

Society of Petroleum Engineers Distinguished Lecturer's Series

Thursday, September 19th, 2019 at 11:30am

Location:

Dalhousie University
Milligan Room, 8th Floor —LSC

Thriving in a Lower for Longer Environment

Mary Van Domelen

When the price of oil plunged in 2014, industry analysts predicted that shale plays would be shutdown as they would no longer be economical. In reality, the North America shale industry did not just survive, it thrived. How?

The most successful companies responded by exercising capital discipline and effectively managing their resources. As a result, breakeven prices for the key unconventional plays were decreased by 40-60%. Reduction of service pricing alone cannot account for the improvement in profitability relative to oil price. What other factors contributed?

This presentation captures the key lessons learned. The organizational, operational, and technological advancements which allowed the shale industry to continue to thrive in a "lower for longer" price environment are illustrated through case histories. Geologists worked to identify each play's core, while companies evolved from delineation to full field development. The synergistic effect of combining new technology with operational efficiency is illustrated by the ability to drill longer laterals with significant decreases in drill days. Completion optimization, fueled by the use of big data analytics, resulted in drastic increases in EUR allowing expansion of the core in many plays. Improvements in artificial lift technologies accelerated early time production, significantly increasing the net present value of capital employed. Throughout all of these processes, cooperative relationships between the service sector and E&P companies was imperative to the continued success of the industry.

Can the lessons learned by the shale industry be applied in the global setting? Absolutely.

May Van Domelen

Mary Van Domelen holds a BS in Chemical Engineering from the University of Oklahoma. She is a licensed Professional Engineer and a SPE Certified Petroleum Engineer with over 35 years experience. Mary started her career with Halliburton in research and operations roles based in the USA, Europe, Africa, and Middle East. She has held engineer advisor and management roles with innovative E&P companies such as Maersk Oil, Chesapeake, and Continental Resources. Her experience includes horizontal drilling and completion operations in multiple basins. She has co-authored more than 30 papers and holds several patents. Mary was a 2015-2016 SPE Distinguished Lecturer and was the 2016 SPE Mid-Continent North America Regional Completions Optimization and Technology Award recipient.

For more information please visit
<http://www.spe.org/dl/index.php>

or contact Adango Miadonye,
Program Chairperson, at
adango_miadonye@cbu.ca



Maritimes Section

*Distinguished
Lecturer*