dinner event at Canary Wharf, in October, to discuss '**Weathering the storm... Contingency for sustained low oil prices**'. Speakers will be Jon Slatkin (Partner in KPMG's Turnaround Practice, and KPMG's Restructuring Sector Lead for Oil & Gas), and Dr Marc van Grondelle, who currently leads the KPMG Joint Venture Advisory practice. More programme details, and registration guidance on page 5.

Also in this issue, Iain Poole, Head of Oil and Gas Consultancy, Barnett Waddingham, shares his views on '**Fracking: Opportunities for Success**'. It makes for fascinating reading (page 3), as he addresses the concept that: 'Commodity prices aside, the economics are improving'... although there may be 'conflict ahead'. In the second part of the series (next issue), Iain tackles the questions of 'climate change' insurance policies, community compensation schemes, and the very active opposition in the UK.

As new chairperson (appointed in June) for The Society of Petroleum Engineers (SPE) London Section, Pamela Tempone has emphasised her continued focus on maintaining and enhancing technical quality within SPE programs (despite challenges created by the sudden dive of the oil price), together with member engagement and volunteerism. Reflecting that focus, we're renewing the **popular evening presentation series for 2015/2016**, offering our members valuable learning opportunities. With most events being held at the Royal Geographical Society, the programme (see page 12) offers outstanding speakers who will share knowledge and best practice.

We're also planning a series of exciting, '**Continuous Education**' events in the coming months, including one-day seminars, and new 'Business Development' events. See page 12 for full details.

And, we're introducing our **first-ever 'Games' section** – together with **prizes**. Will you win? Enter on page 11 – and good luck!

In the spirit of confidence and determination set by our chairperson, this issue of SPE Review London offers the opportunity to be educated, entertained – did we mention games... prizes...?! – and informed. Enjoy!

AND...please talk to us!
We welcome your feedback on the online SPE Review London. It's our fifth issue, and the first in Autumn, 2015.
Please send us your ideas, comments and suggestions for articles, interviews and/or topics you'd like to see in future issues.

Fracking: Future Conflict... or Opportunities for Success?

Fracking is the subject of very active opposition in the UK. Iain Poole, Actuary, Head of Oil and Gas Consultancy, Barnett Waddingham, London UK , shares his views on fracking in the oil and gas industry.

This is part one of a two-part series.


Iain Poole

It's been around for more than 50 years...

Hydraulic fracturing was experimented with in the late 1940s, with successful commercial application starting in the following decade. Worldwide, there are now more than 400,000 hydraulically fracked wells in production, with approximately 70% in the US. According to Richard Byrnes (Halliburton), a typical field, fully developed, could have 500 to 2000 wells, in an area of 54 square miles.

Successful development of an unconventional play is challenging, necessitating a holistic, step-change approach, and risk mitigation. Fast decision-making, rapid adoption of new technology, and a good supply chain strategy are also key success factors. Average North American independent operator returns in 2013 were below cost of capital. The first wells drilled may never break even – it is only after drilling 20 - 40 wells that cost reductions can become significant; $300MM could be invested before a final decision is made.

According to Paal Kibsgaard, Chairman and CEO of Schlumberger[1]: 'We... believe that the biggest opportunity going forward will be to significantly improve production per well. After having doubled the horizontal length and number of stages per well in the past five years, while also significantly increasing volumes of water and proppant[2] per stage, the average well production has still not improved noticeably.
'The solution to increase production per well can instead be found in engineered completions that uses formation-evaluation data and completion-modelling software to optimize fracture placement. Production can be further increased by using completion technologies and fracturing fluids that ensure each perforation cluster is properly fractured, while also maximizing fracture conductivity.'

Technological improvements include better understanding of formation geology, better tailoring of mud and faster monitoring of mud and control of drilling programmes, and improved fracture modelling enabling a better number and type of fractures to be achieved.

Improving Economics

Commodity prices aside, the economics are improving. As successive wells are drilled, a progressive reduction in time and costs can be achieved; recently, much of the improvement can be attributed to reduced charges from service companies and for rig hire.

Borrowing a concept from psychology, this successive reduction in cost is being modelled as the 'learning curve'. A learning curve is now assumed to apply; California, US–based Palantir Technology suggests a 15% learning rate as a good starting point for an inexperienced company planning new projects. Various functions have been used for fitting learning curves to historic data; the most common (again, borrowed from psychology) is the power law.

The learning rate parameter has to be interpreted with care; with a 15% curve if the initial well costs $15 million, then the 10th well should cost $8.7 million, and the 20th well should cost $4.6 million. In the US, learning rates up to 40% have been claimed, although it is not clear if this has ever been sustained over the life of a project that may involve thousands of wells, or how often it can be achieved in future; the low-lying fruit may already have been picked.

There is also a perception that production decline is very steep, more than exponential, especially in early stages. The USGS provides a pro-forma profile for Marcellus Shale that indicates Initial Production 4.3MMcf/day, then cumulative production of 0.67, 1.55 and 2.11 bcf after one, five and 10 years respectively.

1 Schlumberger CEO Paal Kibsgaard at the Scotia Howard Weil 2015 Energy Conference, New Orleans. http://www.slb.com/news/presentations/2015/2015_0323_pkibsgaard_howard_weil.aspx [Online] Accessed 26 August, 2015.

2 A solid material known as 'proppant' is injected during fracking; this is needed to prop open the fractures after fluid pumping has stopped and the fluids have dispersed into the formation. Up to 50% of the fluid mix remains downhole.

Continued on page 9

Weathering the storm… Contingency for sustained low oil prices

Dealing with a revenue crisis, or preparing to avoid one… in the sustained low oil price regime.

Oil companies in the UK and abroad are preparing for a regime of sustained low oil prices. Some are already experiencing acute finan cial pain, and struggle to make ends meet.

CapEx commitments which were entered into in the past years prove difficult or impossible to abort, and revenue levels do not underpin the economics of ongoing projects, or (in some cases) are insufficient to cover OpEx.

Healthy Oil & Gas companies can also be destabilised: by the inability of their Joint Venture partners to meet their obligations (a fact which these parties are naturally reluctant to admit, sometimes until it is too late.)

In the past year, the industry has responded to the low oil price regime by influencing the variables under its direct control: CapEx has been reduced, organisations have been (or are being) re-adjusted.

However, in the not too distant future a more complex set of measures will have to be taken. As hedging instruments expire, bank and bond financing matures and credit / liquidity tightens, measures must be taken to secure more sustainable levels of financial and operating performance through financial (and operational) restructuring.

Banks, Sovereign Wealth, and Private Equity are taking a hard look at such re-financing, with a substantial number of Reserve Based Lending facilities and other such instruments coming up for renewal in the Autumn.

Furthermore, Director's duties require oil company Executives and Boards to prepare for such contingencies.

On 13 October, 2015, KPMG will host an informal dinner event at Canary Wharf for a maximum of 20 SPE Members, to discuss recent experiences and best practices in preparing for such eventualities. The event will take place under Chatham House rules.

Jon Slatkin and Marc van Grondelle will take us through a view from the coal face of dealing with the low oil price regime. They will share insights and trends, and suggest some potential remedies as the Upstream world is coming to terms with the 'New Normal' of sustained low(ish) oil prices.

SPE Dinner Meeting, 13 October 2015 'Financial stability in sustained low oil prices preparing your contingency plans'

Directors' duties require executives and non-execs to foresee, and prepare for, possible financial instability in a company. In Upstream, this may not just be triggered by the company, but more often by the Joint Venture partners.

In Oil Field Services, the downturn in CapEx is having a devastating effect. Banks, Sovereign Wealth and Private Equity are taking a hard look at the return on the finance they provide, and may impose additional conditions. A perfect storm!

But even a perfect storm is survivable with a proper contingency plan. And being prepared protects the Directors, corporately and personally.

Jon Slatkin and Marc van Grondelle will discuss (anonymised) experiences, best practices, and suggest possible solutions for Directors and Executives of Upstream- and Oil Field Service companies who are looking to afford the maximum protection for their companies.

ABOUT THE SPEAKERS

Jon Slatkin is a Partner in KPMG's Turnaround Practice and is himself a former CEO. He is KPMG's Restructuring Sector Lead for Oil & Gas.

Dr Marc van Grondelle, SPE, is a former international Upstream executive, who currently leads the KPMG Joint Venture Advisory practice.

Jon and Marc are currently supporting a variety of clients in dealing with, or preparing for, the 'new normal' of low revenue.

REGISTER: **PLEASE NOTE, REGISTRATION FOR THIS EVENT IS NOW OPEN, AND IS ON A FIRST-COME, FIRST-SERVED BASIS.**
Members may register their interest for this dinner via:
EVENTBRITE - http://london.spe.org/home
DATE: 13 October, 2015
LOCATION: KPMG, 15 Canada Square, London E14 5GL

SPE YP 2015/16: Innovation and fun!

Following on from four years of increasing global recognition by SPE International, SPE London-YP strives to provide even greater value to SPE members for the 2015/16 year, with innovative technical, social and university liaison activities.

We look back at some fun, exciting and educational events in 2014/15... and forward to the new 2015/2016 programme.

Bowling, ping-pong – and cricket!

In early June, the SPE YP London section held its second famous annual bowling tournament and spring/summer party in London.

The SPE Young Professionals Committee welcomed young professionals and students from all backgrounds, including guests from Coventry and Portsmouth universities, to a memorable competition. Networking took place alongside in-house entertainment, including arcade games, ping-pong, pool and even a cricket simulator.

Once the bowling started, guests enjoyed freshly made canapés and pizzas in the lounge. During the tournament, everyone bowled seriously with full concentration and enjoyed a few hours of hard competition. Of course, there is nothing as irresistibly contagious in a bowling tournament as sharing jokes and laughs, which can make for the worst gutter balls!

As some guests bowled in their respective teams, others made the most of the venue's facilities – from arcade games to table football and snooker. Both the karaoke machine and ping-pong table were in use throughout the night – often the source of fierce competition.

The evening was a complete success, and the SPE Young Professionals Committee wants to thank everyone who attended and participated in this fantastic event. We look forward to seeing you again next year!

The Tattershall Castle

SPE LondonYP's Autumn Catch-up aboard The Tattershall Castle - a boat moored in central London, with fantastic views over the city's landmarks.

EXPRO PVT lab visit

SPE YP's PVT Knowledge day in February 2015 was at Expro Fluid Analysis Centre (FAC) in Reading. It included a presentation of Reservoir Fluid and PVT analysis by Brian Moffatt of Petrophase in RPS Energy Henley office.

Continued on page 7

SPE YP 2015/16: Innovation and fun! (continued from page 6)

Looking forward...

For 2015/16 SPE London-YP committee hopes to:

- Bring students closer to YPs and more experienced upstream E&P professionals via our Ambassador Lecture Programme, SPE Mentoring and Recruitment Skills Initiative.
- Strive for technical excellence and knowledge exchange through a range of events available to all members; including interactive field trips.
- Make SPE London-YP fun and a great way to make new friends and contacts via our social and professional networking programme.
- Demonstrate best practice to other SPE YP organisations worldwide.

Meet the Committee:

NAME	POSITION	COMPANY
Adriana Pinzon	Chair	DEA UK
Luce Tchen	Vice-Chair/University	Petrenel
Silvia Rey	Communications	IHS
Daniel Barnes	Treasurer/Sponsorship	Strategicfit
Mohamed Farraq	Technical	IGas
Karl Beardsley	Technical	Acoustic Data
Thy Ngo	Technical	Petro-vision
Mark Beleski	Social	Circle Oil
Anne Claudel	Social	BP
Arash Farhadi	University	Primera Reservoir

SPE London-YP aims to bring young professionals closer to other YP societies both in the London area, and beyond, in association with other European SPE YP Committees.
If you have any good ideas for further events, we welcome your suggestions: yplondon@spemail.org

Boston Consulting Group : 'Introduction to Management Consulting in Oil and Gas

This SPE YP's evening event was fun and informal, yet informative for all – including debating current industry issues such as shale gas development in Europe, and the future of oil price. It provided a valuable insight into management consulting in general, and to Boston Consulting Group's work and scope.

Student Paper Contest

It's been a couple of years since SPE YP London hosted the finals of the first-ever UK Student Paper Contest in 2013. This year, the Geological Society London once again welcomed professionals and students for the final project presentations to a panel of judges and an audience from a wide range of backgrounds.

Final countdown to SPE Offshore Europe 2015

8-11 September 2015, Aberdeen Exhibition & Conference Centre

Make the most of the opportunities to learn at the free-to-attend technical conference, take the time to explore the international exhibition, discover the innovative technology on display and connect with colleagues and new business contacts.

Opening Plenary Session

The event will open on Tuesday 8 September with a plenary session focusing on the basic challenge of meeting energy demand while balancing concerns over climate change, security of supply and consumer affordability. **Professor Brian Cox** (arguably the UK's best known physicist) is confirmed as a speaker – his books and TV programmes are read and watched around the world and credited with making science engaging and accessible to millions. Other confirmed speakers include: **Keisuki Sadamori**, Director, Energy Markets and Security, International Energy Agency; **Simon Bittleston**, Vice President, Research, Schlumberger; **Matt Corbin**, Managing Director, Aker Solutions; and **Liz Rogers**, Vice President Environment, Social Responsibility and HSSE Compliance, BP.

Exhibition

Approximately 1500 global organisations will showcase their technologies, services and expertise on the exhibition floor; at least 300 companies will be first-time exhibitors. The complete supply chain of companies will be represented, including operators, drilling contractors and oilfield service companies, consolidating Aberdeen's established reputation as a supplier of services and products to projects worldwide.

Global Reach

Reflective of the global nature of the industry, there will be a large overseas exhibitor presence with representation from 44 countries and 33 international pavilions. Many of the registered visitors to date have overseas remits – 35% are involved in projects in Africa, 30% in the Middle East and 25% in Asia Pacific.

Free-to-attend Conference Programme

Keynote sessions

The keynote programme will offer 11 sessions dealing with important elements of the framwork within which the industry is likely to have to operate in the coming years. Topics to be addressed include: health; the safetyand security of people and assets; well intervention; financing investments; oil spill response; and inspiring the next generation to join the industry.

Technical sessions

The technical programme will present more than 75 papers, demonstrating that the industry's engineering, manufacturing and technology excellence is set to assure a long-term sustainable future. Speakers drawn from all over the world will discuss topics such as asset and well integrity, maximising economic recovery, smarter field development, pipelines and risers, subsea processing, talent development, unconventional gas development, process safety, and decommissioning.

Deepwater Zone

A dedicated theatre will host industry experts presenting topical case studies and participating in panel discussions. With content programmed by Subsea UK, the Society for Underwater Technology and ITF, these sessions will address deepwater developments; the future of inspection, repair and maintenance; new technologies for efficiency and effectiveness; subsea challenges for enabling deepwater production; and ultra-deepwater challenges. In the event's largest Deepwater Zone to date, some 30 companies from this rapidly evolving sector will display their latest products and services.

Breakfast Briefings

- **Tuesday**: Steve Varley, UK Chairman and Managing Partner, EY, and Lars Christian Bachar, Executive Vice President, Development & Production International, Statoil.
- **Wednesday**: Oil & Gas UK is organising a breakfast briefing on its Economic Report 2015.
- **Thursday**: 'The price of oil, did market analysts forget about E&P?' by international oil and energy consultant, Manouchehr Takin.
- **Friday**: Feeding the pipeline of female talent in STEM.

Topical Lunches

- **Tuesday**: 'New times, new challenges' by Bernard Looney, Chief Operating Officer, Production, BP.
- **Wednesday**: Andy Samuel, Chief Executive, Oil & Gas Authority.
- **Thursday**: Small operators' panel chaired by Neil McCulloch, President, North Sea, EnQuest. **Speakers include**: Oonagh Werngren, Operations Director, Oil & Gas UK; John Pearson, Group President Northern Europe & CIS, Amec Foster Wheeler; Matt Corbin, Managing Director, Aker Solutions; and Robin Allan, Director of Business Units, Premier Oil.

UKTI Country Briefings

UKTI commercial officers and buyers from key international regions will be running a series of free-to-attend country briefings, including Brazil, Norway, Mexico and Saudi Arabia. ■

Information and registration: www.offshore-europe.co.uk

Fracking: Future Conflict... or Opportunities for Success (cont. from page 3)

UK Potential

The British Geological Survey (BGS) identified three principal areas with significant potential for onshore development: the Bowland Shale of the Pennine Basin, the Kimmeridge Clay of the Weald Basin in Surrey and Sussex, and the Oil-Shale Group of the Midland Valley of Scotland. The Bowland shale is the best understood; the BGS estimated GIIP of that area alone as 1,300 trillion cubic feet (P50).


Frac-sand-macro-comparison

In May 2014, BGS, in association with the Department of Energy and Climate Change (DECC), published a survey[3] of the Weald Basin Jurassic shales, estimating the range of shale oil in place as 'between 2.20 and 8.57 billion barrels (bbl) or 293 and 1143 million tonnes, but the central estimate for the resource is 4.4 billion bbl or 591 million tonnes'. We still await the BGS survey of the Midland Valley; it is expected that Oil in Place will be much smaller. The oil-bearing strata in the Weald are considered dissimilar to the oil-producing shales of the USA. The technology required for production of shale oil differs markedly from that for gas. At this stage, it is too early to be able to give reliable estimates of the shale gas or oil resources that may be technically or economically recoverable.

The UK's gas distribution infrastructure is more developed than that in the USA, though Halliburton expects UK shale developments may have problems with supply chain, transporting proppant, availability of equipment, dealing with flowback water, and lack of skilled people. In 2013, there were 176 Petroleum Exploration Development Licences (PEDL) for onshore oil and gas in the UK. Since then, the 14th (2014) licensing round has taken place, with results announced in August 2015. A further 159 licences were awarded in England and Wales. Many of the new and existing licences may imply fracking in future, but not all, as Conventional plays are included. Award of licences in Scotland was removed from this round, as responsibility will soon be devolved to Edinburgh.

The operators' representative body – the United Kingdom Onshore Oil and Gas (UKOOG) – stated in an August 2015 press release[4]: 'Over 2000 onshore oil and gas wells have been drilled in the UK, and 120 are currently operational, yet few people realise these sites are even there. The opportunity exists to create tens of thousands of jobs, reduce imports, generate significant tax revenue and support British manufacturing from an extremely small footprint, which will benefit the environment at the same time. 'Research from the IoD shows that as few as 100 shale gas sites, each the size of only two football pitches, could reduce the UK's import dependency by half.'

A year earlier, a Populus survey[5] (commissioned by UKOOG) of 4,000 adults in Great Britain found '57% of Britons think shale gas production should go ahead; only 16% are opposed', while '67% agree Britain should be less reliant on gas from other countries, compared with just 1% who disagree'.

Rural Lancashire

DECC stated in 2013 (Report, 2013[6]) that it expected, by 2055, to be 'importing close to 70% of the gas we consume, assuming we do not develop shale', and in an updated (2015) Policy Paper[7], DECC added: 'The government believes that shale gas has the potential to provide the UK with greater energy security, growth and jobs. We are encouraging safe and environmentally sound exploration to determine this potential.'

Future Conflict – are there solutions?

Fracking is the subject of very active opposition in the UK.
The UK government issued a policy statement in August 2015, intended to speed up the planning process, advising that 'we need to seize the opportunity now to explore and test our shale potential.'

Questions arise:

- Can local opposition be mitigated by community compensation schemes?
- Will guarantees or reassurances given by government or the industry regarding climate change or other perils lead to litigation?
- How best may we determine the extent of technically and economically shale oil and gas reserves in the UK? And how may this change in response to technical improvement or changes in commodity prices?

The second part of this article – available in our October issue – will address these questions, and more.

3 Jurassic shale of the Weald Basin: resource estimation report. http://www.bgs.ac.uk/shalegas/wealdShaleOil.html [Online] Accessed 26 August, 2015.

4 UKOOG welcomes the results of the 14th licensing round. http://www.ukoog.org.uk/about-ukoog/press-releases/159-ukoog-welcomes-the-results-of-the-14th-licensing-round [Online] Accessed 26 August 2015.

5 New survey shows 57% of Britons support natural gas from shale. http://www.ukoog.org.uk/about-ukoog/press-releases/131-new-survey-shows-57-of-britons-support-natural-gas-from-shale [Online] Accessed August 26, 2015.

6 Developing Onshore Shale Gas and Oil – Facts about 'Fracking'. Department of Energy & Climate Change Pdf. December 2013.

7 2010 to 2015 government policy: energy industry and infrastructure licensing and regulation. https://www.gov.uk/government/publications/2010-to-2015-government-policy-energy-industry-and-infrastructure-licensing-and-regulation/2010-to-2015-government-policy-energy-industry-and-infrastructure-licensing-and-regulation [Online] Accessed August 26, 2015.

NEW: Word Search and Quiz (with prizes!)

Word Search

e	n	e	r	g	y	s	e	a	f	m	t	f	p	p	r	e	n
r	n	x	r	b	c	a	e	h	u	p	s	t	r	e	a	m	a
i	s	p	e	t	r	o	l	r	e	e	n	f	l	o	a	a	s
f	e	l	t	g	o	l	d	s	l	o	n	d	o	n	g	r	y
r	a	o	a	n	c	o	a	l	i	h	t	s	f	s	o	i	l
a	i	r	r		k	t	i	v	e	f	e	c	f	s	h	n	r
c	a	a	t	e	e	r	s	s	t	e	x	a	s	r	a	e	q
k	f	t	a	n	k	e	r	s	t	r	s	t	h	l	r	t	e
i	c	i	u	a	t	s	f	g	p	e	t	r	o	l	e	u	m
n	t	o	f	n	c	e	a	e	d	x	c	c	r	o	f	g	e
g	i	n	o	c	r	r	i	r	s	t	o	r	e	i	i	i	t
b	m	s	i	m	t	v	p	o	g	r	a	p	h	y	n	l	h
l	a	n	r	c	h	e	m	i	c	a	l	h	o	p	i	g	a
v	c	a	m	a	e	s	o	p	i	c	t	f	e	i	n	r	n
w	a	t	e	r	i	p	a	f	t	t	a	r	s	e	g	r	e
e	h	d	h	b	o	p	g	q	e	i	u	n	a	t	r	t	g
l	p	i	p	o	l	t	g	a	s	o	l	i	n	e	e	f	s
l	h	l	i	n	l	e	x	i	p	n	r	s	d	n	i	a	u

Air
Bop
Carbon
Chemical
Coal
Energy
Exploration
Extraction
Fracking
Fuel
Gasoline
London
Marine
Methane
Noc
Petrol
Petroleum
Refining
Reserves
Rock
Offshore
Oil
Sand
Store
Tankers
Tars
Texas
Upstream
Water
Well

SPE Review London QUIZ

We're looking for puzzle winners ...
Of course, all puzzle-solving people are smart...
so test your skills on our first-ever puzzle.
The answers are in this issue of SPE Review London.
So, pour yourself a cup of coffee (or tea, or water - whatever your beverage), and enjoy your reading and puzzle solving.

And, we're looking for the 2015/16 Champion Puzzle Solver!
The SPE Review London Champion Puzzle Solver will get a special award, and a choice of his/her gift.

How to enter:

- In an email, please note the number of each question (1 - 7), and the corresponding correct answer number (1 - 4).
- For example, if you think the answer to the first question is 'Social Media Expert', then your email would show 1/4; if you think it's 'University Professor', then it would be 1/2.
- Please send emails with answers to Zelda Bekker (*zeldab0505@gmail.com).*
- *We'll draw the monthly/champion winner from all correct entries received.*

Good luck!!

Do You Know?
Fill in the circle beside the correct answer

1.What is Iain Poole's business title?
- ○ Head of Oil and Gas Consultancy
- ○ University professor
- ○ Management Consultant
- ○ Social Media expert

2.How many onshore oil and gas wells have been drilled in the UK, to date?
- ○ 1000
- ○ 1500
- ○ 2000
- ○ 2400

3.Who is the Chair of the London SPE-YP for 2015/16?
- ○ Susan Singer
- ○ Thy Ngo
- ○ Mark Thompson
- ○ Adriana Pinzon

4.Where is the location for SPE Offshore Europe 2015?
- ○ Aberdeen
- ○ London
- ○ Paris
- ○ Rome

5.Who puts on the 'Women in Energy' seminar?
- ○ SPE International
- ○ SPE-YP London
- ○ SPE London
- ○ Private company

6.When are the Individual Project Presentations (by the students on the MSc in Petroleum Engineering) taking place?
- ○ September 16 and 17
- ○ December 12 and 13
- ○ October 15
- ○ November 16 and 17

7.What is the first word shown in this issue's Word Search?
- ○ Edinburgh
- ○ Cardiff
- ○ London
- ○ Belfast

SPE London plans to inform, educate and manage through its 'Continuous Education' events...

The SPE London is planning a series of exciting, 'Continuous Education' (CE) events in the coming months.

The programme will include a couple of one-day seminars, as in previous years:

- '**Introduction to Exploration and Production**' on 12 November 2015, at the Royal Geographical Society.
- '**Women In Energy**' in 2016.

The '**Introduction to Exploration & Production**' seminar is aimed at people working in the oil and gas industry, who are either new to the industry and/or would benefit from a basic understanding of exploration and production processes – with emphasis on the key elements that make up oil and gas projects.

The '**Women in Energy**' seminar will focus on exploring different strategies that companies in the oil and gas industry can utilise to empower and encourage their talented female professional population to manage and excel in their career journeys.

We are also planning at least two new events along the theme of '**Business Development**' in 2016. Our first event will be titled '**Past and Future Exploration and Production Business Development Strategies**'. We will then focus on a workshop on the topic of: '**Reserves Reporting Standards**', later in the year.

Can you help?

We need your industry experience...

Volunteers with SPE London tell us they get great personal satisfaction from using their professional abilities and business acumen to 'give something back'.

We're looking for a few key new volunteers in 2015!
While volunteers are very welcome on all our committees, we are especially looking for skills for the 'Conference', and the 'Continuing Education' committees.

The SPE London section 'Conference' committee organises regular, established events, along with single occasions created especially to answer industry demand. Each event is the responsibility of the committee chairman and his or her team.

The Continuing Education (CE) committee is particularly seeking volunteers with technical or event-organising experience, skills.

Please **contact Kate McMillan** for more details of how you can volunteer your experience and skills to benefit all our members: katespe@aol.com

EVENTS: Upcoming events – 2015

8 - 11 September 2015
SPE Offshore Europe 2015
AECC (Aberdeen Exhibition & Conference Centre)
Aberdeen, Scotland. UK. **Note: Online registration**

15 - 16 September 2015
MSc Petroleum Engineering Presentations
South Kensington, London. UK.
Individual, 15-minute project presentations by students on the MSc in Petroleum Engineering. Lunch and poster session.
Information: http://www.imperial.ac.uk/engineering/departments/earth-science/contact-us/

13 October 2015
SPE Dinner Meeting, 13 October 2015
Canary Wharf, London. UK
'Financial stability in sustained low oil prices preparing your contingency plans'
Registration: **First-come, first-served basis.**

27 October 2015
Special SPE London evening: 'Geomechanics - Quo Vadis?'
Geological Society, London

8 - 11 November 2015
SPE ICoTA 21st European Well Conference
Aberdeen, UK
Call for abstracts – deadline 14th August 2015
Information: event organisers Rodger and Co: 01224 495051

SPE Web Events : Ongoing
SPE International Upcoming Web Events
Some online events scheduled for September 2015:

- **Proposed Technologies to Address E&P's Growing Energy Challenges:** Live Event on 09/08/2015 at 9:30 AM (EDT)
- **Near Wellbore Complexity Considerations in Horizontal Well Completions:** Live Event on 09/09/2015 at 9:30 AM (EDT)
- **Getting To Zero – The Road to Stavanger - Europe:** Live Event on 09/14/2015 at 6:00 AM (EDT)
- **Stabilization of the Inherent Slugging Tendencies of Horizontal Shale Wells through Production Management and Artificial Lift:** Live Event on 09/17/2015 at 12:30 PM (EDT)

Full Information: https://webevents.spe.org/

Consultant Listings

Ross McCartney: Expert evaluation of formation water and produced water analyses for scale, well, and reservoir management. www.oilfieldwaterservices.co.uk ross@oilfieldwaterservices.co.uk

Oleum Khaos Ltd: First quartile Petrophysics, 30+ years' experience, field studies, well planning, peer assist / review, project management. +44 (0)1252 416396 info@oleumkhaos.com www. oleumkhaos.com

Alan Taylor: Reservoir engineering, simulation, well modelling for oil & gas field development planning. Southern Reservoir Engineering Ltd. ajt.sre@btinternet.com Mob: +44 (0)7785 544485 Dir: +44 (0)1305 751677

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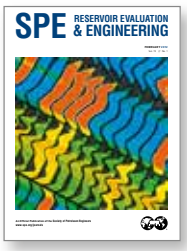

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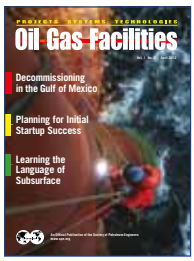

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