The past year has experienced dramatic changes in industry activities. Despite the downturn, it has been encouraging to see that there has remained an active interest through various industry events and discussions in improvement in the delivery of complex wells.

I had the opportunity to participate in several SPE Advanced Technology Workshops (ATWs) and Forums related to this topic, and it was great to see record attendances, which provided for a diverse, yet high-quality, discussion and interaction. Design factors, improving drilling execution, and complex-well design, along with maximizing reservoir contact for horizontal and complex wells, are still major industry drivers, even though the industry has already drilled and completed many thousands of these wells.

Every year, new technology enters the market place providing potential for improvement of all aspects of horizontal-well operations, but on the basis of excellent and open discussions at SPE events, there still are further challenges to overcome. Conclusions from several meetings included positive reactions to the introduction of new technologies in helping drive performance to new levels, but it was highlighted that the repeatability depended upon good knowledge capture and transfer of learning.

Development of the structured approach, focused on continuous improvement, is as relevant today as it was 20 years ago. This message was echoed at all ATWs and Forums. The reduction in nonproductive time and overcoming operational challenges through better planning, although well known, are still a required focus.

As the industry adapts to a constantly evolving horizontal- and complex-well environment, positional accuracy and placement of the well trajectory are critical to better reservoir contact and production.

One interesting conclusion was that the successful drilling of many highly challenging wells appears to have been taken for granted. However, delivering the completion phase on long-stepout wells and management of the reservoir remain challenges for the future.

**Horizontal and Complex-Trajectory Wells**

**TECHNOLOGY FOCUS**

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