Dear IPA Members,

This 2nd IPA e-newsletter is indeed very special. It contains a special report on the last IPA Annual Convention and Exhibition which went very well thanks to the intensive collaboration of all the committee members and also reports on the very active and educating activities of the IPA Professional Division since the start of the year.

The 34th IPA Annual Convention and Exhibition 2010 has achieved its objectives of holding an open dialogue between all stakeholders and providing a platform for the Government and the industry to address opportunities and future challenges in the energy sector. As the oil and gas industry continues to be the main contributor to the State Budget, thus strong alignment between the Government and the industry is needed to further develop this sector for the benefit of Indonesia and its people.

This sector not only contributes to the State Budget, but also directly to the well-being of the communities surrounding the operation areas of the Production Sharing Contractors through their respective CSR programs which you will read here in the newsletter.

In this newsletter, you will also read various activities that have been conducted by the IPA Committees or working groups in their attempt to contribute their input with regard to industry issues and concerns. One of the most active committees is the Professional Division which will tell their share of activities in facilitating technology transfer and know-how, to enrich knowledge of oil and gas practitioners in the special section of this newsletter.

We hope that this information will enrich your knowledge about the industry and specifically about the IPA activities and programs. And we wish you an enjoyable reading!
The 34th IPA Convention & Exhibition

The 34th Annual IPA Convention & Exhibition 2010 was successfully held from May 18-20, 2010 at the Jakarta Convention Center with the theme:

“Investing Together For Future Growth”

As the biggest annual regional event for the oil and gas industry, this year’s Convention was officially opened by H.E. Vice President Boediono and attracted:

• 3377 Convention participants, including a significant number from overseas.
• 138 Booth Exhibitors, comprising of oil and gas companies, service companies, professional associations, consultants, media organizations and others.
• 120 technical papers on the oil and gas industry.

In their Opening Addresses, H.E. Vice President Boediono and the Minister of Energy and Mineral Resources, Darwin Z. Saleh, conveyed the following messages:

• Government has a clear understanding of the need to attract investment into the energy sector and is determined to support the industry in addressing their issues.
• That there is a changing paradigm from revenue generation from exports (revenue objectives) to fulfilling domestic requirements (growth objectives) and that both play a vital role and both can be achieved.
• Exploration activities will be revived and accelerated by reviewing the incentive structure and streamlining regulations.
• High level teams will be set up to monitor progress of significant oil and gas fields, formulate gas infrastructure development and determine energy pricing policy.
• Government also recognizes the need for greater coordination at the highest levels between all ministries/departments.

In his Opening Address, the President of IPA Ron Aston emphasized that:

• Indonesia is resource rich and is well poised for economic growth.
• The country will need energy supply to meet domestic demands and earn valuable export revenues. However, hydrocarbon extraction is becoming more difficult with declining mature fields and new opportunities located in more remote and challenging areas.
• Increasingly, the future of Indonesia’s energy supplies lies with gas of which there are abundant reserves, both conventional and unconventional, but with far greater complexity and financial requirements. Huge investment in infrastructure is necessary.

We had been greatly honoured to have the presence of H.E Vice President Boediono to open the convention, His Excellency the Minister of Energy & Mineral Resources Darwin Z. Saleh at both the opening and closing ceremony as well as the Gala Dinner, the presence of the State Minister for the Environment Gusti M. Hatta, Vice Minister of Transportation Bambang Susantono for the plenary and special session as well as Members of Parliament and numerous other distinguished panelists as well of course to our own Directorate General Oil and Gas Evita Legowo and BPMIGAS Chairman R. Priyono throughout the events. We are truly honoured by their participation.

During the 34th Annual IPA Convention and Exhibition:

• 14 Production Sharing Contracts (PSC) and 8 Gas Sales Contracts (GSA) were signed
• 18 New Work Acreages and 9 New CBM acreages were announced

which indicates that Indonesia’s oil and gas sector remains an attractive investment destination and an important pillar for the Indonesian economy.

Highlights of the 34th Annual IPA Convention and Exhibition activities were as follows:

1. Short Courses; 110 participants attended
2. Technical Sessions; presenting the latest technology innovations in the oil and gas industry. Number of technical papers gathered this year was 100 (93 Professionals, 7 Students) and number of Posters displayed was 26 (21 Professionals, 5 Students).
3. Plenary Sessions; involving distinguished speakers consisting of Ministers, senior government officials and representatives of the industry addressing current issues facing the industry :

1st Plenary Session: “How Best Can Indonesia Attract Investment in the Oil and Gas Sector”

• That Indonesia is an attractive investment proposition
• That demand for energy is growing rapidly whilst hydrocarbon extraction is becoming more difficult with declining mature fields and new opportunities located in more remote and challenging areas.
• That the investment necessary to meet that demand is huge
• That various issues must be rapidly addressed to alleviate concerns of investors and provide...
Clarity, Consistency and Certainty to them, particularly around the issues of Cost Recovery.

2nd Plenary Session: “The Role of Gas in Meeting Indonesia’s Revenue and Growing Energy Demand”
» The future of Indonesia’s energy supply lies with gas of which there are abundant reserves, both conventional and unconventional.
» But these are often to be found in remote and challenging areas resulting in them being extremely expensive to monetize.
» With huge investment in infrastructure necessary.
» Price is the key issue – it must be competitive and essentially market driven and although the government will set the price the upstream industry must not be the indirect subsidy provider.

4. Special Sessions:
Special Session 1 : Emerging Issues Under the Environmental Law for Oil and Gas Industry.
» There was recognition of the concerns about the criminal and administrative sanctions and the potential delay factor on production.
» Assurances were given by the Minister that flexibility would be shown to industry if they showed “a reasonable plan” to meet the requirements.
» True understanding of the impact of the law is still in progress and the implementing regulations to be issued will be very important.

Special Session 2 : Alignment of Interest: Understanding and Managing Upstream Business – Indonesia
» Given the non-renewable nature of oil and gas business, constant efforts are needed to maintain production level and to explore and develop new resources.
» These objectives can be achieved if supported by business-friendly systems and regulations.
» Need to align the perspectives and expectations from industry players (investors) and the Government as to deliver commitment to all stakeholders.
» Both sides need to look beyond economics and commercial considerations.
» Some of the key issues to be maintained are contract sanctity, good governance and business judgment and the need for greater clarity and cooperation on various tax and fiscal issues.
» To cope with these new challenges, regulatory agencies should act more as facilitators rather than as supervisors, and to attract more investment, Indonesia needs regulatory Clarity, Consistency, Certainty and Competitiveness.

Special recognition goes to the following for their contribution and efforts with the 34th Annual IPA Convention & Exhibition:

TECHNICAL PAPER PRESENTATION & POSTER:
1. BEST PAPER ENGINEERING:
   Tuan Ma (ConocoPhillips Indonesia)
   Title: Early Performance and Improved Oil Recovery Process Evaluation – Kerisi Field, South Natuna Sea

2. BEST PAPER GEOLOGY:
   Benyamin Sapiee (Institut Technology of Bandung)
   Title: New Insight of Tectonic Evolution of Cendrawasih Bay and Its Implication for Hydrocarbon Prospect Papua, Indonesia

3. BEST PAPER GEOPHYSICS AND FORMATION EVALUATION:
   Rizky P. Sekti (University of Miami)
   Title: Fracture and Stratigraphic Characterization Using Full Resolution 3D Ground Penetrating Radar in Cretaceous Carbonates

4. BEST PAPER HSE, BUSINESS, AND COMMERCIAL:
   William David Hartell (Hess Corporation)
   Title: FLNG or FGLT? Investment Decision Input

5. BEST PAPER PROFESSIONAL OVERALL:
   Tim A. Moore (PT. Arrow Energy Indonesia)
   Title: Critical Reservoir Properties For Low-Rank Coalbed Methane Resources of Indonesia

6. BEST PROFESSIONAL POSTER:
   Wikan Winderasta (PT Chevron Pacific Indonesia)
   Title: Application of Dynamic Reservoir Modelling for Horizontal Well Placement in Duri Steam Flood Field’s Technology Project.

7. BEST STUDENT ORAL PRESENTATION:
   Riedo Waren (Institute of Technology Bandung)
   Title: Reservoir Geometric Identification of Tight Dominated Estuarine Environment Deposits and Its Implication to Reservoir Qualities: Case Study within the Upper Sand of Bekasap Formation, Gadang Field, Central Sumatra Basin

8. BEST STUDENT POSTER PRESENTATION:
   Aveliansyah (University of Diponegoro)
   Title: Facies and Paleo-environment of Miocene Pulau Balang Formation and Its Implication for Hydrocarbon Potential in Kutai Basin based on Outcrop Data Observation.

EXHIBITION: BEST BOOTHE AWARD
1. PSC Category: INPEX
2. CONTRACTOR Category: SCHLUMBERGER
3. PEOPLE’s Choice Category: PERTAMINA
4. SERVICE Category: WARTSILA
Data Management Committee
Upon thorough discussion with PUSDATIN, DITJEN MIGAS and BPMIGAS with regards to oil and gas data submission as required by Decree of Minister of Energy and Mineral Resources No. 27 year 2006 and after going through all government letters associated with data submission procedure carefully, IPA Data Management Committee concluded that the final data submission process should follow the letter of DITJEN MIGAS dated on February 10, 2009. The accepted workflow is for PSC contractors to send a request for data evaluation to DITJEN MIGAS before submission to PUSDATIN. PSC contractors should comply to this new workflow effective immediately.

Finance & Tax Committee
The Finance and Tax Committee continuously monitors new development in the industry’s finance and tax matters and regularly shares with the key finance people in the oil and gas companies. This process is very important as it will capture the input and concern of the industry.

The Committee formed a joint effort with Regulatory Affairs Committee to provide input to the Government on the draft Government Regulation regarding Cost Recovery and on the improvement of the Work Program and Budget process. The Committee was also actively involved in discussions with BPMIGAS and the Directorate General of Tax in an effort to better regulate the timing of VAT payment for VAT Collectors and the procedures to implement tax borne by the Government for home office overhead and technical service charges.

Environment and Safety Committee
Environment and Safety Committee (ESC) is actively involved in discussion with relevant regulators to advocate new regulation, so that oil and gas operations can run smoothly whilst complying with the prevailing regulations.

In the first quarter of 2010, the IPA ESC has successfully facilitated communications between Ditjen Migas, State Ministry for the Environment (KNLH) and BPMIGAS with regards to the implementation of the new Protection Act and Environmental Management (UUPPLH) which took effect on October 3, 2009.

Meetings and discussions were held with Deputy State Minister for the Environment and his team, Ditjen Migas, and IPA ESC, whereby IPA ESC provides insights and constructive input to prevent the shutdown of upstream oil and gas operations due to non-fulfilment of “environmental quality standards,” especially water waste and air emissions.

Advocacy process was also carried out in cooperation with BPMIGAS so that IPA ESC was involved in several cross-sectoral meetings coordinated by Ditjen MIGAS.

The last meeting which was held on 21 April 2010 and attended by the Ditjen Migas, KNLH, BPMIGAS and IPA ESC-team, has generated an agreement to provide PSCs and other business entities a transitional period to enable them to adhere to stipulation on environmental quality standard.

KNLH and IPA ESC also agreed to continue to conduct periodic communication, giving feedback and providing regulatory proposals which will be further reviewed by KNLH.

IPA ESC is now conducting monthly workshop that focus on enactment of recent environmental legislations.
Chevron is a major partner in Indonesia’s economy and an active member of the community. Through our wholly owned subsidiary PT Chevron Pacific Indonesia, we produce approximately 40 percent of Indonesia’s crude oil, and we’re searching for new oil and gas reserves from central Sumatra to offshore East Kalimantan. Chevron sells lubricants in Indonesia through our subsidiary PT Chevron Oil Products Indonesia. Our operations in Indonesia help make Chevron the largest producer of geothermal energy in the world.

Chevron covers both operations in Indonesia and the Philippines under the IndoAsia Business Unit (IBU). Chevron IBU runs upstream and power operations through the following business entities: PT. Chevron Pacific Indonesia (CPI) and Chevron Indonesia Company (CICo) in the field of oil and gas exploration and production, and Chevron Geothermal Indonesia, Ltd. and Chevron Geothermal Salak, Ltd., and Chevron Geothermal Philippines Holdings Inc. (CGPHI) in the Philippines for geothermal and power operation.

In 2009, Chevron in Indonesia produces nearly half of Indonesia’s crude oil production with total daily production averages more than 450,000 barrels per day of liquids and total production of natural gas was more than 600 million cubic feet.

We operate in partnership with Indonesia’s Executive Agency for Upstream Oil and Gas Business Activities through production-sharing contracts (PSCs). PT Chevron Pacific Indonesia (CPI) has a 100 percent interest in and operates the Rokan and Siak PSCs in Sumatra. Chevron’s 90 percent interest in the Mountain Front Kuantan PSC is expected to transition to a local operator by mid-2010.

Chevron has operated interests in five offshore Indonesian PSC areas covering approximately 3.2 million acres (13,000 sq km). Four PSC areas are located offshore East Kalimantan in the Kutei Basin, including operated interests in East Kalimantan (92.5 percent), Makassar Strait (90 percent), Rapak (80 percent) and Ganal (80 percent). The fifth PSC is a 100 percent-owned interest in East Ambalat, located in the Tarakan Basin offshore northeast Kalimantan.

The working interest for each of Chevron’s two onshore exploration blocks in western Papua, West Papua I and West Papua III are expected to be reduced to 51 percent in 2010 pending final approval from the government of Indonesia.

Chevron has a 40 percent non-operated working interest in the NE Madura III Block in the East Java Sea Basin and a 25 percent non-operated working interest in the offshore South Natuna Sea Block B northeast of the Rokan Block.

Chevron is the world’s leading geothermal energy company, with two geothermal projects in Indonesia that generate more than 600 megawatts of clean, reliable and affordable energy for the nation’s growing economy.

Chevron has been active in Indonesia for more than 85 years and manages more than 7,000 employees and 30,000 business partner employees. More than 98 percent of employees and managers are Indonesian nationals. Over the years, Chevron and its employees have contributed in many ways to education and vocational training, health and human services, and small business and micro-enterprise development.

Chevron businesses in Indonesia received several national awards in 2009. Among them were honors in the areas of excellence in employee career development, education initiative and community development program.
CSR

Medco E&P Indonesia: Increasing Farmer Income, Reducing Carbon Emission and Government Budget on Chemical Fertilizer Subsidy through Organic SRI (System of Rice Intensification)

In March 2009 in Suka Makmur Village, BTS Ulu Sub-District, Musi Rawas District, South Sumatera Province, on 15 hectares land area owned by local farmers, PT Medco E&P Indonesia launched a new method of organic rice cultivation called System of Rice Intensification (SRI). The objective of this program is to improve agricultural land development thus will increase the income of local community. The main advantages of this new method are: cheaper production cost, environmentally-safely and high productivity level.

In implementing this program, PT Medco E&P Indonesia entails active participation from local community starting from evaluating the soil quality, land preparation, production of organic fertilizer, until its full implementation and development of the program. Assistance is offered to the targeted farmers in the form of courses and workshops, and the program is continually monitored to optimize the success rate. By putting farmers as the agents of change of this Organic SRI rice development program, the farmers will learn together on how to identify, analyze and resolve problems and how to become facilitators in workshops and exchange best practice amongst themselves.

The program was very successful: agricultural productivity increased from 0.5-2 ton/hectare to 7-8 ton/ hectare, and traditional cultural values such as “gotong royong” (mutual cooperation), which had started to disappear, is now returned. Price of organic rice is higher than conventional rice.

Meanwhile, with regard to the environmental aspect, the Organic SRI program has played a significant role in reducing water usage by up to 50%. Methane gas production, which destroys the ozone layer, has also been reduced by up to 67%. The use of organic fertilizer and pesticides made from environmentally friendly local organic material has also contributed in improving land ecosystem through the physical and chemical traits of the soil, so that soil fertility will be recovered. The effort to encourage farmers not to burn straw has also contributed to the reduction of CO and CO2 gas production, which is a potential threat to the ozone layer.

The introduction of Organic SRI in Suka Makmur village has enabled villagers to rediscover their communal identity through land cooperation, resolving collective problems and developing their village. Furthermore, it also helped to reduce agricultural production costs, mainly related to manpower. The Organic SRI Program has changed the life of the villagers and transformed the village into the best village in Musi Rawas District.

A comparison of costs and income before and after the implementation of the Organic SRI program can be seen in the table below.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>CONVENTIONAL SYSTEM</th>
<th>ORGANIC SRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Size**</td>
<td>17.6 ha</td>
<td>15 ha</td>
</tr>
<tr>
<td>Rice Variety*</td>
<td>IR 42, Dapo, Cikung &amp; Bangkai</td>
<td>Sintanur &amp; Cigulis</td>
</tr>
<tr>
<td>Harvest Season*</td>
<td>February-March 2009</td>
<td>July 2009</td>
</tr>
<tr>
<td>Average Productivity*</td>
<td>100% / ha</td>
<td>6% / ha</td>
</tr>
<tr>
<td>Average Non Organic Fertilizer Use*</td>
<td>90.3% / ha</td>
<td>9% / ha</td>
</tr>
<tr>
<td>Average Organic Fertilizer Use*</td>
<td>3.9% / ha</td>
<td>200% / ha</td>
</tr>
<tr>
<td>Harvest**</td>
<td>1.65 Ton/ha</td>
<td>7.0 Ton/ha (increase 334% 364% / ha)</td>
</tr>
<tr>
<td>Methane Gas Production***</td>
<td>85.96 g/day/ha</td>
<td>36.11 g/day/ha (decrease 59%)</td>
</tr>
<tr>
<td>Human/Compact Production</td>
<td>0.01 Ton/day</td>
<td>0.30 Ton/day</td>
</tr>
<tr>
<td>Cobalt/Chopper Production</td>
<td>0.08 Ton/day</td>
<td>0.12 Ton/day</td>
</tr>
</tbody>
</table>

* Agriculture Survey, Bali indik Vol. Faculty of Agro Sci. USU 2009
** Calculation made “average per 34.41 ha” yearly harvest in Suka Makmur village, district BTS Ulu, Musi Rawas
*** NHI Analysis Data Results based on Andi Fitri research, use argo in 34 days after planting, the rice yields conventional system produces methane gas 0.85 mg/hr, whereas the Organic SRI produces only 0.1 mg/hr.

The success of the SRI program in Suka Makmur Village has been reported by local and national mass media and has become a discussion topic among government officials. It motivates other villages and stimulates intention of local government to apply the same program. There are some principles to be considered when adopting the concept, i.e., the SRI program should
entail community-based participation, which is essential in securing the villager’s sense of responsibility in implementing the program.

In October 2009, PT Medco E&P Indonesia received Millennium Development Goals (MDGs) Award through its implementation of SRI program at Musi Rawas Regency, South Sumatera. Currently, PT Medco E&P Indonesia has implemented Organic SRI program in some regencies such as Musi Rawas (30 Ha), Banyuasin (7 Ha), Tarakan (2 Ha) & Indragiri Hulu (20.2 Ha).

IPA Receives 2010 Getenergy Award

Dipnala Tamzil, IPA Executive Director received the Getenergy award presented by special guest Alain Robert, a famous celebrity also known as “Spiderman”.

The Indonesian Petroleum Association (IPA) received the 2010 Getenergy Award on “Special Association Award: Advancing Education in the Oil and Gas Industry”, during the 2010 Getenergy event which was held on March 22-24, 2010 in Kuala Lumpur, Malaysia. This special association award recognizes IPA’s continuous and significant contribution in developing Indonesian human capital in the oil and gas sector through its various trainings, field trips and annual convention programs. The award was presented during the Getenergy 2010 Awards Ceremony and Gala Dinner on the evening of 23 March 2010.

With more than 5000 online votes entered for the four categories which were under competition, IPA had narrowly defeated the Petroleum Technology Development of Nigeria, which was also short listed in the category.

The annual Getenergy event is a forum where academia, industry players and service providers gather to discuss how to improve the development of human resources for the energy industry.

This year’s Getenergy event had participants from several regions, among others are from Europe, the U.S., the Middle East, Africa, Asia and Australia.
Editor’s Note

Reality struck our office recently when a friend suddenly passed away. This highly experienced geologist will be missed by many, and his contributions will stand the strains of time. His passing made me look further into my contributions to my fellow geoscientists. I asked several questions such as: Am I a good influence? Have I created opportunity where there was none before? Will I be remembered in a positive way? And will those around me remember something I have contributed – and smile? The sad passing of a friend, brings growth through remembering and honoring the individual.

Am I a good influence? We have a tremendous vehicle here in Indonesia which allows us to freely express our scientific viewpoints – the Indonesia Petroleum Association. Once a year we have the ability to gather and commune as geoscientists and engineers. This gathering is an opportunity to discuss new techniques and technological breakthroughs. It is also a means for each of us to provide insight to complex problems we have struggled through, give insight to the solutions and consequences of action taken on those learning’s. Have you spoken at the IPA or provided a poster during one of these conferences? If not, start now! I have provided several during the few years I have had the honor of working in Indonesia. These are learning opportunities. The real growth comes from writing the paper and ensuring the research is well founded and documented. Years from now, individuals will continue to build on the great ideas documented in the IPA records and you will have influenced someone you may not know – and they will also learn a little about you in the process.

Have I created opportunity where there was none before? We create opportunities by using our mind. That requires fuel which we find in literature and from interactions with our fellow IPA members, as well as data that we acquire from the subsurface. These combined can provide a spark or an idea that should be pursued. After all, hydrocarbon is first found in the mind of the explorer and then confirmed with the drill bit. To create opportunity requires a steadfast dedication to continued education. A stagnant mind is wasted.

Will I be remembered in a positive way? Our good friend always had a smile on his face. I can not remember him ever saying a negative thing about another. He would go out of his way to help and could always be counted on when help was needed. What traits do we have? I have re-committed to deal with my fellow scientists and engineers in a positive manner and to find the silver lining in situations. I will also be more willing to publicly acknowledge thanks and seek to help those in need.

The Indonesia Petroleum Association provides significant opportunities for growth in numerous ways. Each of us has free agency – the question is what we will do with it. We challenge those who have not presented at the IPA to make their mark next year. Make this a goal! Use the resources of the IPA to learn and grow. Then go seek others, help them, and grow with them. That is the memory to cherish – that one individual who made their mark. Gee, how I loved that smile.
Professional Division Chairman’s Corner

Ron Noble
Chairman
IPA Professional Division
Niko Resources Indonesia
rnoble [at] nikoindonesia.com

Professional Division Members and Friends,

It has been quite some time since the last printed version of the IPA newsletter. The reason being, we have shifted to a new publication format, the “e-Newsletter.” You will notice broader coverage of topics that fall under the umbrella of the IPA. This includes committee highlights from several working groups that collectively represent the IPA. There are also special interest articles and company profiles. The new format fits nicely with the re-design of the IPA website. We hope that you enjoy it. Otherwise, you can give us your feedback, and we will respond to your views.

The Professional Division section of the Newsletter has contributions from the same team that previously brought you the printed version. This includes a summary of drilling activities, luncheon talks, field trips, short courses, technical articles and editorials. In the Chairman’s Corner, I typically focus on technical topics of current interest. I will continue to do so in future editions.

So, what is in the news this month? Well, it’s hard to turn on the TV or pick up a newspaper without coming across something about deepwater drilling, oil spill mitigation and environmental impact. To the extent that everyday people are now talking about blowout preventers, well flow parameters, and alternatives to the lower marine riser cap. Much to my surprise, I had a conversation with my dear mother and an avid CNN fan, about why ice crystals (hydrates) form and how they blocked earlier attempts to capture the gushing oil. Previously, her only concern was on which side of the car to find the petrol tank.

Having the spotlight of public attention so clearly fixated on drilling activities has its advantages and disadvantages. The advantages include a much greater awareness of the risks and dangers associated with deep sea drilling. We work in a highly technical and capital intensive business. The public should understand this and not take it for granted. In turn, oil companies and organizations must be 100% committed to implementing safe practices. If they do not, they know the consequences. The situation in the Gulf of Mexico today serves as a bleak reminder, albeit under the most unfortunate circumstances. The disadvantages are the negative perceptions created towards oil companies and drilling contractors. Fairly or unfairly, everyone in the industry suffers from a tragic event like this. The environment and local communities are affected even more. We can expect to see increased involvement from regulatory bodies, which in turn, could lead to higher costs and slower implementation of projects.

In the long run, however, we should all benefit by becoming safer and better equipped to deal with the technological challenges of deepwater E & P. We certainly do not want another reminder of what can happen if things go wrong.
Technical Program of the 34th Annual IPA Convention and Exhibition:
Showcasing the Latest Oil and Gas Technology Innovations

Stephen Murray Scott
Vice Chairman
IPA Professional Division
Genting Oil
stephen.scott[at]id.gentingoil.com

The Technical Program of the 34th Annual IPA Convention and Exhibition was again a remarkable success, indicating the relative importance of the convention among our industry technical colleagues.

This success was realized as a result of the dedicated effort of a number of Technical Program Committee volunteers and IPA Secretariat staff who contribute year after year without fail. It is they that manage the technical paper selection and editing process, break out papers according to topic areas and then build out the technical sessions. These volunteers are then joined by others at convention time who serve as session chairpersons and presentation judges. All of this volunteer effort consumes many personal hours outside these people’s actual professional work hours. I think we can all agree that the technical program, both the paper and poster presentations and the exhibition, are the reasons the convention exists.

This year the technical committee received 224 professional abstracts and 62 student abstracts from which 93 professional papers and 7 student papers were selected for oral presentation within 30 oral presentation sessions spanning 3 days. In addition, 21 professional posters and 5 student posters were accepted and displayed during the convention. Geological and geophysical subject matter continue to dominate the technical program with 15 of 30 oral sessions dedicated to these subjects. Engineering subjects accounted for an additional 9 oral sessions.

Best Paper (Professional) Awards were given in Engineering, Geology, Geophysics and HSE/Business/Commercial. The overall Best Paper (Professional) Award went to Tim A. Moore, P.T. Arrow Energy Indonesia, for his paper titled “Reservoir Geometric Identification of Tide Dominated Estuarine Environment Deposits and Its Implication to Reservoir Quality: Case Study Within the Upper Sand of Bekasap Formation, Gadang Field, Central Sumatra Basin”. Awards were also given for Best Professional and Best Student Posters.

For more details on the convention, have a look at the updated IPA website:
• Special Report on 34th Annual Convention
• Photos from 34th Annual Convention
• Opening Ceremony Speeches
• Closing Ceremony Speeches

It won’t be too much longer before the “Call for Abstracts” for the 35th Annual IPA Convention and Exhibition 2011 goes out. Current and future volunteers of the Technical Program Committee and IPA Secretariat staff look forward to your ongoing support and contributions to the Indonesian petroleum community through submission of abstracts for consideration and your general support.
Let’s Do IPA Lunch!

The IPA Luncheon Talk Committee has been very active since the start of the year, with a series of Luncheon Talks held covering a wide range of very interesting topics:

- Bapak R. Priyono, Chairman BPMIGAS, “Summary of 2009 E&P Activities in Indonesia and Outlook for 2010” on February 16, 2010 at the Four Seasons Hotel. (click here for pdf format presentation)

At the last Luncheon which was held on Tuesday, June 22, 2010 at the Shangri-La Hotel, the IPA Luncheon Talk Committee again hosted a reputable speaker from the world of E&P. Mr. Quinn Passey of ExxonMobil's Upstream Research Company presented a very interesting talk on shale gas reservoirs titled “From Oil-Prone Source Rock to Gas-Producing Shale Reservoir - Geologic and Petrophysical Characterization” to a full and attentive audience.

Around 70 participants from the oil and gas industry attended the event. Quinn’s extensive research background on a number of petrophysical and geologic issues made for an intriguing talk and lively discussion on the nature of shale gas reservoirs. He also revealed some surprising research results on the distribution of porosity within these rocks.

Shale gas is an established resource in the USA, Canada and Europe, with shale gas production currently accounting for approximately 8% of total U.S. gas production. Some studies suggest that this percentage may rise to approximately 50% in the next ten years. In any case, shale gas is becoming an increasingly important gas source in a number of countries. The government of Indonesia has indicated that they will begin to open tenders for shale gas development in the near future.

Quinn’s talk reviewed the type of source rocks that become shale gas reservoirs, variations in total organic content (TOC) within these reservoirs, shale gas analysis techniques and porosity determination. Key findings from his research discussed in the talk include:

- The parasequence is the fundamental unit of shale gas reservoirs
- Shale gas reservoirs are overmature oil-prone source rocks
- Shale gas reservoirs comprise a large range of matrix lithologies
- Porosity, TOC and gas content are all positively correlated
- Laboratory characterization of porosity, permeability and gas saturation is problematic
- Free gas is likely to be located in organic-matter porosity

Click here for the complete pdf format presentation.

Please contact the Luncheon Talks Chairman:

Mark A. Thomsen
ExxonMobil Oil Indonesia
(021) 571-5129
mark.thomsen [at] exxonmobil.com

with suggestions or volunteers for future talks. Topics should be relevant to exploration and production in Indonesia or be of interest to a wide range of disciplines.

See you at the next Luncheon Talk on July 28, 2010!
IPA Field Trips 2010

The Professional Division of the IPA promotes and supports a number of field trips in Indonesia throughout the year. These field trips are open to all professionals, both technical and non-technical staff, working in the oil and gas industry with the objective of increasing the understanding and technical know-how of all the participants.

For 2010, the IPA has conducted three field trips so far, and another three are being planned before the end of the year.

Petroleum Geology of the South Sumatra Basin

In March 2010, Dr. Alit Ascaria [Premier Oil] and Dr. Andang Bachtiar [Exploration Think Tank Indonesia] lead a trip devoted to the “Petroleum Geology of South Sumatra Basin”. Nine professionals working with international operators and JOB’s, joined the field trip. They were exposed to one of the major petroleum provinces in the country, in particular the South Palembang Sub-Basin.

Understanding the general characteristics of clastic and carbonate rocks in terms of their depositional mechanism, facies, dimension and diagenesis, as well as the vertical/lateral facies varieties was the main objective of this trip. The improvement of geological modelling and seismic interpretation studies back in the office based on this new knowledge, was a not less important aspect of the field study.

Eight outcrop locations had been visited, representing various depositional environments starting with highly fractured granite and granite wash (economic basement) (Figure 1).

At another outcrop, alluvial fan systems, pebble sized conglomerate with coarse grained quartz sandstone of fluvial environment and shales rich in molluscs (shells), ambers, and lignite fragments, that had been deposited in swampy environment were examined (Figures 2-3).

Eight outcrop locations had been visited, representing various depositional environments starting with highly fractured granite and granite wash (economic basement) (Figure 1).

The next outcrop allowed students to walk through the upper part of a sedimentation cycle represented by various carbonate facies (coralgal bioclastic packstone, benthic foraminifera bioclastic packstone, bioclastic mudstone/wackestone, benthic foraminifera bioclastic grainstone) (Figures 4-5).

Figure 1. Fractured granite outcrop, rock hammer for scale.

Figure 2. Participants studying outcrop.

Figure 3. Environmental interpretation of outcrop in Figure 2.

Figure 4. Carbonate outcrop, student for scale.
The trip started at a famous mud volcano and gas seep, then on to rock outcrops to discuss concepts of oil and gas reservoirs, source rocks, and seals. The program continued with the observation of traditional production methods at the historic oil fields of Wonocolo and Kawengan (Figure 7).

Northeast Java Basin is one of the earliest petroleum provinces discovered and developed in Indonesia. Oil was first produced in this area more than one hundred years ago (1893/1894), and exploration continues today at the JOB Pertamina - Petrochina East Java’s Sukowati Field (Figure 8).

The trip started at a famous mud volcano and gas seep, then on to rock outcrops to discuss concepts of oil and gas reservoirs, source rocks, and seals. The program continued with the observation of traditional production methods at the historic oil fields of Wonocolo and Kawengan (Figure 7).

Northeast Java Basin is one of the earliest petroleum provinces discovered and developed in Indonesia. Oil was first produced in this area more than one hundred years ago (1893/1894), and exploration continues today at the JOB Pertamina - Petrochina East Java’s Sukowati Field (Figure 8).

Mahakam Delta Field Trip

The “Mahakam Delta Field Trip” is one of the most popular trips organized since the early ’90’s by the IPA. The 2010 expedition took place from 11th to 15th May, with fifteen participants from major international operators and Indonesian oil companies. The field trip was led by Irfan Cibaj (Total E&P Indonesie) (Figure 9).
In the Kutei Basin of East Borneo, more than 14 km of fluvial, deltaic and shelf sediments have accumulated since the Lower Miocene. The presence of a large prograding delta at the mouth of the Mahakam River demonstrates that it is still an active depositional system.

The field trip focuses on the modern deltaic depositional environment, as an analog to the Miocene delta structures. Participants are tasked with the objective of describing the present sedimentary processes, depositional facies and development of reservoir geometries, and comparing this with Lower Miocene deltaic deposits which outcrop adjacent to the delta.

The delta exhibits a very regular fan shaped lobate morphology, with a network of fluvial distributaries originated by the Mahakam River. The entire delta extends for about 40 km seaward, and the delta plain, delta front and prodelta cover an area of approximately 10,000 km² (Figure 10).

The coastal sedimentary processes determine to a large extent the nature and geometry of the sandstone reservoirs. It is very important to identify the predominant transport process and the resulting type of delta system. The field trip included visits to analyze some typical delta depositional environments from the Mahakam River, upstream from delta, the distributary channel system, the delta plain and the mouth bars system.

Future Field Trips

The IPA is organizing another three field trips before the year end:

- The first will take place in August, and will visit the Solo Kuwu Cepu area. This trip is designed for non-technical personnel.
- The second one is planned in September, with the main target of studying the outcrops of the Eocene to Miocene carbonate formations on the western coast of Sulawesi.
- Finally in December, an additional field trip for non-technical personnel is planned to the Solo Kuwu Cepu area.
FIELD TRIP TO MERAPI VOLCANO AND THE SOUTHERN MOUNTAINS YOGYAKARTA: VOLCANICLASTIC ROCKS FOR PETROLEUM GEOLOGISTS

By: Dr. Ir. Sutikno Bronto
Center for Geological Survey, Geological Agency
Department of Energy and Mineral Resources
57th Diponegoro St., Bandung 40122, Indonesia

Last year IPA (Indonesian Petroleum Association) organized a fieldtrip on the Merapi volcano and the Southern Mountains, Yogyakarta area, from May 31st to June 3rd, 2009.

The main purpose of this trip was to introduce, or refresh, the interest of the petroleum industry towards volcanoclastic rocks, with particular attention to field recognition activities. Actually volcanoclastic rocks, together with other volcanic rocks, i.e. coherent lavas, are widely present in Indonesia, on main lands, on islands and under sea water, with some peculiar facies distributions.

Volcanic rocks have been formed since the Permian in Sumatra, namely Silungkang and Palepat Formations (see Rosidi et al., 1976; Rock et al., 1983; Hartono et al., 1996) and Cretaceous volcanic rocks have been mapped on Kalimantan (Haruyan Formation; see Rustandi et al., 1995).

On the Java, volcanism has been identified and dated from Paleogene age (Bronto et al., 2006). So far, hydrocarbon accumulations in volcanic rocks have been discovered in Jatibarang Formation (Paleogene) in West Java and Wunut Formation (Pleistocene) in East Java. The ages of those two formations are quite different, 50 million years separates their deposition. During that huge span of time, volcanism has actively formed volcanic rocks, and the possibility of having hydrocarbon accumulations and further discoveries in clastic formations with volcanic origin is still significant.

A number of participants from many organization joined the fieldtrip: IPA, Talisman Asia, Pertamina, University of Gadjah Mada, Yogyakarta, STTN Yogyakarta and Center for Geological Survey, Bandung. The group was lodged at the Yogyakarta Sheraton Mustika Hotel.

The areas at the base of the Merapi volcano and the Southern Mountains near Yogyakarta, have been selected to conduct the field trip due to some specific reasons.

The Merapi volcano is well known as one of the most active volcanoes in the world. The most recent eruption occurred in 2006. This activity produced block and ash flow deposits, a kind of volcanoclastic deposit that is genetically termed “pyroclastic flow deposit” (local names are “awan panas” or “wedhus gembel”). The field trip participants have been able to observe and describe the main characteristics of the modern volcanoclastic deposit produced by a recent volcanic eruption.

The results of these observations and the lithological and depositional descriptions of the formations have been applied to Tertiary volcanoclastic rocks in the Southern Mountains, where the main body of volcanic cones has been eroded. Recognising the main characteristics of volcanoclastic deposits in modern volcanoes, such as on Merapi, is the key factor to understanding and studying volcanoclastic rocks deposited during the Tertiary and before, according to one of the most important basic principles of Geology stated by James Hutton more than 200 years ago: the present is the key to the past.

The presence of an international airport makes access to Yogyakarta very easy from both Jakarta and other cities. Yogyakarta is also well known as an attractive tourist site. The accessibility to the field sites is equally quite easy, one of the stop sites is located only 5 km, or about a 15 minutes drive, from the hotel!

After the 2006 Yogyakarta earthquake, many quarries have been opened in the western region of the Southern Mountains, visited during the field trip. The purpose of these activities is to obtain stones and construction material in order to repair the buildings damaged by the earthquake. The recent quarries and the associated outcrops represent a very valuable option for geologic observation.

In general, as result of a number of different mechanisms, volcanoclastic rocks are fragmented...
(Pettijohn, 1975; Walker & James, 1992). Based on granulometry those rocks are classified as volcanic breccias (or conglomerate) for coarse grain material, volcanic sandstones (moderate) and volcanic siltstones or claystones (fine grains).

Genetically, fragmentation processes are caused by

- supercooling phenomena of magmas or lavas, generating so-called autoclastic rocks
- volcanic explosion, generating pyroclastic rocks
- reworked/resedimented, generating piclastic rocks
- deformation, generating cataclastic rocks

The first day of the field trip was dedicated to the visit of the southern slope of the Merapi volcano at the Kaliadem tourist camp and to the upper stream of the Opak River. Here, the participants could observe the recent pyroclastic flow deposits, as well as older sequences, and an andesite lava flow. Observations proceeded toward the lower portion of the stream and the Yogyakarta Plain, to describe lahars deposits, a kind of resedimented syn-erupted volcanoclastic deposit. Further to the south, about 30 km away from Merapi summit, but still along the Opak River, participants were introduced to Tertiary basaltic lava flows having pillow structures. These outcrops, also present in a nearby small hill, have been interpreted as remnants of the Watuadeg paleovolcano (Bronto et al., 2008).

On the second day of the field trip, participants visited the western part of the Southern Mountains. This area is included the Kabupaten Bantul, the Special Province of Yogyakarta.

Participants were introduced to many different types of volcanoclastic rocks, both from the descriptive and genetic point of view. The presence of volcanoclastic rocks, especially pyroclastic and autoclastic rocks with massive coherent lavas (lava flows and subvolcanic intrusive bodies), confirmed the presence of paleovolcanoes in the area.

Some important points from the field trip have been summarized below:

1. Not all volcanoclastic rocks are generated as epiclastic sedimentary rocks, pyroclastic and autoclastic rocks are common.
2. Igneous bodies of lavas and subvolcanic intrusions are associated with volcanoclastic rocks, proving the presence in the area of paleovolcano(es), i.e. a place where magma erupted to the surface (on land or under the sea).
3. The presence of volcanoclastic rocks, pyroclastic and epiclastic ones, deposited in between paleovolcano remnants, implies that those rocks were deposited in intra-arc basins. To delineate these sedimentary basins, it necessary to promote an integrated study with volcanic geology to identify paleovolcanic centers and complimented with radiometric dating analyses.
4. The study of the intra-arc sedimentation of volcanic origin, can contribute to the definition of new prospective areas for hydrocarbon exploration, largely neglected and underestimated by the industry.

References


Upcoming Events

SHORT COURSES

1. Basic of Petroleum Engineering, Geophysics and Geology Technology in Upstream Oil & Gas Industry for Non-Technical Staffs
   Dr. Sigit Sukmono (ITB), Budianto Toha M.Sc. (UGM) and Suranto, MT (UPN "Veteran")
   Dates: July 12 - 15, 2010
   Venue: Sheraton Mustika Yogyakarta, Indonesia
   Cost: US$ 1,500 (IPA Members or Non-IPA Members)
        includes: hotel accommodation for 5 (five) nights, course material, working lunches & refreshments

   Dr. Roger Slatt (University of Oklahoma)
   Dates: July 12 - 16, 2010
   Venue: Sheraton Mustika Yogyakarta, Indonesia
   Cost: US$ 2,550 (IPA Members) or US$ 2,650 (Non-IPA Members)
        includes: hotel accommodation for 6 (six) nights, course material, working lunches & refreshments

3. An Overview of CBM and Other Unconventional Gas
   Peter J. Cockcroft (Consultant, Singapore)
   Dates: September 20 - 21, 2010
   Venue: Hotel Mulia Senayan - Jakarta, Indonesia
   Cost: US$ 1,100 (IPA Members) or US$ 1,200 (Non-IPA Members)
        includes: course materials, working lunches & refreshments

4. Geological Application of Well Logs
   Jenny Garnham (Independent Consultants, UK)
   Dates: October 25-29, 2010 OR November 1-5, 2010
   Venue: Sheraton Senggigi Beach Resort Lombok, Indonesia
   Cost: US$ 2,550 (IPA Members) or US$ 2,650 (Non-IPA Members)
        includes: hotel accommodation for 6 (six) nights, course material, working lunches & refreshments

5. Sequence and Seismic Stratigraphy: Concepts and Applications
   Dr. Henry Posamentier (Sr. Geological Consultant, Chevron Energy Technology Company)
   Dates: TBA
   Venue: Sheraton Senggigi Beach Resort Lombok, Indonesia
   Cost: TBA
        includes: hotel accommodation for 5 (five) nights, course material, working lunches & refreshments

LUNCHEON TALK

The Pressure is on: Investor Survey of the Indonesian Oil and Gas Industry
Paul Van Der Aa of PricewaterhouseCooper
Date: 28 July 2010
Venue: Four Seasons Hotel

FIELD TRIP

1. Solo – Kuwu – Cepu – Porong - Suramadu
   Yohannes P. Koesoemo of SDA Consultant, Cepu
   1-4 August 2010

2. South Sulawesi
   Dr. Alit Ascaria of Premier Oil
   4th week of Sept 2010

3. Solo – Kuwu – Cepu – Porong - Suramadu
   Yohannes P. Koesoemo of SDA Consultant, Cepu
   13-16 December 2010
Drilling Highlights
2009 Review and 2010 (The Story So Far...)

Mark Harris
di international
55B Amoy Street
Singapore 069881
mark.harris [at] diinfo.com
Tel: +65 6225 1153
Fax +65 6225 1197
Mobile: +65 9620 7698

To respect confidentiality, details are minimised unless in the public domain. All information from di international WEB+ and associated data listings. Ongoing wells not included.

Apologies to readers for the late appearance of this review, this may seem dated but it will bridge the gap to mid-2010.

2009 REVIEW (Fig 1)

SUMATRA

In the North Sumatra Basin, ENI completed its two well drilling program in the Krueng Mane PSC using the “Jack Bates” semi-sub. The first of the two tight holes was Emerald 1 (dry), drilled at the end of 2008. The second well, Bunga Seulanga 1, was an unsuccessful test of Baong Formation sandstones.

Four operators were active in the Central Sumatra Basin. Medco continued with the delineation of the Kaju oil and gas discovery of 2007 (oil & gas in Tualang Formation sands) and drilled Kaju 3 (oil), while in the CPP PSC, Bumi Siak Pusako plugged and abandoned wildcat Jade G-1X as a dry well but ended the year with a minor oil discovery with Ruby G-1X. Petrosetat meanwhile drilled two successful delineation wells on the Rawa Minyak oil field in the Selat Panjang PSC. Finally, Chevron discovered oil at Handal 1 in the Rokan PSC but Sijambu East 1 in the Siak PSC was dry.

South Sumatra continues as the most active region of Indonesia, accounting for approximately 40% of the wells drilled in 2009. The most active operator was again PetroChina, completing the following wells in the Jabung PSC: Gerbang 1 (dry), Marmo 2 and 3 (both oil & gas), NBE-1 (gas/condensate discovery in TAF), successful delineations NBE 2-5, Panen 2 (oil & gas) and Suko 2 (dry).

Elsewhere, CNOOC discovered gas & condensate with Kenanga 1 in the Batanghari PSC, Medco plugged and abandoned Noni 1 as dry in the Rimau PSC, but in the SSE PSC, Meta 2 confirmed oil in BRF carbonates and North Temelat 1 was an oil discovery. PT Odira Energy were successful with the first well in the Karang Agung PSC, making a gas discovery at Rahmat 1 and also drilling Ridho 1.

PT Pertamina completed delineation well Karang Makmur 2 (oil & gas in TAF), wildcat Ketaling Utara 1 (dry) and wildcat Puspa 1 (gas/condensate in TAF). PT Sele Raya drilled Sungai Anggur 1 in the Belida PSC, resulting in a minor oil and gas discovery, and wildcats Gasop A-1 (dry) and NW Belani 1 (oil in ABF) in the Merangin II PSC. Finally, Tately drilled the Buring 1 wildcat [gas shows] in the Palmerah PSC along with delineation wells Budi 2, 3 and 4.

JAVA

In the West Java Sea, CNOOC continued its drilling of the OSES PSC, again using the “Bohai IV” jack-up, with three wells completed, namely Laras 1 (oil in TAF), Mahayu 1 (dry) and Mila 4 (gas in TAF). Petronas Carigali drilled its first well in the Lampung II PSC using the “Adriatic XI” jack-up, but wildcat Ruby Merah 1, was a dry test of the TAF.

Onshore, PT Pertamina completed 10 wells, namely Argowangi 1 (dry), Bambu Beasar 1 (gas & condensate), delineation wells Galian 2 and 3 (both dry), Karang Enggal 2 (oil & gas), Karang Tunggal 1 (oil & gas discovery in BRF & TAFE), Mahoni Kencana 1 (oil & gas shows), Pondok Makmur A-1 (oil & gas), Pondok Makmur 2 (oil & gas) and Ranca Jawa 2 (oil shows).

In the East Java Basin, offshore drilling resumed with three operators active. Anadarko completed its third well in the NEM III PSC using the “Raniworo” jack-up, but Garam 1 was dry, while Husky drilled Adiyasa 1 (non-commercial gas) and Kukura 1 (dry) using the “Adriatic XI” jack-up in the East Bawean II PSC. Finally, Santos discovered an estimated 46 Bcfg in Mundu Formation carbonates at Peluang 1 in the Madura Offshore PSC, the well being drilled using the “Raniworo.”

Onshore, PT Pertamina drilled the Kalijati 1 wildcat (dry) and made a significant gas discovery in the Kujung
Formation with the Tiung Biru 1 wildcat. Partnered with PetroChina in the Tuban JOA, South Bungoh 2 confirmed oil and gas in Ngrayong Formation sands.

**TARAKAN BASIN**

In the onshore part of the Tarakan Offshore PSC, Provident was unsuccessful with delineation well Bayan A-3. In contrast, Medco’s South Sebuku 1 wildcat in the Bengara I PSC resulted in a gas discovery in stacked sands of the Tabul and Meliat formations. On Bunyu Island, PT Pertamina discovered oil and gas in Tarakan, Santul and Tabul sands with Bobara Putih A-1. Offshore, Eni’s Aster 5 delineation well in the Bukat PSC encountered oil and gas shows only, the well being drilled using the “Jack Bates” semi-sub.

**MAKASSAR STRAIT**

Much attention was focused on both sides of the Strait in 2009. Eni’s second commitment well in the Muara Bakau PSC, Jangkrik 1, resulted in an oil and gas discovery in Mio-Pliocene sands. This well was drilled using the “Jack Bates” semi in 430m of water. Later in the year, to commence a high profile program, ExxonMobil brought in the “West Aquarius” semi-sub to drill Rangkong 1 (dry) in the Surumana PSC in 2,250m of water and Sultan 1 (non-commercial gas) in 1,980m of water in the Mandar PSC.

**SULAWESI**

Onshore, PT Pertamina confirmed oil and gas in Minahaki Formation carbonates with delineation well Matindok 2, while in the Senoro-Toili JOA, with partner Medco, Cendana Pura 1 was an oil and gas discovery in the Minahaki.

**PAPUA**

Onshore in the Salawati Basin, PetroChina continued drilling in the Kepala Burung PSC, with KUW North 1 (abandoned), SE Walio 1 (oil & gas in Kais Formation reef with flow rates exceeding 4,500 bo/d), and delineation wells SE Walio 2 (oil shows) and SE Walio 3 (non-commercial oil). Finally, the PT Pertamina/PetroChina JOB drilled wildcat Bagas 1 (dry) and delineation Bagong 2 (oil) in the SKB JOA.

**2010 DRILLING TO DATE (Fig 2)**

At almost the halfway stage of 2010 as we go to press, the following is a brief summary of exploration drilling activities so far.

**SUMATRA**

No activity has taken place in 2010 to date in the North Sumatra Basin, but in Central Sumatra, Chevron’s Prima 1 in the Rokan PSC is to be tested.

It’s been a continuation of 2009 in South Sumatra however, the basin dominating in terms of drilling levels. CNOC’s second well in the Batanghari PSC, namely Matahari 1, encountered oil and gas shows only, a similar result being reported for Pearl’s Cerah 1 in the Tungkal PSC. Meanwhile, PetroChina continued its successful run in the Jabung PSC in recent years with discoveries at Panen Utara 1 (gas & condensate) and Sabar Utara 1 (gas). Medco, on the other hand, has been less successful, with dry wells at Makmur 1 in the SSE PSC and Kalisa 1 and Raut 1 in the Rimau PSC. PT Pertamina discovered gas at Ginaya 1, encountered gas shows at Kalalili 1 and confirmed gas and condensate with delineation well Pagar Dewa 6X. PT Sele Raya encountered oil shows in its West Belani Ext 1 in the Merangi II PSC and, finally, PT Tropik Energi drilled Arto Damar 1 (oil & gas discovery) and Sriwijaya 2 (oil & gas) in the Pandan PSC.

Operators with ongoing wells as we go to press include Medco (Langkap Basement 1), PT Pertamina (Manduru 1, Prabumenang 6X), PT Pertamina/Talisman (East Mandala 1), PT Sele Raya (Kemang Utara 1), PT Tiarabumi (Sampoerna NE 1), PT Tropik Energi (Sriwijaya 3) and Star (Cerah Sekayu 1).

**JAVA**

PT Pertamina has been particularly successful in its onshore West Java drilling in 2010 to date, with completed wells Akasia Bagus 1 (gas & condensate discovery), Karang Degan 1 (gas & condensate discovery), Karang Luhur 1 (gas & condensate discovery), Pondok Makmur 3ST (oil & gas), Pondok Makmur 5 (oil & gas) and Pondok Mekar 1 (oil & gas shows).

Ongoing wells in West Java include PT Pertamina’s Jati Keling 1 and Pondok Makmur E.

Onshore East Java, PT Pertamina/PetroChina confirmed oil and gas at Lengowangi 2A in the Tuban JOA. On Madura Island, SPE Petroleum drilled Dolang-Dolang 1 (dry).

Ongoing East Java are wells being drilled by PT Pertamina (North Kendungtuban 1) and SPE Petroleum (Dungok 1 and Maderelor 1).
In the East Java Sea, Pearl’s East Lengo 1 is being drilled in the East Muriah PSC using the “Trident 9” jack-up.

TARAKAN & KUTAI

Offshore Tarakan, Eni drilled Tulip East 2 (tight hole) in the Bukat PSC using the “Saipem 10000” drillship. In the onshore Kutai Basin, PT Pandawa has suspended South Karamba 1 in the Wain PSC.

MAKASSAR STRAIT

On the western side of the Strait, Anadarko is currently drilling Pancang 1 in the Popodi PSC, while Eni has relocated the “Saipem 10000” to the Muara Bakau PSC to drill delineation well Jangkrik 2 and Total is drilling Trekulu 1 in the Southeast Mahakam PSC with the “Soehanah” jack-up. Further south, Pearl’s NW Ruby 1 in the Sebuku PSC was declared tight hole, drilled using the “Trident 9.” In the east of the Strait, ExxonMobil’s last well in the Mandar PSC was unsuccessful, Kris 1ST being drilled using the “West Aquarius” semi-sub.

MALUKU & PAPUA

Onshore Seram, CITIC confirmed oil with wells at East Nief 1ST and Nief Utara 3ST in the Seram PSC. Finally, in Papua, Genting is drilling wildcat Asap 1X in the Kasuri PSC, while PetroChina discovered oil at North Walio 1 and is drilling South Payau 1 in the Kepala Burung PSC.

Notably absent from this summary of about 18 months of drilling are any wells from onshore North Sumatra, the Natuna Sea, Barito Basin, and much of Maluku. Hopefully the next summary will have filled some, if not all, of these omissions.
Global E&P Calendar

Simon Crellin
Director, Petroleum Services
Deloitte LLP (UK)
email: sicrellin [at] deloitte.com

2010 AsiaPacific Exhibition, Conferences, and Forums

Jul 1-2
China/Asia Pacific-Middle East LNG Market and Offshore Technology & Operations Summit
Shanghai
Magenta Global
http://www.magenta-global.com.sg/

Jul 22-24
ASEAN Oil & Gas Expo (AGEX) 2010
Sabah
FireWorks Event (M) Sdn Bhd
http://www.aseanoilgas.com

Jul 26-29
Deepwater Drilling Rig Outlook
Singapore
IBC Asia Limited
http://www.ibc-asia.com

Aug 3-6
2nd Annual Offshore India Oil and Gas Summit
Mumbai
IBC Asia Limited
http://www.ibc-asia.com

Aug 4-5
3rd Annual CBM (Coal Bed Methane)
Singapore
IBC Asia Limited
http://www.ibc-asia.com

Aug 22-26
21st International Geophysical Conference & Exhibition
Sydney
ASEG & PESA

Aug 30-Sep 2
Drilling Strategies 2010
Singapore
IQPC
http://www.drillingstrategiesasia.com

Sep 9-10
PetroVietnam 2010 Conference
Hanoi
PetroVietnam

Sep 19-22 2010
New Zealand Petroleum Conference (NZPC)
Auckland
Crown Minerals
http://www.nzpetroleumconference.org.nz

Sep 22-24 2010
SEAAOC (South East Asia Australia Offshore Conference)
Darwin
IR Conferences
http://www.seaaoc.com

2010 AsiaPacific Training Courses and Workshops

Jul 5-7
Well Completion Practices
Kuala Lumpur
UNI Strategic
http://www.unistrategic.com

Jul 5-9
Bayesian Inference and Neural Networks in Formation Evaluation
Kuala Lumpur
Hot Engineering
http://www.hoteng.com

Jul 5-9
Improved Oil Recovery Methods: Theory and Applications
Kuala Lumpur
NE Xt Development
http://www.nexttraining.net/calendar.cfm

Jul 5-9
Applied Sequence Stratigraphy of Clastic Rocks
Kuala Lumpur
Subsurface Consultants & Associates
http://www.scacompanies.com

Jul 5-9
Basic Reservoir Engineering
Kuala Lumpur
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Jul 5-9
Gas Lift
Kuala Lumpur
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Jul 5-9
Production Technology for Other Disciplines
Perth
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Jul 5-9
International Petroleum Contracts
Singapore
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Jul 5-9
Development Geology
Kuala Lumpur
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Jul 5-9
Introduction to Reservoir Engineering
Kuala Lumpur
Nautilus (SEA) Ltd
Email: g.love@nautilusworld.com

Jul 7-9
Introduction to the Geology of Coalbed Methane
Kuala Lumpur
NE Xt Development
http://www.nexttraining.net/calendar.cfm

Jul 12-14
Introduction to the Geology of Coalbed Methane
Bandung
NE Xt Development
http://www.nexttraining.net/calendar.cfm

Jul 12-14
Basin Analysis Masterclass
Kuala Lumpur
UNI Strategic
http://www.unistrategic.com
Jul 12-15
Basics of Petroleum Engineering, Geophysics and Geology Technology in the Upstream Oil & Gas Industry for Non-Technical Staff
Yogyakarta
IPA (Dr. S. Sukmono, B. Toha, Suranto)
http://www.ipa.or.id/

Jul 12-16
Petroleum Geology of Deep-Water (Turbidite) Depositional Systems
Yogyakarta
IPA (Dr. R. Slatt)
http://www.ipa.or.id/

Jul 12-16
Applied Reservoir Engineering
Ho Chi Minh City
NExT Development
http://www.nexttraining.net/calendar.cfm

Jul 12-16
Modern Organic Geochemistry for Exploration of Oil and Gas
Beijing
NExT Development
http://www.nexttraining.net/calendar.cfm

Jul 12-16
Gas Production Engineering
Bangkok
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Jul 12-16
Petroleum Generation, Migration and Basin Modelling Techniques
Kuala Lumpur
Nautilus (SEAA) Ltd
Email: g.love@nautilusworld.com

Jul 15-17
Oilfield Geomechanics (Application to Drilling, Completions, Reservoir, Production, Geology and Geophysics)
Bali
Geomechanics International
http://www.geomi.com

Jul 19-22
Primary Cementing - Cementing I
Kuala Lumpur
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Jul 19-22
Essentials of Rock Physics for Seismic Amplitude Interpretation
Kuala Lumpur
Nautilus (SEAA) Ltd
Email: g.love@nautilusworld.com

Jul 19-23
Worldwide Comparisons of Deepwater Reservoirs: Seismic Data Interpretation
Kuala Lumpur
NExT Development
http://www.nexttraining.net/calendar.cfm

Jul 19-23
Advanced Formation Evaluation - Sandstones
Bangkok
NExT Development
http://www.nexttraining.net/calendar.cfm

Jul 19-23
Basin Analysis Workshop: An Integrated Approach
Kuala Lumpur
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Jul 19-23
Shaly Sand Petrophysics
Kuala Lumpur
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Jul 19-23
Performance Analysis, Prediction and Optimization using NODAL Analysis
Perth
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Jul 20-22
Oilfield Geomechanics (Application to Drilling, Completions, Reservoir, Production, Geology and Geophysics)
Perth
Geomechanics International
http://www.geomi.com

Jul 26-28
Managing Wellsite Operations
Kuala Lumpur
UNI Strategic
http://www.unistrategic.com

Jul 26-30
Introduction to Seismic Stratigraphy: A Basin Scale Regional Exploration Workshop
Singapore
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Jul 26-30
Basic Petroleum Engineering Practices
Kuala Lumpur
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Jul 26-30
Well Log Interpretation
Kuala Lumpur
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Jul 26-Aug 6
Drilling Practices
Kuala Lumpur
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Aug 1-4
Floating LNG
Kota Kinabalu
SPE
http://www.spe.org
Aug 1-4
A Geological Trip from Solo to Kuwu-Cepu-Porong-Suramadu for Non Geoscientists
Indonesia
IPA (H.M. Yohannes P. Koesoemo)
http://www.ipa.or.id/

Aug 2-6
Geological Interpretation of Well Logs
Kuala Lumpur
Nautilus (SEAA) Ltd
Email: g.love@nautilusworld.com

Aug 2-6
Introduction to Drilling Engineering
Beijing
NEXT Development
http://www.nexttraining.net/calendar.cfm

Aug 2-6
Subsurface Facilities for Subsurface Engineers
Bandung
NEXT Development
http://www.nexttraining.net/calendar.cfm

Aug 2-6
Advanced Seismic Stratigraphy: A Sequence - Wavelet Analysis - Exploration - Exploitation Workshop
Singapore PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Aug 2-6
Downhole Remediation Practices for Mature Oil and Gas Wells
Kuala Lumpur
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Aug 2-6
Completions and Workovers
Kuala Lumpur
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Aug 2-6
Applied Subsurface Geological Mapping
Bangkok
Subsurface Consultants & Associates
http://www.scacompanies.com

Aug 9-13
Integrated Production System/Gathering Network/Flow of Fluids
Bandung
NEXT Development
http://www.nexttraining.net/calendar.cfm

Aug 16-17
Advanced Energy Derivatives Pricing, Hedging and Risk Management
Singapore
Oxford Princeton
http://www.oxfordprinceton.com

Aug 17
Coal Seam Gas - Production, Completion & Operation Practicalities
Brisbane
IR Executive Development
http://www.ired.com.au

Aug 17-20
Risk Analysis and Management
Kuala Lumpur
NEXT Development
http://www.nexttraining.net/calendar.cfm

Aug 23-27
Analysis and Development of Tight Gas Reservoirs
Beijing
NEXT Development
http://www.nexttraining.net/calendar.cfm

Sep 6-7
Petroleum - Technical & Commercial Fundamentals
Perth
IR Executive Development
http://www.ired.com.au

Sep 7-9
Coal Bed Methane - Technical & Economic Fundamentals
Brisbane
IR Executive Development
http://www.ired.com.au

Sep 7-9
Petroleum - Technical & Commercial Fundamentals
Perth
IR Executive Development
http://www.ired.com.au

Sep 7-9
Coal Bed Methane - Technical & Economic Fundamentals
Perth
IR Executive Development
http://www.ired.com.au

Sep 7-9
Coal Bed Methane - Technical & Economic Fundamentals
Perth
IR Executive Development
http://www.ired.com.au

Sep 9-12
Oilfield Geomechanics (Application to Drilling, Completions, Reservoir, Production, Geology and Geophysics)
Kuala Lumpur
Geomechanics International
http://www.geomi.com

Sep 12-15
Coalbed Methane (CBM)
Bali
SPE
http://www.spe.org

Sep 13-14
Petroleum - Technical & Commercial Fundamentals
Sydney
IR Executive Development
http://www.ired.com.au

Sep 13-17
Seismic Petrophysics
Bandung
NEXT Development
http://www.nexttraining.net/calendar.cfm

Sep 13-17
Fundamentals of Oil and Gas Economic Evaluations
Beijing
NEXT Development
http://www.nexttraining.net/calendar.cfm

Sep 13-17
Seismic Interpretation
Kuala Lumpur
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Sep 14-16
Deltic to Deepwater Depositional Systems of NW Borneo - Concepts and Models for Reservoir Prediction
Sabah & Sarawak
Nautilus (SEAA) Ltd
Email: g.love@nautilusworld.com
Sep 20-23
Petroleum Exploration and Production
Ho Chi Minh City
NExT Development
http://www.nexttraining.net/calendar.cfm

Sep 20-24
Drilling for Everyone
Kuala Lumpur
NExT Development
http://www.nexttraining.net/calendar.cfm

Sep 20-24
New Oil Production Technologies
IPA (M. B. Dusseault)
http://www.ipa.or.id/

Sep 27-28
Development Geology
Kuala Lumpur
PetroEDGE & Fugro Robertson
http://www.petroedge.asiaedge.net/

Sep 27-Oct 1
An Introduction to Reservoir Appraisal and Development
Kuala Lumpur
Nautilus (SEAA) Ltd
Email: g.love@nautilusworld.com

Sep 27-Oct 1
Introduction to Clastic Depositional Systems: A Petroleum Perspective
Kuala Lumpur
Nautilus (SEAA) Ltd
Email: g.love@nautilusworld.com

Sep 27-Oct 1
Project Management Kuala Lumpur
NExT Development
http://www.nexttraining.net/calendar.cfm

Sep 27-Oct 1
Earth Stresses, Borehole Stability, Well Design
IPA (M. B. Dusseault)
http://www.ipa.or.id/

Sep 27-Oct 1
Petroleum Risks and Decision Analysis
Kuala Lumpur
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Sep 27-Oct 1
Flow Assurance for Offshore Production
Kuala Lumpur
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Sep 27-Oct 1
Applied Seismic Anisotropy and Fractured Reservoir Characterisation
Kuala Lumpur
PetroSkills/OGCI
http://www.ogci.com OR www.petroskills.com

Sep 28-30
3 Day MBA in Oil & Gas
Hong Kong
Terrapinn http://www.terrapinn.com

Sep 29-Oct 1
Petroleum Contracts and Practice in Negotiations
Kuala Lumpur
PetroEDGE & Fugro Robertson
http://www.petroedge.asiaedge.net/
# PROFESSIONAL DIVISION COMMITTEE MEMBERS

<table>
<thead>
<tr>
<th>POSITION</th>
<th>NAME</th>
<th>COMPANY</th>
<th>PHONE #</th>
<th>FAX #</th>
<th>MOBILE PHONE</th>
<th>E-MAIL ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairman</td>
<td>Ron Noble</td>
<td>NIKO RESOURCES</td>
<td>782-1001</td>
<td>782-2002</td>
<td>0811-800604</td>
<td>r noble [at] nikoindonesia.com</td>
</tr>
<tr>
<td>1st Vice Chairman</td>
<td>Dharmawan Samsu</td>
<td>BP</td>
<td>7854-8094</td>
<td>7854-9140</td>
<td>0811-880253</td>
<td>dharmawan.samsu [at] sel.bp.com</td>
</tr>
<tr>
<td>2nd Vice Chairman</td>
<td>Stephen Scott</td>
<td>GENGTING OIL</td>
<td>527-3828</td>
<td>527-3827</td>
<td>0811-9622901</td>
<td>stephen.scott [at] geningoil.com</td>
</tr>
<tr>
<td>Secretary</td>
<td>Audrey Soehertian</td>
<td>IPA</td>
<td>515-5959</td>
<td>5140-2545/6</td>
<td>0812-9296803</td>
<td>audrey.soehertian [at] ipa.or.id</td>
</tr>
<tr>
<td>Treasurer</td>
<td>Roland Panjaitan</td>
<td>HESS</td>
<td>2995-1000</td>
<td>2995-1001</td>
<td>0816-1606800</td>
<td>roland.panjaitan [at] hess.com</td>
</tr>
<tr>
<td>Continuing Education</td>
<td>H.L. Ong</td>
<td>GEOSERVICES</td>
<td>830-5555</td>
<td>831-1454</td>
<td>0811-817400</td>
<td>hlong [at] geoservices.co.id</td>
</tr>
<tr>
<td>Field Trips</td>
<td>Walter Ziza</td>
<td>TALISMAN</td>
<td>2995-7828</td>
<td>515-1571</td>
<td>0812-1085513</td>
<td>wziza [at] talisman-energy.com</td>
</tr>
<tr>
<td>Luncheon Talks</td>
<td>Mark A. Thomsen</td>
<td>EXXONMOBIL OIL</td>
<td>571-5129</td>
<td>571-5131</td>
<td>0811-1907310</td>
<td>mark.thomsen [at] exxonmobil.com</td>
</tr>
<tr>
<td>Student Activities Liaison</td>
<td>Redo Waworuntu</td>
<td>CONOCOPHILLIPS</td>
<td>7854-2183</td>
<td>7854-2282</td>
<td>0811-197295</td>
<td>redo.d.waworuntu [at] conophillips.com</td>
</tr>
<tr>
<td>Membership</td>
<td>C.F. Sugembong</td>
<td>STAR ENERGY</td>
<td>3002-1530</td>
<td>530-7928</td>
<td>0811-134695</td>
<td>sugembong.cf [at] starenergy.com</td>
</tr>
<tr>
<td>Newsletter</td>
<td>Joel J. Guttormsen</td>
<td>CONOCOPHILLIPS</td>
<td>7854-2241</td>
<td>7854-2282</td>
<td>0811-172153</td>
<td>joel.j.guttormsen [at] conophillips.com</td>
</tr>
<tr>
<td>Publications</td>
<td>Andy Livsey</td>
<td>HORIZON</td>
<td>7918-1559</td>
<td>7918-4095</td>
<td>0816-868525</td>
<td>arl [at] horizon.co.id</td>
</tr>
<tr>
<td>Balikpapan Chapter</td>
<td>Patricius Andri Indhiarto</td>
<td>CHEVRON</td>
<td>(0542) 756-3347</td>
<td>(0542) 756-3714</td>
<td>0813-8113377</td>
<td>andri [at] chevron.com</td>
</tr>
<tr>
<td>Riau Chapter</td>
<td>Timbul P. Panjaitan</td>
<td>CHEVRON</td>
<td>(0761) 933-319</td>
<td>(0761) 942-014</td>
<td></td>
<td>timpanj [at] chevron.com</td>
</tr>
</tbody>
</table>