



SOCIETY OF PETROLEUM ENGINEERS

SPE NEWS

COPENHAGEN SECTION

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Welcome WELCOME TO A NEW SEASON

Welcome to a new SPE season where we start on a new series of meetings with technical presentations and social dinners. Since our Summer Party at the Regatta Pavilion on June 20th, we have made a new program consisting of presentations by SPE Distinguished Lecturers, presentations by our local oil and gas industry and from universities. They will cover topics like the growing demand for oil and gas, hydrocarbon potential in Greenland, development considerations for Hejre, LNG, Mature Fields and dual-lateral wells in tight gas. I want to thank the speakers for their commitments, which form the backbone of our activities. I also want to thank our advertising sponsors for their contributions that allow us to continue with our activities. As such, we are ready for the coming season and I hope that you are as well.

We start at Welltec in Allerød. Last year, they opened the season with an interesting presentation of their tractor and gave a guided tour of their facilities. This year, they have called in John Haukvik to give us an insightful talk on well intervention technologies. This topic becomes more and more important to our operations as the fields become more mature and more choices have to be made between repairing and improving existing wells or, alternatively, drilling more wells.

Such considerations are important and the associated analyses, technological possibilities and operational challenges are some of the things that make the oil industry an exiting place to work.

I hope to see many of you at Welltec in Allerød on Thursday September 18th.

Per Bak
Section Chairman

FUTURE MEETINGS

FOR MORE INFORMATION
REGARDING THE PROGRAMME
SEE PAGES 4-5



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A STORY FROM THIS MONTHS MEETING SPONSOR

The story of Welltec® is a story that began 20 years ago sparked by one man's insistence of doing things differently.

The idea of a robotic device to convey electric line tools in horizontal and deviated wells was an evolution of Jørgen Hallundbæk's thesis at the Technical University of Copenhagen from 1987. At that time, he had envisioned a new idea to extend the reach of coiled tubing in highly deviated wells.



Convincing operators to try on new technology was not accomplished overnight. The entry barrier in the oil and gas industry is high due to the big financial interests at stake making it difficult for new technology to be accepted. Add to that an idea that implied a revolution of existing practices, and the word challenge is spelled out. Nevertheless, Jørgen Hallundbæk insisted that new technology could transform the way interventions were done.

The first company to stick their neck out was Statoil. Jørgen Hallundbæk had been discussing the idea with John Haukvik from Statoil Research and Development and in 1994 they got the North Sea operator to back the idea of the Well Tractor®.

Fourteen years later, StatoilHydro has shifted their intervention strategy to apply Welltec's type technologies to a considerable part of their interventions.



Summer SPE Summer party 2008

Hurray for the Danish summer. After a rainy and thundery morning, the weather cleared to be the most beautiful and sunny afternoon. A total of 68 members and spouses turned up at Bagsværd Pavillionen for the annual SPE summer party.

Following the welcome drink, all set out for a boat trip on Bagsværd Lake, to the background sound of champagne bottles popping mixed with Irish music.

Dinner was a set Creole buffet with the works; "dirty rice", spare ribs, seafood, and much more. After dinner entertainment included Irish dancing and lessons for those who felt inspired. SPE wishes to thank Schlumberger and Felicity Boyd for sponsoring the summer party, and William Ginty for arranging it.

Hans Plessing
Treasurer

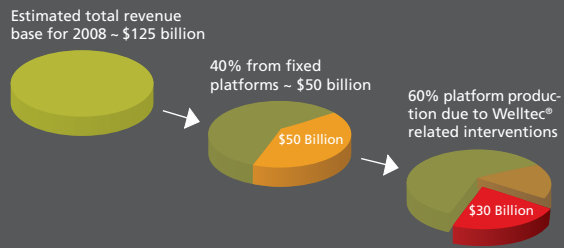


Down Hole Precision Robotics

Precision Robotics
The value-creating solutions provided by down hole precision robotics enable operators to minimize production losses and quickly get wells back on production.

Returns on Investment
A major North Sea operator has estimated that they save 50% on their interventions when they apply Welltec's innovative services instead of conventional methods. More to the point, they recognized billions of dollars in value-creation as illustrated by the graphics to the right.

Generates multi-billion dollar value-creation



Based on estimated revenue for major North Sea operator

Exploration and Production www.dongenergy.com



International working culture based on Nordic values
Substantial job flexibility
Good work/life balance
Minimal hierarchy
Efficient decision processes
High responsibility
Emphasis on competency development

MEETING SCHEDULE :2008-2009

September 18			MAIN SPEAKER	AFTER DINNER
TOPIC	Intervention Strategies for Production Enhancement			
SPEAKER	John Haukvik			
LOCATION	Welltec, Gydevang 25, 3450 Allerød			
SPONSOR	Welltec			
October 23			MAIN SPEAKER	AFTER DINNER
TOPIC	The Growing Demand for Oil and Natural Gas and the Related Global Warming Issues			Chevron: The ultrasound Well Scanner
SPEAKER	SPE-DL George J Stosur			
LOCATION	Hotel Adina, Amerika Plads 7, 2100 København Ø			
SPONSOR	Chevron			
December 4			MAIN SPEAKER	DINNER SPEAKER
TOPIC	Hydrocarbon potential in East Greenland			East Greenland
SPEAKER	Jørgen Bojesen-Koefoed, Flemming Getreuer Christiansen			
LOCATION	GEUS, Øster Voldgade 10, 1350 København K			
SPONSOR	GEUS			
January 13			MAIN SPEAKER	DINNER SPEAKER
TOPIC	Hejre development – Uncertainty analysis using experimental design techniques			
SPEAKER	Jesper Werner Christensen			
LOCATION	DONG E&P, Agern Allé 24-26, 2970 Hørsholm			
SPONSOR	DONG Energy			
February 11			MAIN SPEAKER	DINNER SPEAKER / DISCUSSION
TOPIC	LNG – Roaring Ahead – Where Will it End?			
SPEAKER	SPE-DL John Morgan, John M. Campbell & Company			
LOCATION	Moltkes Palæ, Dronningens Tværgade 2 , 1302 København K			
SPONSOR	Shell E & P			
March 10			MAIN SPEAKER	DINNER SPEAKER
TOPIC	Mature Fields: Keep Revisiting the Fundamentals New Technology “The Ultrasound Well Scanner”			
SPEAKER	SPE-DL Dr. Neil Williams, Oil Search Limited - Tecwel, Chris Nussbaum			
LOCATION	Moltkes Palæ, Dronningens Tværgade 2 , 1302 København K			
SPONSOR	HESS			
April 16			MAIN SPEAKER	DINNER SPEAKER
TOPIC	TBA			
SPEAKER	TBA			
LOCATION				
SPONSOR	DTU			
May 19			MAIN SPEAKER	ANNUAL MEETING
TOPIC	Halfdan Northeast: Development of tight gas with dual lateral wells			
SPEAKER				
LOCATION	Mærskolie og Gas AS, Esplanaden 50, 1263 København K			
SPONSOR	Mærskolie og Gas AS			
June 19			MAIN SPEAKER	DINNER SPEAKER
TOPIC	Summer party			
SPEAKER				
LOCATION				
SPONSOR	Schlumberger			

GLOBAL VIEW LOCAL INSIGHT

INGENUITY BACKED BY GLOBAL EXPERTISE

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Part of the A.P. Moller - Maersk Group, and active since 1962, Maersk Oil operates some 800,000 barrels of oil and gas per day.

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Innovative technology development is at the very core of Maersk Oil. Through breakthrough technologies and teams of dedicated professionals we have a proven track record of extracting oil and gas efficiently from challenging fields.

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The intervention technology evolution AND ITS VALUE CREATION TO THE OPERATORS

Abstract

How and why has the intervention methods developed over the past three decades in the North Sea off-shore environment? And consequently, what is the value to the operators for performing planned frequent interventions and adapting new light weight intervention technology?

The presentation illustrates examples extracted from the Norwegian offshore sector on why heavy interventions methods like the early utilization of hydraulic workover & snubbing methods from the 70's up to the 90's, gradually were shifted over to coiled tubing interventions and for the past 10 years, to sophisticated wireline and tractor systems.

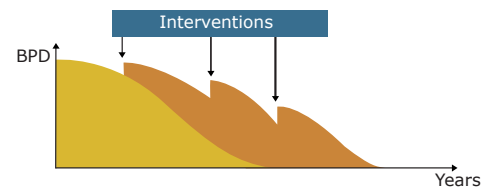
For subsea wells, the RLWI (Riserless Light Well Intervention) technology has now proven to be versatile. Contractors taking the chance investing in such fit for purpose special intervention ships are now receiving long term contracts for this type of intervention on most subsea fields. 4 RWLI ships will be in operation in the North Sea this year and over 10 are currently under construction.

The key to cost efficient intervention is synonymous with the selection of the optimum conveyance method, the right BHA (Bottom Hole Assembly) and ease of well access. The presentation will illustrate how one operator optimized their primary conveyance method shifting from heavy to light intervention and what variety of tools and BHA that had to be developed. This operator as a part of their initial drilling and well construction planning phase also runs simulations and verification programs to ensure ease of access, what's called "intervention friendly wells".

Intervention operations play an important role from a reservoir production management point of view. Some operators have a more planned and biased strategy for utilizing frequent intervention as a part of their drainage objectives vs. others. The benefits have been longer well production life and higher recovery rates.

Prolonging Lifespan of Oil and Gas Wells

- Unlocks huge potential from mature wells
- Higher production levels
- Increased revenue
- Value-creations running into billions of US Dollars



This is Noreco

Noreco is a fast growing Norwegian, independent oil and gas company. The company's focus is to explore, develop and produce oil and gas in the North Sea. Since its start in 2005, the company has grown rapidly through license rounds and acquisitions. Noreco operates in Norway, Denmark and United Kingdom, and employs 70 oil and gas professionals. Noreco is listed on the Oslo Børs under ticker NOR.



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Examples will be given on how an operator through a strategy process resulted in investing in developing special intervention methods for their wells has obtained higher production rates vs. infill drilling. Obviously, the answer is not either or, but ideally to apply both methods concurrently. Another example is taken from two offshore platform fields where the pay back was over 10 times the intervention expenditure.

Although the examples and trends are mainly from the Norwegian sector there are certainly similarities to other offshore locations.



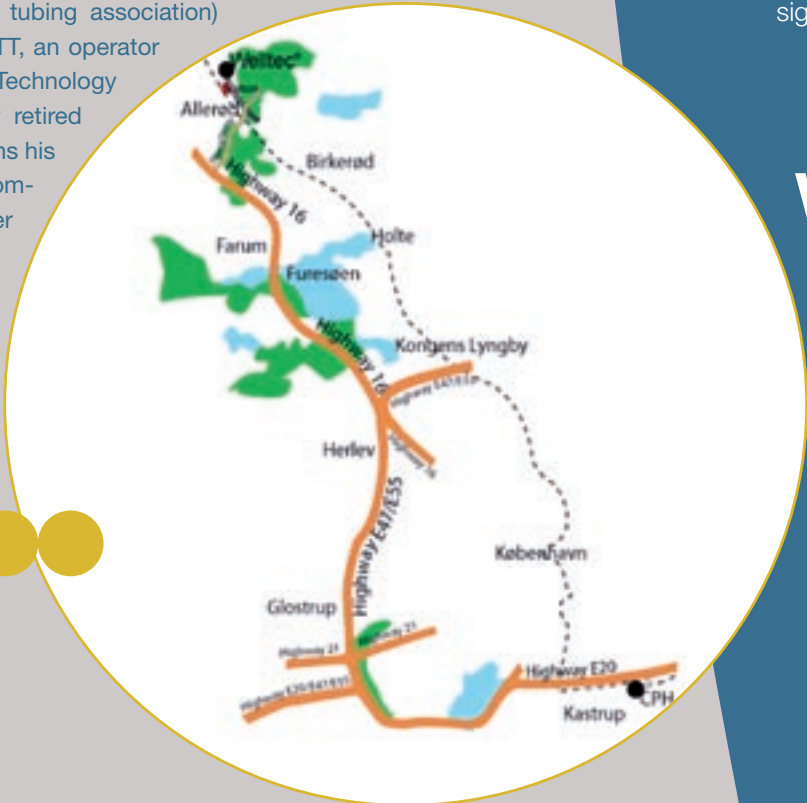
BIOGRAPHY

John Haukvik holds an MBA from the University of Gothenburg, 1974 and a BS in Petr. Engr. from the University of Stavanger, 1977. He then joined the oil industry working internationally for drilling contractors and well service companies. In 1981 he was appointed Country Manager for Newsco Well Services (later acquired by BJ services) in Norway and introduced Coiled Tubing, CT E-line, nitrogen services & foam cementing to the Norwegian offshore market.

In 1987 he founded and was the Managing Director for Norcem Well Services which later became Transocean Well Services with HQ in Stavanger and later he established multiple international bases among one in Esbjerg.

From 1993 to 2008 he was employed with Statoil (now StatoilHydro) as an Advisor and later in a senior management role as a Special Advisor at the Statoil HQ, being responsible for generating R&D initiatives for Through Tubing Drilling & Intervention Technology including qualification processes and project portfolio management. He developed the strategy within Statoil for step changing from heavy, costly and HSE challenging intervention methods over to more lightweight, HSE friendly and cost efficient novel methods.

John Haukvik is a SPE member and has served as a Chairman for ICoTa (Intervention and Coiled tubing association) and is the founder of TATT, an operator driven Through Tubing Technology forum. He has currently retired from StatoilHydro and runs his own well management company and among other assignments is a Board Member of Welltec in Denmark.



COPENHAGEN SEPTEMBER MEETING

THURSDAY 18 SEPTEMBER 2008

PROGRAMME

17:00 – 18:00

Drinks

18:00 – 19:00

Presentation and SPE news

19:00

Dinner

LOCATION

WELLTEC

Gydevang 25
3450 Allerød

MAIN SPEAKER

John Haukvik

TOPIC

The intervention technology evolution and its value creation to the operators

ENTRANCE FEE

None

REGISTRATION

Please indicate your attendance by 10 September by signing up on the internet: www.spe-cph.dk

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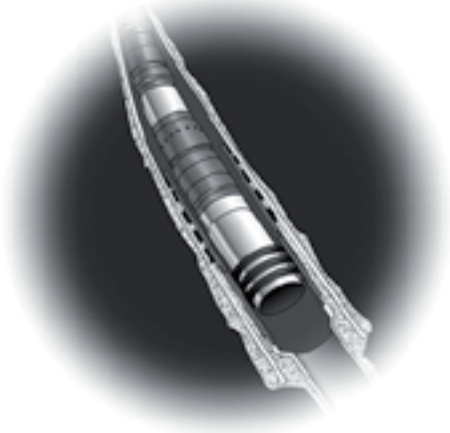
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Photo courtesy of ConocoPhillips

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Industry Challenge

Deploy liner in difficult conditions that require rotating the liner at acceptable circulation rates to mitigate the risk of the well bridging off and the hanger pre-setting — a high risk with conventional liner hangers.

Halliburton Solution

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Customer Benefit

Optimized capital expenditure. The robust design of the VersaFlex expandable liner hanger improves rig-time efficiency and helps avoid costly redundant conditioning trips, hanger damage and premature setting.

To learn more about how Halliburton puts reliability in action, visit www.halliburton.com/reliability1 or e-mail us at versaflex@halliburton.com.

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