

FORTHCOMING REGIONAL AND INTERNATIONAL EVENTS

Dates	Meeting	Location
10 - 13 Sep 2006	Logging while Drilling: Stretching the Limits of Technology - ATW	Dubai, UAE
11 - 13 Sep 2006	Asia Pacific Oil and Gas Conference and Exhibition	Adelaide, Australia
24 - 27 Sep 2006	Annual Technical Conference and Exhibition	San Antonio, USA
16 - 18 Oct 2006	SPE/IADC Indian Drilling Technology Conference and Exhibition	Mumbai, India
5 - 8 Nov 2006	Abu Dhabi International Petroleum Exhibition and Conference	Abu Dhabi, UAE
5 - 8 Nov 2006	Deepwater Technology - ATW	Hong Kong, SAR China
13 - 15 Nov 2006	IADC/SPE Asia Pacific Drilling Technology Conference	Bangkok, Thailand
26 - 29 Nov 2006	Integrated Asset Management - ATW	Goa, India

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SPENDSEC

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NEWS



Chairman's Corner

Dear Member,

Hearty congratulations on being awarded coveted "2006 SPE President's Award for Section Excellence" a unique honor for Indian SPE movement. The Section Excellence Award of SPE is a rare honor in the petroleum fraternity wherein the sections are judged on dissemination of technical information, membership development, outreach and community involvement, and other criteria. The award will be presented by 2006 President Ms Eve Sprunt at the SPE Annual Technical Conference and Exhibition (ATCE) in San Antonio later in September 2006.

There is more pride in this, considering the fact that New Delhi section has won this in the very first year of existence. The credit goes to the hard work & sincere efforts of the dedicated Section Officers, the enthusiasm & active participation of all the members and the support of sponsors.

It was no cakewalk when, in December 2004, an idea was conceived to start the New Delhi Section. The journey began from thereon, nine meetings, twelve speakers, a student chapter, regular issuance of news magazine and hosting an updated website. The year's events were rightly culminated with a social get together an important aspect of SPE forum. A great team effort.

This is yet another moment of celebration our news letter SPENDSEC NEWS is entering into second year with this issue. Hearty congratulations to the editorial team.

The term of the current Section Officers expires in September 2006, keeping in the tradition of the SPE calendar, a new body is to take over from October 2006 for one year. It should be the motto of the new executive committee to go all out and provide another great set of events for Section Members.

Looking ahead to more exciting times.

Niladri K. Mitra
Niladri K. Mitra

SPENDSEC July Meeting Twin Talks

Sunil Kumar Singh

In continuation of its tradition, SPENDSEC, The New Delhi Section of Society of Petroleum Engineers once again provided a thoughtful evening for the Oil & Gas E&P industry on 25th July 2006 at India Habitat Centre. The meeting was organized after the summer vacation gap of one and a half month, and, therefore, there were two speakers on varied topics. A record audience of 70+ was enough to show the increasing enthusiasm and interest shown by one and all. The efforts of SPENDSEC Team has borne fruits as now several professionals related to this industry big and small, are keen to be a part of this movement.



Stuart Wheaton, Head Sub Surface, Cairn Energy India presenting a talk to SPE New Delhi Section

Continued..... page 2

IN THIS ISSUE

From the Editors Desk	1
SPENDSEC July Meeting Twin Talks	1
Response to SPENDSEC Activities	3
Glimpses of July 25, 2006 Section Meeting	4
Nominations for the SPENDSEC Board 2006-07	6
Membership Status	6
August Meeting Preview	7
Corporate Sponsors during the year.	7
Forthcoming Regional and International Events	8
Section Officers	8

Continued from..... page 1

The Challenge of Waxy, High Pour Point Oil Production: Stuart Wheaton

This talk was about thinking big and thinking right as the stake is tremendous for the mammoth Rajasthan find, where oil in place exceeds 2 billion barrels. Stuart Wheaton did a thorough job of presenting the various facets of the complications ahead. It appeared as if developing this field would be a real delight for reservoir engineers as it presented technical challenges that would find engineering skills at the very best. His detailed presentation left nothing to imagination. The waxy crude is expected to have its footprints in every aspect of project management, encompassing reservoir management, well completion, production and transportation.

Let the crude be mobile. That is the challenge. The requirement of flow assurance is not limited to well bore and surface facilities, but extends right into the reservoir. An early EOR or a mix of the techniques would be needed to achieve higher recovery. Chemical injection, which may include down-hole de-emulsifiers, PPD or inhibitors, shall form a routine production activity to support well-bore flow dynamics. To add to this, there need to be an effective mechanism probably built in the completion to ward off sand incursion. Artificial lift considerations would be tailored to handle the very high viscous crude. Stuart informed that PCPs would be used for high viscosity low rate wells, whereas ESPs would be used for high rate horizontal wells with sand exclusion. As a matter of fact, there are scores of provisions in this kind of development scene, which need to be carefully selected and may be pilot tested as the scale of operation is truly big.

Transportation of the crude will need careful synchronization with weather. Tools in hand to deal with requirement will enlist diluents, PPD, buried pipeline and such other detailed provisions. Nothing of this sort is in place in this part of the sub-continent. But there are similar fields in China and NZ that may well be the starting point. This is huge plus for the project as past experience serves to eliminate options and narrow down the development philosophy on a solid ground. Nevertheless, there are always opportunities and scope to innovate and Stuart seemed to be a willing customer in this respect.

Reservoir heterogeneity, Geo-statistics, Horizontal wells and BlackJack Poker: Dennis Beliveau

It is a well known realization in Petroleum Industry that geo-science is all about uncertainty and that the distinction between success and failure is marginal but catastrophic in result. Dennis



Dennis Beliveau, Principal Reservoir Consultant, Cairn Energy India talking about Reservoir heterogeneity

Beliveau underlined this dictum from different perspectives, each defining limitations and, therefore, also the prowess of geo-sciences in finding and developing hydrocarbon resource. A meaningful application of reservoir optimization needs this basic percept well entrenched - whatever technology or methodology we apply, there may always be probability working against us. His prescription was simple: live with it.

Maxwellian probability first introduced for the study of kinetic theory of gases and subsequently applied with resounding success in wave mechanics provides us with the basis to use probability in our favor. Reservoir engineering is no exception to this natural probability distribution. It was precisely the reason that the plot displaying reservoir function versus random variable was so similar to the text book plot.



S.K. Patra, Section Director releasing the latest issue of SPENDSEC News.

Apparently, there appeared as if we may not have a way around the 50-50% syndrome of predicting production rate, PI improvements and other such factors so vital for the project economics. This despondency, however, may as well be misplaced, for Dennis Beliveau also emphasized that the inherent grouse about the uncertainty is insurmountable when we consider an isolated case and that there exists possibility to be on the better side of the probability divide when we extend our prediction to a group of wells. The ability to comprehend and assimilate geo-scientific information in totality holds the key.

His 3-D space conceptualization about the uncertainties was nicely illustrated with a twisted space around a hole. No doubt, 2-D prognostics and reservoir modeling based on it are inherently faulted, particularly when our sub-surface information are indirect and subject to the subjectivity associated with measurements and interpretations. The spatial distribution of petro-physical parameters like porosity, permeability, saturation, mobility, and fluid boundaries etc are uncertain and entirely different to what isolated probes otherwise indicate. Further we also need to recognize that we deal with simple statistical averages. Notwithstanding the type of averages we employ to convince ourselves, the intermediate details need not follow any projection pattern in a stand alone situation. One of the important challenges facing reservoir prediction is about thinking asymmetric and imbibing observed information in a 3-dimensional reservoir space. The point was again amplified with a populated porosity permeability data points that nobody would ever dare to run a curve through. Actually, there could not have been any meaningful relation at all for the illustrated data-set. The observed data was squarely distributed, leaving us with the only option to deal the situation with the help of statistical means.

Extremely informative twin talks indeed!!!

In Response to SPENDSEC Winning President's Award

Dear Rahul,
"Congratulations on a most deserved award!!! (No surprise for me). Looking forward to seeing you in San Antonio. All the best"
Giovanni Paccaloni, 2005 SPE President

Hi Rahul,
My heartiest congratulations to you and your section too. I was quite surprised to see our name on the list as I was convinced that SPENDSEC was the best section in the Middle East region.... Then I saw you guys at the top of the list where you belong. Looking forward to seeing you again in San Antonio. Best wishes,
Dr Razik Shaikh,
Chairman, Northern Emirates Section

Dear Rahul,
"Well, it was no surprise really, but I am delighted to see that the New Delhi Section is being recognised as one of the best in the world. I truly hope that you are able to come to ATCE and receive this award in person, as you have really driven this all the way. Congratulation! Best wishes"
Ross Davidson,
Director of Operations, SPE Middle East

Dear Rahul,
I am most delighted by the news of the SPE Award for "Section Excellence". Indeed, a recognition well deserved.... My congratulations to you and all others who made it possible to achieve this distinction. Hope to see you at the ATCE in September. Best regards,
Sara S. Thomas, Ph. D.,
PERL CANADA LTD.

Dear Rahul,
Congratulations for bringing New Delhi section into the top sections of the world almost overnight!!! We are confident that Geopetrol along with its employees will in some form or the other participate to support your section. Best Regards
Edward Wood
President India Business, Geopetrol International Inc



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19 July 2006

Mr. Rahul Bali
Superintending Engineer Prodn.
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Dear Mr. Bali,

Congratulations! The New Delhi Section was selected to receive the 2006 SPE President's Award for Section Excellence. This prestigious award recognizes SPE sections whose efforts in membership development, member programs, technology dissemination, cooperation with other civic and professional organizations are exceptional and much more.

To acknowledge the section's outstanding efforts, I would like to present the award to you at the President's Luncheon that will be held Wednesday, 27 September 2006 at 11:30 a.m., in the Henry B. Gonzalez Convention Center's (HBGCC) Ballroom C, Section 1 & 2. You will be seated at a reserved table with other award winners unless you request other assignment on the attached form. If you or your representative who will receive this award do plan to attend the luncheon, the rehearsal for President's Luncheon award recipients will be on Tuesday afternoon, 26 September from 4:30-6:00 p.m. in HBGCC Ballroom C. At this meeting, you will receive specific instructions regarding the script and process for going on stage to receive your award during the luncheon. Then plan to return here on Wednesday morning no later than 10:30 a.m. to obtain your table seating assignment, plus have your photograph taken with the SPE President.

SPE staff will be sending a packet of material including VIP registration, housing and RSVP forms along with this correspondence. Please complete these forms and return them to SPE before the deadline of 25 August 2006 in order to assure your accommodations. As one of this year's prestigious award recipients you also receive one complimentary full conference registration and one ticket to the President's Luncheon.

Also, make a note on your calendar that the invitation only SPE Board of Directors reception will be held Sunday afternoon, 24 September in the HBGCC Grotto. You will receive a separate invitation to this event in the coming weeks. Following this reception, a Welcome Reception kicking off the conference is scheduled from 6:30 to 8 p.m. on the exhibition floor. A special highlight event of the 2006 ATCE is the Annual Banquet that will be held Monday evening, 25 September and we encourage you to attend.

Please confirm your attendance by contacting Brian Wiggins, SPE Sections Manager, at phone number 972-952-9451 or e-mail address bwiggins@spe.org

Sincerely,

Eve S. Sprunt

Dr. Eve S. Sprunt
2006 SPE President

Cc: Mr. Niladri K Mitra, Chairman, SPE New Delhi Section
Mr. Ali Al-Jarwan, Director, SPE Middle East Region

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Dear Rahul,
"Congratulations. This is indeed your untiring efforts. Regards"
Dr. P. Gopalakrishnan,
Consultant Reservoir Engineer

Congratulation! SPE New Delhi Chapter.
Good job done, keep it up... All the best.
Partha P. Mitra, CEA to C&MD ONGC



August Technical Section Meeting

Reducing Risk and Uncertainty in Exploration and Development through Downhole Fluid Interpretation

Sameer Joshi

*Reservoir Engineering Domain Head,
Schlumberger, India*

Venue :
Magnolia, India Habitat Centre, Lodhi Road,
New Delhi-110001

Wednesday, August 30, 2006 at 1900 Hrs



To check details visit
events section at
our website at
<http://newdelhi.spe.org>

Sponsors



OIL India Limited

Nominations invited for the SPENDSEC Board 2006-07

SPENDSEC is visible on the map of SPE International

SPENDSEC wins 'SPE President's Award for Section Excellence' in the very first year of existence
Now the second year is crucial.

The steps taken and standards set in the first year need to be strengthened.

There is a need to continue the efforts with more zeal

The New Board of SPENDSEC Section Officers is scheduled to formed next month to take over from October 1 2006

We are looking for new talent to volunteer.

We know you can add value in any of the roles.

Do you want to be on SPENDSEC Board /Committee?

If so then put your name forward by sending an email to

SPENDSEC@spemail.org

For more information about the roles of the officers please visit our site: <http://newdelhi.spe.org>

Membership Status

Rahul Bali, *Member, SPE International Membership Committee*

SPENDSEC welcomes our New / Transferred in members:

New / Reinstated

Mr. Pinaki K Ghosh

General Manager, Oil & Natural Gas Corp. Ltd.

Mr. Vipin Gupta

Director, Trenchless

Ms. Abha Kumari

Superintending Engineer, Oil & Natural Gas Corp. Ltd.

Mr. Arbindoo Kumaria

Chief Engineer, Oil & Natural Gas Corp. Ltd.

Mr. Neel M Sharma,

Reservoir Engineer, Jubilant Oil & Gas Pvt Ltd

Mr. Vinod K Sibal

Director General, Directorate Gen Hydrocarbons

Mr Harpal Singh

AEE(Production), Oil & Natural Gas Corp. Ltd.

Ved B Soneja

Superintending Engineer, Oil & Natural Gas Corp. Ltd.

Transferred in:

Mr. Amitava Dasgupta

Deputy Chief Engineer Drilling, Oil India Ltd. (From: India)

Mr. Arvind Kumar

Principal Reservoir Engineer, Cairn Energy India Pty. Ltd. (From: India)

Mr. Ankaj K Sinha

Junior Petroleum Engineer, Cairn Energy India Pty. Ltd. (From: India)

Mr. Krishna P Venkatesan

Petroleum Engineer, Cairn Energy Plc UK (From: India)

Membership Status July-end 2006

Total Members	155
Unpaid	11
New	8
Transferred In	4

Table 1. shows the membership status update of SPENDSEC. Out of total 155 members, less than 10% i.e., only 11 are unpaid.

AUGUST MEETING PREVIEW

Reducing Risk and Uncertainty in Exploration and Development through Downhole Fluid Interpretation

Sameer Joshi

*Reservoir Engineering Domain Head,
Schlumberger, India*

Abstract:

Wireline formation testing has long been used to measure formation pressures and gradients and thus infer formation fluid properties. With the advent of sophisticated formation testers featuring downhole pumps and advanced optical fluid analyzers it is now possible to quickly pumpout and scan formation fluids in realtime. This provides critical information such as fluid type, hydrocarbon composition, GOR and pH while the tool is still downhole. Using new technologies, virtually contamination-free samples can be quickly obtained downhole.

Amid the inherent uncertainties associated with oil exploration and development, this kind of critical information in realtime can help exploration and development teams to take correct completion decisions and thus avoid later costly workovers or underperforming wells and facilities, especially in high-cost frontier and deepwater areas. Fluid properties in

future wells can be predicted in advance and then compared with actual downhole results to validate or refine the existing reservoir model.



Sameer Joshi has over 20 years of experience in the upstream E&P industry, where he has worked as a reservoir engineer, log analyst and wireline field engineer. He holds M.S. and Engineer degrees in Petroleum Engineering from Stanford University, USA (1993, 1996) as well as an M.Sc. in Physics from the University of Delhi, India (1983).

Sameer started his career with the Oil & Natural Gas Corporation (ONGC), India and later joined Schlumberger, where he is currently posted as the Reservoir Engineering Domain Head. His interests include design and interpretation of wireline services related to formation testing and sampling, pressure transient analysis and production logging. He is currently a Technical Committee member of the SPWLA India Chapter. He has served previously as Co-Chair of the Well Test Discussion Group of SPE Java Indonesia Section (2002-2005) as well as Session Chair and Technical Program Committee member at the 2005 SPE International Improved Oil Recovery Conference in Asia Pacific (IIORC), Kuala Lumpur.

Corporate Sponsors during the year.

