

# Management: Delivering the best performance—no matter where

SPE/IADC 52773

## “Development and Implementation of a Process that Fosters Organizational Learning”

How can an operator consistently deliver best in class drilling performance around the world? Phillips formed a Critical Well Improvement Team (CWIT) to answer this question. This team included representatives from each of its E & P business units and from every discipline involved in drilling projects. The team critically looked at the processes used in planning and executing drilling projects and examined the obstacles that stood in the way of consistently delivering best in class wells. This led to the development of the Maxwell, short for Maximise Well Value, Process.

The Maxwell process includes a consistent methodology to be used in planning, executing and post well analysis of drilling projects. In addition it introduces a common filing structure, a common format for documents generated by a drilling project and a method for sharing lessons learned on a global scale. Maxwell also includes a staffing template to help each division identify the personnel resources required to deliver best in class drilling results.

—DR Morgan, et al, Phillips Petroleum UK

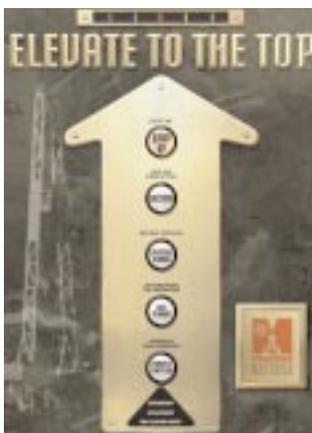
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## “When ‘No’ is the Appropriate Answer to the Customer”

The traditional method of establishing relationships between customers and suppliers in the drilling business is very inefficient and wastes money through consuming resources without adding value. Two avenues of improvement will be described: 1) suppliers evaluating their opportunity and declining where appropriate; 2) customers removing

cumbersome systems from the past and using new, more intelligent and efficient methods for selecting suppliers.

Pursuing unsuccessful bids is both a waste of direct effort and a dilution of resources, which could be properly assigned to developing potentially successful opportunities. The current personnel constraints on the drilling business make this intolerable for companies who wish to differentiate themselves. These companies will adopt logical processes to select the bid opportunities they will pursue. These processes will include strate-



SPE/IADC 52773: Phillips' Maxwell process organizes planning, executing and post-drilling analysis.

gy development with a clear understanding of target markets, business plans which specify prioritization through cost/benefit ratios and decisions trees which consistently lead contractors/suppliers to the highest potential opportunities. Suppliers will ultimately say “no” to the customer when clearly indicated through their decision processes, in a manner that enhances the relationship.

—JP de Wardt, de Wardt and Co  
—DM Leggett, Dresser Oil Tools

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## “Managing Peers Assists—Case Study of Improved Extended Reach Drilling Performance”

Drilling operations on the North Slope of Alaska are noted for best in class performance and innovations such as slim hole designer and multi-target wells. The opportunities for extended reach drilling are enormous. Continued development of the Niakuk field is almost entirely dependent upon cost-effective high-departure wells. However drilling was temporarily suspended on 2 wells during 1997 due to drilling problems.

As a result, Shared Services Drilling, comprising BP Exploration and Arco Alaska, staff conducted a ‘peer assist’ to review all aspects of their ERD opera-

tions from concept stage through well construction. Unique to the process were uncertainties in the problems to be solved as well as the accelerated pace dictated by the drilling schedule. The latter requirement was onerous and required a large group of ‘ERD specialists’. Contributing to the peer assist were partners, major suppliers and experienced ERD operations personnel worldwide.

This paper describes the methodology used to manage various projects recommended by the ‘examiners’ at the peer assist as well as specific outcomes related to ERD operations. The main areas of concern included wellbore stability, hole cleaning and hydraulics management, mud system optimization, tool integrity, and planning processes.

As a result of the post peer-assist studies, drilling performance at Niakuk has improved. Current well plans now incorporate the studies’ major findings, and more aggressive ERD wells are back on the drilling schedule. Goals with partners are also better aligned, allowing increased planning time.

—A Judzis, BP Exploration  
—S S Stoltz, Arco Alaska  
—L Wolfson, Halliburton Energy Services

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## “Well Construction in Azerbaijan (Onshore)”

In May 1998, Arco, through the purchase of Union Texas Petroleum, became the first international oil company to acquire an onshore PSA concession within Azerbaijan by obtaining a controlling interest in the West Apsheron concession located 30 km southwest of Baku.

Although oil companies operating offshore have established a process of doing business within the Azerbaijan’s Caspian Sea region, onshore operations have had their own unique set of challenges relative to permitting, planning, environmental and well construction considerations. In addition, Azerbaijan government officials involved with the onshore permitting process, many of whom had not been exposed to advanced well construction practices, were sensitive to Arco’s approach to well construction. These challenges have been overcome through close cooperation between Arco and Azerbaijan.

The basis of this discussion will be the well construction performance of North Karadag Well 512, a high-pressure

Miocene well drilled to 3,165 m during summer 1998 on the West Apsheron concession.

—G J Guild, T Hendricks, T Tardu,  
Arco Azerbaijan

### SPE/IADC 52777 (ALT)

**“San Alberto X-10: Application of Total Quality Management in Planning a Deep Exploratory Well, to be Drilled in a Very Remote and Environmentally Sensitive Sub-Andean Region in Bolivia”**

In 1996, Petrobrás Bolivia acquired participating interests in the San Alberto Block, a remote and highly environmentally sensitive sub-Andean exploration area in southern Bolivia.

This paper demonstrates the use of current Total Quality Management concepts during the planning of the drilling of Well SAL X-10, Petrobrás’ first deep well there. (350 days to reach 5500 m TD, with estimated costs running at approximately US\$ 29 million), as well as an analysis



SPE/IADC 52776: Permitting, planning and well construction in Azerbaijan all posed challenges for Arco, first international operator to obtain an onshore concession in that nation.

of the results obtained after termination of the drilling operations.

—D F Oddone da Costa, G J F Fernandes,  
Petrobras Bolivia

### SPE/IADC 52778 (ALT)

**“Win 90s: Evolution of a Partnership”**

In the late ‘80’s Shell embarked on a strategy of contracting out the execution of drilling and the management of many associated services on its North Sea installations via a “lead contractor”. Perception of its effectiveness throughout the next decade covered the whole spectrum of opinion. Supporters highlighted the potential for reduced overheads, performance improvement and focus on core business. Detractors highlighted increases in overheads, loss of control and reduction in performance focus.

This paper describes the evolution of a working relationship between operator and contractor from the initial implementation period when Win 90s was being forcefully promoted through the development of a workable and working partnership.

—I Lane, KCA Drilling Ltd  
—S Richards, Shell UK ■