Forward together for continued success


Len Srnka, president, EAGE, writes: It is a great honour and privilege for me to be able to serve as your president for 2012-13. Having just experienced our excellent 2012 Annual Conference and Exhibition in Copenhagen, again held jointly with SPE-EUROPEC, I can say confidently that EAGE is poised to continue the success it has achieved in recent years. I anticipate continued growth in our membership, and new opportunities arising for conferences, workshops, and publications. The skills, dedication, and hard work by many people are responsible for this success, including the permanent office staffs in Houten, Dubai, Kuala Lumpur, and Moscow, and the many volunteers who serve the Association on committees, as Board advisors, and on the Board itself.

My vision for the Association builds on its substantial current strengths, and can be summarized in two words: Forward Together. These words embrace the established core values of EAGE as a professional geoscience and engineering society, and also provide an optimistic tone for the opportunities that lie ahead in these challenging times. I see Forward meaning to advance our technical disciplines, our professional development, and our technical support for societal needs; and Together as increasing integration of geoscience and engineering disciplines, cooperation and coordination with our sister societies, and participation and diversity within our Association. Above all, EAGE is, and must remain, an association of, by, and for its members.

The strategy that implements this vision largely continues what was approved by the Board in 2009, in four main focus areas: 1) use our Annual Conferences, workshops, and publications to enhance existing and promote emerging technical areas, including both natural resource and environmental topics; 2) grow our educational activities in their scope, demographics, and geographical reach, and promote public awareness of the importance of geoscience and engineering to society; 3) seek cooperation and coordination with our sister societies for the mutual benefit of members, their host organizations, and technical disciplines; and 4) increase participation and diversity within our Association, especially for women.

Trivia Question

Q: Is the following statement True or False?
If water flows naturally to the ground surface in a water bore (or well) due to hydrostatic pressure, it is considered ‘sub-artesian’.

See answer p. 7.

Dubai conference looking for answers on integrated reservoir modelling

Abdulla Al Naim vice president of exploration, Saudi Aramco.

Are we doing it right? That’s the question which will be asked at the inaugural Conference on Integrated Reservoir Modelling to be hosted in Dubai at The Palace Hotel, The Old Town, from 2-28 November 2012.

The conference will focus on the latest developments in integrated reservoir modelling and their implications on reservoir management and field development strategies. A particular emphasis will be on the field applications and validation of new technologies that have emerged over the last decade.

What’s inside

Core element for workshop 3
Busy year for DGS 7
ADIPEC goes annual 8
Industry news 10
And more...
Dubai conference looking for answers on integrated reservoir modelling

Continued from p.1.

Special attention will be given to case histories and examples of multi-disciplinary integration.

Abdullah A-Naim, vice president of exploration, Saudi Aramco, will give the opening keynote speech of the conference. He will be sharing his views on today’s modelling approaches and the future of modelling for more robust field characterization and development. Al-Naim’s responsibilities cover seven departments; these include finding, delineating, and helping to develop the enormous oil and gas reserves of the Kingdom and evaluating the Kingdom’s hydrocarbon potential.

Prior to the conference, a one-day short course will be on offer, entitled Integrated Reservoir Characterization and Modelling and led by Dr Mickaële Le Ravalec, an IFPEN expert with over 15 years of reservoir modelling experience.

The short course will address the joint integration of static and dynamic data into reservoir models as it is practiced today and as it will be practiced in the future. It looks at existing and emerging integration techniques, inter-disciplinary integration, and uncertainty estimation. Case studies will be presented to highlight how integrated modelling and matching workflows lead to successful reservoir management.

The conference is being supported by Saudi Aramco, Total, ExxonMobil, and CGG Veritas.

Forward together for continued success

Continued from p.1

women and young professionals. As an example in this last focus area, an initiative is underway by the Local Advisory Committee for London 2013 to enhance the presence and participation of our women members and to seek better ways to support their careers.

Of course, strategies must keep pace with new challenges and opportunities, so the Board will revisit the existing Association strategy when we next meet in conjunction with the Near Surface Geoscience Annual Conference in Paris this September.

My predecessor, past-president John Underhill, was successful in putting new long-term strategic MOUs in place with our sister societies AAPG and SEG as well as building on our existing links with SPE. Several new initiatives are in place for events in 2013 as a result. We plan to hold a joint workshop with the AAPG in Europe on a highly topical subject area, and to hold a joint forum with the SEG on a topic in geophysical fundamentals. During the past year, the SEG invited EAGE to participate in their Oil and Gas Reserves Committee that seeks to incorporate geophysical methods in reserves estimation, and that participation has begun through our Oil and Gas Geoscience Division.

I am mindful of the fact that I am the first EAGE President who is based in the USA, although I have deep European roots. My location brings with it both the challenge of working effectively with my fellow Board members and the Head Office staff in Houten, but also the opportunity to continue strengthening the Association as a global geoscience and engineering organization from a trans-Atlantic perspective. I do feel comforted in my geographical challenge in that our vice president, Gladys Gonzalez, and our newly elected Education Officer, Paul Sava, are also based in the USA, so we will work this perspective together to help make EAGE an even stronger Association than it currently is.

Copenhagen ’12 was a big success for EAGE.

Registration for the conference and short course is currently open and for more details on the event, please visit: www.eage.org.
Fourth Arabian Plate Geology Workshop: New format for the highly anticipated core element!

The workshop has been highly popular since it first started in 2008 in Muscat, Oman focusing on the regional depositional history, stratigraphy and palaeogeography of the Shu’aiba. Two years later in 2010, Abu Dhabi (UAE) played host for the second workshop, this time focusing on the Albian-Cenomanian-Turonian interval. In 2011, Kuwait also jumped on board and welcomed over 100 delegates for the Third Arabian Plate Geology workshop on the Permo-Triassic (Khuff) interval of the Arabian Plate.

Theme of this year’s edition covers the Late Jurassic to Early Cretaceous (Oxfordian to Valanginian) interval that is characterized by world-class siliciclastic, evaporite and carbonate seal/reservoir sequences, and source rocks. The Fourth Arabian Plate Geology Workshop will again be held in Abu Dhabi, UAE at the Hilton hotel and will kick-off on Sunday, 9 December from 3pm onwards with the Core Workshop. Prof Fred Read, emeritus professor from Virginia Tech University will open the workshop with his keynote address entitled: ‘Late Jurassic Early Cretaceous carbonate depositional systems: Global to local controls’.

The Core Workshop will feature an unprecedented collection of cores and outcrop data, including virtual displays and posters, from countries surrounding the Gulf and will allow participants to ground-truth geological concepts. Participating companies displaying cores include: ADMA, ADCO, Al Hosn Gas, Chevron, KOC, PDO, Qatar, Saudi Aramco and Total. The following days will feature oral and poster presentations.

There is also an optional Habshan Field Trip to the Oman Mountains available on 6-8 December. In addition, two one-day pre-workshop field trips are planned to observe modern analogue features of the Abu Dhabi Sabkha, Lagoon and Ooid Shoals. For more details, please visit the website.

Registration is currently open, so please visit www.eage.org.

Borehole workshop bound for Malta

Final plans are in place for the forthcoming Borehole Geophysics Workshop II, scheduled for 21-24 April 2013 in St Julian’s, Malta, with one keynote speaker from Saudi Aramco. With the theme of ‘3D VSP: Benefits, Challenges and Potential’, the workshop is expected to facilitate lively debate among the delegates and speakers, on both 3D VSP data acquisition and processing, as well as other borehole-related disciplines. It follows the highly successful Borehole Geophysics Workshop held in Istanbul in 2011, which raised many questions and comments about the development of this 3D VSP technology.

To start the workshop, keynote speaker Ibraheem Assa’dan, general manager of exploration of Saudi Aramco, will give a management perspective on borehole geophysics technologies, while Dr Phil Christie of Schlumberger and former president of the EAGE will focus on the technical challenges and developments of these technologies. The Call for Papers is open, and the programme will include oral and poster submissions on a variety of technical subjects and case studies. There will be a panel discussion to conclude each session, with prizes in recognition of significant floor contributions to the debate.

Two optional short courses will be available to delegates, facilitated by Les Nutt of Schlumberger covering borehole seismic fundamentals and advanced analysis and applications. Attendees will be able to explore and process real VSP data on their own laptops using software which will be provided in advance along with a course text book. There will also be a display area to give invited companies the opportunity to show their relevant technologies.

Malta is a popular holiday destination, an island steeped in history, with a unique culture and heritage. It has excellent transport links through most European hubs, and direct flights from Cairo. EAGE has organized a social programme that includes a local sight-seeing tour to showcase some of the island’s attractions.

This event would not take place without the strong support of Saudi Aramco, with additional sponsorship from Schlumberger, Sercel, Halliburton, VSFusion, and others, for which EAGE is very grateful.
EAGE stages first forum on industry challenges for students and young industry professionals

Students and young professionals have much to look forward to in the first-ever EAGE Forum on Students and Young Professionals. This inaugural event aims to bridge the gap from theoretical learning to successful integration of students and young professionals into the sometimes challenging and ever-changing work environment of the oil and gas industry.

Sultan Al Hajji, vice president, Total UAE, has confirmed as one of the keynote speakers and his thoughts on diversity, the future of local talent, and the challenges that lie ahead are very much anticipated. Al Hajji is in charge of institutional development with responsibilities covering sustainable development, corporate social responsibility, human capital development, diversity, communication, and representing Total shareholders in the Middle East.

Another topical session that will surely intrigue fresh graduates and those looking to get in to the industry is the session ‘Career Prospects for Young Talents’. Raj Sharma, regional director of Hays Oil & Gas, UAE will share his insights on current employment and compensation trends in the oil and gas industry. He is responsible for the geosciences and HSE sectors for the entire region and works closely with the other Hays Oil & Gas hubs across the globe.

The Forum will also welcome Samer Sobh, president, MENA Young Professionals Network, Shell EP International (Dubai, UAE) who will speak in the session ‘Whisper your success: The Reality of Field Experience’. Samer started his career in Shell in 2007 with the sub-surface and wells IT team in the MENA region. In 2009, he took the role of IT and JM Lead for Shell Pearls Project in Kazakhstan before he moved to Aberdeen in a global role in the surface production engineering team. Currently Samer is working on the Iraq South Gas project and is based in Dubai with frequent visits to Basra, Iraq.

New in the EAGE Bookshop: Environmental Geophysics (EET 7)!

Here are many excellent books and some courses dealing with environmental/near surface geophysics but they are all inward facing, i.e., aimed at geophysicists and students of geophysics and not truly accessible to the stakeholders and commissioners of environmental geophysics.

‘Environmental Geophysics: Everything you ever wanted (needed!) to know but were afraid to ask!’ by Peter Styles is an outward facing course for people who need to understand geophysics because it can solve their problems and will be driven by problems regularly encountered and their optimal geophysical solution in collaboration with the essential but last to be applied intrusive investigation. It may, of course, be of significant use to students and geophysical practitioners as it contains a wealth of case studies kindly provided by friends, colleagues, and collaborators.

The people to whom this book is addressed do not require a great understanding of the mathematical basis of geophysics but do need to understand the physical principles, what information can be gleaned, the limitations and boundaries of interpretation, and especially how we can combine techniques in an integrated way to solve subtle, complex and critical problems which one technique alone cannot solve.

This book is part of the EET series and complements the EET 7 course. The EAGE Education Tour (EET) offers a one-day course delivered by renowned geoscientists at various locations globally. Accompanied by a comprehensive course book, it provides members and others access to the latest developments in key topics in the Geosciences.

Professor Peter Styles has taught and practiced environmental and engineering geophysics for 35 years to undergraduates, postgraduates, and conducted professional training courses, nationally and internationally. He has held academic posts at Swansea, Liverpool and now Keele University as professorial research fellow in applied and environmental geophysics, and he has published more than 90 papers and many professional reports on all aspects of environmental geophysics.

Visit www.eage.org/bookshop to find more details about this publication and many more!
London will be EAGE’s 75th anniversary conference and exhibition

Not quite the Olympics but next year will be a big occasion for the EAGE. Not only will the Annual Conference & Exhibition be held the UK capital city on 10–13 June, but we will be celebrating the 75th event! The theme will be ‘Changing Frontiers’, with BP executive vice president Mike Daly acting as chairman of the local advisory committee.

London ’13 offers a six-day programme and can be expected to include a large conference, workshops, short courses, technical exhibition (with room for over 350 exhibitors from the geoscience industry), student programme, and field trips. The venue hosting our 75th meeting is ExCeL, London’s largest conference and exhibition venue, situated alongside Canary Wharf and London City Airport in a stunning waterfront setting by Royal Victoria Dock. It is all within easy access of central London.

The technical programme for London ’13 will address many of the key issue in geoscience and engineering today. As the world’s population approaches seven billion people, the demand for our planet’s resources and the pressure on its fragile environment has never been greater. Central to both these issues is the role of geoscience and engineering. Together, these disciplines search out new resources and find ever more sophisticated ways of developing them, economically and sustainably. Fundamental to this task is the requirement to operate safely, yet constantly address risk and move beyond the conventional world, to change the frontier of what is known and what is possible. For those interested in submitting an abstract, the Call for Papers just opened up and will run until the submission deadline on 15 January 2013.

More information on London ’13 in general or sponsor and exhibition opportunities is available on the event webpage on www.eage.org.

More information on London ’13 in general or sponsor and exhibition opportunities is available on the event webpage on www.eage.org.
Membership growth reflects increase in services

EAGE Board Advisor for the Middle East, Mohammed Alfaraj writes: Our region continues to grow despite the economic climate and its contributions are numerous in the field of geosciences and engineering. It is therefore an honour for me to introduce myself to our members in the region. The Board Advisor Middle East is the official EAGE representative in the region, and my responsibilities include advising the EAGE Board on how to best serve EAGE members throughout the Middle East and promote new events that are of relevance and interest to the local EAGE members, and often times beyond, such as workshops and courses.

One of the current initiatives is promoting EAGE membership by assigning a “local EAGE membership representative” in each area with a high concentration of geoscientists and/or engineers. Last year, total Association membership reached 16,000 and considerable growth can be reported from the ME region. This is achieved thanks to the Regional Council ME who assists the local Dubai office in the promotion of EAGE and its activities.

I place a high priority on keeping our members informed not just on EAGE-related activities but industry happenings and technological advances as well. With the world’s population and hence petroleum consumption both on the rise, there is no doubt in anyone’s mind that support for petroleum-related activities will grow as it has to be commensurate and keep pace. EAGE ME aims to be at the forefront in all these objectives, providing a full range of services to you, the members.

In the coming months, we are staging technical workshops either aimed at particular professional interests or targeting the needs of the regional geoscience and engineering communities. Notably, some of our activities include a number of collaborations with our sister societies. The calendar of events in this issue should provide you with more details on these exciting events and I look forward to perhaps meeting you at least at one of them.

Since its formal inception in 2006, EAGE ME has been doing great service to its members from major stakeholders in the regional industry as well as from professional societies and the academia. Personally, I find great satisfaction in ensuring that EAGE continues to offer relevant quality services. As this newsletter is for the members, I would be delighted to hear from you (middle_east@eage.org) with any feedback.

Computer petroleum quiz tests Iranian students

Last December the first computerized Petro-Quiz competition in Iran was organized. It was the initiative of Mahdi Bakhtbidar, president of the EAGE Student Chapter in IAUO (Islamic Azad University Omidieh Branch).

IAUO Student Chapter developed a specialized software in order to carry out and administer the Petro-Quiz designed to encourage students to test their skills and knowledge development. The 75 minute contest was designed around 40 multiple choice questions in various areas of geosciences and petroleum engineering. An overview of results was provided at the end of the contest showing which questions were answered correctly. Each participant received a total points score including a percentage of the number of correctly answered questions.

IAUO Student Chapter offered the top three winning students the opportunity to become free members of its student chapter and the chance to participate in the 3rd EAGE student Online Geo-Quiz that took place in March.

The first three winning students were Hafizolah Emadian, Saeed Teimourzadi, and joint third Mohammad Rahimirad and Mohammad Ali Davarian.
DGS made it a busy year for members

Dhahran Geosciences Society has been tremendously active during the last year under the Executive Committee which concluded its current term in July.

During its tenure, the committee delivered a varied programme that focused on enriching the members’ knowledge, providing a forum to network with colleagues and peers. This included organizing adventurous, yet educational field trips, conducting short courses on current geosciences topics, participating in events such as GEO 2012 and the annual meetings of EAGE, AAPG, and SEG, and inviting distinguished speakers on diverse topics of interest to all society members at large.

DGS organized monthly dinner meetings for all members to meet, network, and gain valuable life and professional’s knowledge. This year, the Committee, under the leadership of Dr Saleh Al-Dossary, made a deliberate effort to provide valuable talks by distinguished guest speakers during the dinner meetings. The topics ranged from geosciences subject matters to how our brain functions and were immensely enjoyed not only by DGS members but also their spouses and guests. Among the memorable dinner meeting talks of this year were:

• ‘SCITECH where Innovation meets Education’ – Dr Muhammad A. Ghanwam, director general, Sultan Ibn Abdul-Aziz Science and Technology Center (Scitech), KFUPM
• ‘The Future Geoscientist: What kind of geoscientist is needed to enable Saudi Arabia face its future challenges’ – Mahmood M. Abdulbaqi, chairman, ARGAS and ARDISEIS.
• ‘Hard as a rock, fluid as oil ... The fascination of thoughts and feelings’ – Dr Haifa Gahtani, acting unit head of psychiatric services and chairperson of the Abuse Response Team, Saudi Aramco Medical Services Organization (SAMSO).
• ‘Characterization of Organic Rich Rocks: From Source to Reservoir Rock’ – Len Srnka, vice president, EAGE.
• ‘Epilepsy, a life-changing experience’ – Raidah Al-Baradie, president of Saudi Chapter of Epilepsy, director of the Comprehensive Epilepsy Program at King Fahd Specialist Hospital (Dammam).
• ‘Leaders: Are they born or made? – Suha K. Al-Behaiai, training and professional development advisor, Saudi Aramco EXPEC ARC.
• ‘The Ten Habits of Highly Successful Oil Finders’ – Robert C. Shoup, geologist and trainer, Subsurface Consultants Associates (SCA)

The society also organized various local and international field trips. The highlights of these trips included the journey to Al-Wahba Crater near Taif that took the visitors back to the beginning of the Arabian plate; the excursions to Shaybah that epimerize man’s conquest of the most inhospitable environments with its red, majestic sand dunes; and a visit to Dhahran half-moon bay area for an evening of star gazing that stimulated our imaginations of what is beyond the limits of our planet. These local trips were complemented by international trips that Median Saleh in Jordan and the high lands of Ethiopia. DGS members thoroughly enjoyed these trips and took a lot of pictures that would make these memories last a lifetime.

The society participated in a number of affiliated society short courses and visiting professor lecture series. The success of these courses was down to the hard work and many volunteer hours of DGS Executive Committee members. These included:

• ‘Acoustics applications for stimulation in gas fields for Multistage Fracturing and Shale Gas’ – Distinguished Instructor: Tom R. Bratton, scientific advisor in petrophysics and geomechanics, Denver, Colorado, USA
• ‘Seismic Imaging: Kirchhoff, Beam, WEM, RTM, Anisotropy, What is Next?’ – Distinguished Instructor: Professor Tariq Alkhalifah, King Abdullah University for Science and Technology (KAUST) Thuwal, Saudi Arabia
• ‘Seismic Acquisition from Yesterday to Tomorrow’ – SEG/EAGE Distinguished Instructor Short Course (DISC), Julien Meunier, CCGVeritas.
• SEG Challenge Bowl, Manama, Bahrain Held in conjunction with DGS’s GEO 2012 – 10th Middle East Geosciences Conference and Exhibition

The 2011–12 DGS EXCOM also implemented several ground breaking initiatives. The most impressive was the increase of DGS membership by more than 40% in one year. This was by enlarging the vision and acceptance of exploration management to include all exploration professionals to be members of the Society, which boosted the membership numbers tremendously.

The committee also participated in GEO 2012 which was appreciated by the organizer of this event, DGS members, and the geosciences industry in general. The society had a booth at the conference and was instrumental in promoting geosciences in Saudi Arabia and in the greater Middle East region.

Trivia answer

False: the term is ‘artesian’.
In sub-artesian bores, the water can rise but does not reach the ground surface.
Geology Day highlights sustainability of natural resources

Under the patronage of Vice Chancellor Dr Abdulla Al Khanbashi, UAE University’s Annual Geology Day was celebrated in May attracting geoscientists from all over UAE to participate in the presentations, exhibition and posters. Among the sponsors for the event were DEWA, Schlumberger, ZADCO, ADMA, Ministry of Energy, ExxonMobil, and JODCO. A geology booth for the Geology Department staff and students was also a feature of the event.

Geology Day 2012 was an opportunity for students to meet representatives of employer groups, including those from industry and government. The event was designed to fulfill several purposes. It enabled students to discuss career possibilities and learn about the principal operations of leading institutions. It also generated interest from the main sponsors and other parties who maintain their support for the Geology Department at the UAE University. The Department was also able to demonstrate the range of research and consulting activities of staff and students.

The theme for the day was ‘Sustainability of Natural Resources’ which attracted several speakers including representatives from Ministry of Energy, Dubai Municipality, and Abu Dhabi Oil Company for Onshore Operations (ADCO). Recent solutions were presented as well as reports on progress in dealing with pressing problems of energy, water, and industrial rock and mineral resources in the UAE, and the impact of these on the environment. Altogether the response from participants was very positive.

ADIPEC to go annual with a gas theme in 2013

The Middle East’s largest oil and gas event will become annual instead of biennial from 2013, according to senior figures from the UAE’s oil and gas industry.

Chief executives Ali Al Jarwan, ADMA-OPCO, and Mohammed Sahoo Al Suwaidi, Gasco, cited the history and growth of the event as the main reasons for the change.

Al Jarwan, who is also chairman of ADIPEC 2012, said: ‘Over the years we have witnessed ADIPEC grow in stature, significance, and size...this growth and demand is unabated. We continue to have a waiting list of exhibitors and require yet more space, and therefore there is a need for an annual platform.’

The growing importance of natural gas within international energy markets will also be reflected in ADIPEC 2013, which will have a gas theme for the first time in the event’s history. Al Suwaidi, Gasco chief executive and 2013 event chairman, said the fuel source will continue to provide some 70 to 80% of its power demand, even as renewables and nuclear are introduced into domestic power generation in the years ahead. He said: ‘We are proud that our power plants here don’t fire any liquids in power production with diesel and petroleum products left available for export.’

He explained that UAE’s annual 15% gas demand growth also placed pressure on its current reserves. ‘We need to look at ways to better exploit free gas. Adnoc will soon be launching an effort to further develop onshore and offshore reserves, with an additional emphasis on developing offshore gas resources. Our aim is to meet the rising domestic gas demand, which is growing by approximately 15% annually, and to open up opportunities for international oil companies.’

Gas projects under construction account for around $25 billion of the total $40 billion in spending on crude, natural gas, petrochemical, and refinery projects between 2010 and 2014. This includes the expansion of gas network co-operation between Abu Dhabi’s ADNOC and Dolphin Energy, in their joint plan to export power to the UAE.

Al Suwaidi also referred to Gasco’s planned LNG receiving facility for Fujairah, a joint venture with Mubadala Oil & Gas and IPIC, without giving further details. In June this year, Germany’s Wintershall and Austria’s OMV also announced a partnership with ADNOC to drill appraisal wells at a sour gas and condensate field in Ruwais, Western Abu Dhabi.

Geoff Dickinson, president of dmg events, exhibition organizer of ADIPEC, also spoke about the need for an annual event. ‘There is pent-up demand for a gas programme, and every year even in difficult times we have had strong interest from exhibitors, with this a natural progression. We are already in the top five energy events globally, and we want to become the world’s largest.’
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Scandinavian companies Tethys Oil (Sweden) and DNO (Norway) have been engaged in extensive drilling programmes in Oman.

Tethys says the exploration well (designated B4EW3) on Block 4 onshore Oman started drilling late July. The well is located approximately 6 km east of the producing Saiwan East field and will target a prospect similar to that field. Drilling operations were expected to last for three or four weeks.

The well is drilled on a four way dip structure identified from 3D seismic and is planned to be drilled to a total measured depth of 2000 m. The primary target is the Khufai formation, the primary producer in the Saiwan East field, at an expected depth of 1400 m. The Saiwan East field geological setting is the analogue for the B4EW3 well and reservoir studies indicate that the Khufai target will have similar reservoir properties as in the Saiwan East field. The secondary target is the deeper Masirah Bay sandstone formation, which is an un-tested formation. After a period of focusing primarily on production growth on Block 3, the company says the well is the first pure exploration drilling in Block 4 for almost two years.

On the Farha South field on Block 3 onshore Oman, a total of 10 wells were completed during the second quarter 2012, according to Tethys. Of these, three wells were drilled into the Bank reservoir of previously undrilled fault blocks resulting in the discovery of three new oil-bearing blocks. As at 30 June 2012, a total of 14 fault blocks are in production with more planned to be drilled later this year.

Five production wells were drilled and completed in previously drilled blocks to increase production and two water injections wells were drilled and completed. The drilling programme is continuing with two rigs in operation. During the coming months increased focus will be on exploration, with the exploration wells to be drilled in Block 4.

Tethys managing director Magnus Nordin said: ‘The second quarter saw a 100% success rate when drilling new fault blocks. Out of three drilled three were found to be oil-bearing. Again 3D seismic proves to be the key to success. We are hopeful that these new discoveries will have a material impact on our resources/reserve base.’

Tethys has a 30% interest in Blocks 3 and 4. Partners are Mitsui E&P, 20%, and the operator CC Energy Development holding the remaining 50%.

Meantime DNO has completed drilling of the West Bukha-5 well in offshore Block 8 and is preparing to resume operations on the West Bukha-4 well where the top hole section was previously drilled. Results from the initial flow test of West Bukha-5 confirm the presence of oil in the Thamama reservoir, with an estimated flow capacity of 1500–2000 b/d.

West Bukha-5 is the first of a three well development drilling campaign in Block 8. Drilled to a total depth of 5200 m, including a 700 m horizontal section with good fracture indications, West Bukha-5 is the deepest yet for DNO in Oman. Three intervals in the horizontal section were acidized and stimulated. The shallower Wadia interval has not been perforated at this stage. Following completion of West Bukha-4, the Noble Roy Rhodes rig was scheduled to drill a third well on the nearby Bukha gas condensate field.

DNO says that during a routine pigging operation a blockage occurred in the 12-in pipeline connecting the West Bukha and Bukha platforms in late March. Efforts to clear the pipeline have been unsuccessful and a decision was taken to replace a 4.3 km section of the blocked pipeline. Production from the shut-in West Bukha field is now expected to be restored within six weeks. Prior to the blockage, the West Bukha field produced about 7000 b/d of oil and liquids and about 25 million cu ft/d of gas. Operations at the Bukha field have continued without interruption with daily deliveries averaging over 20 million cu ft of gas and 1000 barrels of liquids.

The temporary halt in production from the West Bukha field will result in lower production volumes in the second and third quarter of the year. Once production is restored and West Bukha-5 brought on stream, the DNO believes that the overall cash flow from Block 8 operations in 2012 should not be materially impacted with the accelerated recovery of the deferred production.

**CGGVeritas extends its 20 year run in Oman**

CGGVeritas reports that Ardiseis, its regional joint venture with TAQA in Oman and the wider Middle East region, has been awarded a three-year firm contract with an option for a further one-year extension for the high-channel-count, high-productivity 3D land seismic operations it is currently conducting in Oman on behalf of Petroleum Development Oman (PDO). The contract award marks over 20 years of continuous land seismic presence by CGGVeritas in Oman.

A step-change in the resolution of the seismic imaging is expected at all subsurface target levels, according to CGGVeritas. The company will implement a high-density acquisition configuration deploying the Sercel Nomad 90 vibrator, said to be the highest-force vibrator available in the industry, and a proprietary high-end broadband vibroseis technique, EmphaSeis. These two new technologies are designed to enable improved penetration of the seismic signal, resulting in a high-density dataset containing frequencies down to 1.5 Hz.
Wintershall and OMV sign up with ADNOC

The Abu Dhabi National Oil Company (ADNOC), Wintershall, and OMV have signed a technical evaluation agreement to appraise the sour gas and condensate field in Shuwaihat, some 25 km to the West of Ruwais in the western region of Abu Dhabi. Wintershall as operator will conduct the appraisal phase with OMV as an equal partner by drilling up to three appraisal wells and acquiring 3D seismic over the field. In case of a successful appraisal campaign, ADNOC will participate in the development and production phase of the Shuwaihat field.

Rainer Seele, chairman, Wintershall, said: ‘This upstream joint venture is an important step on the path towards long-term cooperation in the energy sector between Germany and the Emirate of Abu Dhabi. The Middle East region is gaining an increasingly important role in our diversified portfolio in sustaining our successful growth trajectory.

To optimize the appraisal and a future development of the Shuwaihat sour gas and condensate field, Wintershall and OMV intend to employ advanced technologies. Both companies have a proven track record in Germany and Austria of more than 40 years of safe development and production of sour gas (H₂S and CO₂) and oil fields. A successful appraisal campaign will result in Shuwaihat being an important development of a gas and condensate field in the western region of Abu Dhabi, helping to cover the increasing hydrocarbon demand of the UAE and the country’s long-term export capability.

China spending big in Iraq

China National Petroleum (CNPC), the largest Chinese oil producing company, has so far invested $3.3 billion in developing oil projects in Iraq, according to an agency report.

CNPC and its subsidiary PetroChina are developing three large oil fields, says CNPC vice president Wang Dongjing. Along with BP, CNPC is developing Iraq’s largest oil field, Rumaila, in the southern Basra province where production is currently hitting 1.35 million b/d. The company is also developing Ahdab oil field in Wasit governorate in central Iraq. The field has recently started pumping 140,000 b/d. Recently it reached production for the first time of 100,000 b/d at Halfaya oil field in Missan province in southern Iraq.

Calendar of key EAGE events

<table>
<thead>
<tr>
<th>September 2012</th>
<th>23 - 25 September 2012</th>
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<tbody>
<tr>
<td>EAGE • Workshop on Dead Sea Sinkholes</td>
<td></td>
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<tr>
<td>Amman, Jordan</td>
<td><a href="http://www.eage.org">www.eage.org</a></td>
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<tr>
<th>October 2012</th>
<th>8 - 9 October 2012</th>
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<tbody>
<tr>
<td>EAGE • Forum on Students &amp; Young Professionals</td>
<td></td>
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<tr>
<td>Abu Dhabi, UAE</td>
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<tr>
<th>November 2012</th>
<th>25 - 28 November 2012</th>
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</thead>
<tbody>
<tr>
<td>EAGE • Integrated Reservoir Modelling</td>
<td></td>
</tr>
<tr>
<td>Dubai, UAE</td>
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<tr>
<th>December 2012</th>
<th>9 - 12 December 2012</th>
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<tbody>
<tr>
<td>EAGE • Fourth Arabian Plate Geology Workshop</td>
<td></td>
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<tr>
<td>Abu Dhabi, UAE</td>
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<tr>
<th>March 2013</th>
<th>17 - 20 March 2013</th>
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<tbody>
<tr>
<td>EAGE • Fourth Passive Seismic Workshop</td>
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<td>Amsterdam, The Netherlands</td>
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<tr>
<th>April 2013</th>
<th>21 - 24 April 2013</th>
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<tbody>
<tr>
<td>EAGE • Borehole Geophysics Workshop II</td>
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<tr>
<td>St. Julian’s, Malta</td>
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<tr>
<th>June 2013</th>
<th>10 - 13 June 2013</th>
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<tbody>
<tr>
<td>EAGE • 75th EAGE Conference &amp; Exhibition incorporating SPE EUROPEC 2013</td>
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<tr>
<td>London, UK</td>
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<tr>
<th>September 2013</th>
<th>15 - 18 September 2013</th>
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<tbody>
<tr>
<td>EAGE • Second Workshop on Geosteering &amp; Well Placement</td>
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<td>Dubai, UAE</td>
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<tr>
<th>October 2013</th>
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<tbody>
<tr>
<td>EAGE • International Conference on Engineering Geophysics</td>
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<td>Al Ain, UAE</td>
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<tr>
<td>EAGE • Second Workshop on Naturally Fractured Reservoirs</td>
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<td>Muscat, Oman</td>
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<th>January 2014</th>
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<tbody>
<tr>
<td>EAGE • Applications &amp; Challenges of Rock Physics for Quantitative Geophysical Interpretation</td>
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CGGVeritas advanced geophysical equipment, technology and services unlock the potential of the subsurface, empowering your oil and gas discovery and reservoir optimization. With our continuous client commitment, the passion of our people and our dedication to health, safety and the environment, CGGVeritas delivers safer, better answers and brings SeisAble Benefits® globally to all of our stakeholders.