

# International Association of Drilling Contractors



## DEC Q1 Tech Forum “MPD: Are We There Yet?”

12 March 2019

8 am – 1 pm

Wild Well Control  
2202 Oil Center Ct.  
Houston, TX 77073

### Minutes

**08.00-08.25** Refreshments and networking

**08.25-08.30** Welcome, review agenda and JIP updates (handouts) – Dennis Moore, Marathon Oil, Chairman

**08.30-08.50** [MPD Enablement for Today and Tomorrow](#): J.G. Samuell, ConocoPhillips

Over the past decade, managed pressure drilling technology has evolved from complex, personnel intensive, high-cost installations to MPD systems that can be controlled from the driller's console. Adoption of the technology is increasing; however, a continued effort is needed to move the technology from an ad-hoc service to an integrated, enabling technology. This presentation will discuss the progression of utilization, current challenges in adoption, and a path forward for unlocking the full potential of MPD at ConocoPhillips.

**08.50-09.10** [“THERE” is in the Eye of the Beholder](#): Calvin Holt, Chevron

This presentation focuses on the obstacles remain to maximizing MPD benefits. Based on a recent MPD onshore operation that failed to deliver on most accounts, this presentation will postulate that many obstacles MPD faces are self-induced. Lessons learned from the operation revealed severe problems across several aspects in MPD engineering and operations. Key aspects to discuss are deficiencies in planning, rig up, competency and well control performance. This presentation will describe issues within each and postulate that they are more frequent than we care to admit. The principle conclusion is that MPD's benefit/cost ratio is not always <1 because of poor project management and questionable operations competency and, as a result, the obvious benefits on MPD will not always be realized.

**09.10-09.30** [Operational Aspects of Managed Pressure Drilling](#): Shaun Toralde, Weatherford Canada

MPD is used in a vast range of applications to address safety, reduce nonproductive time, mitigate hole problems, increase ROP, carry out drilling through transition zones, drill through narrow pore and fracture pressure windows, perform well control, and in HPHT wells. It seems that the future is already here, and at least the next generation of heavy rigs will be designed either with an integrated

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MPD system or with the potential to accommodate the MPD modules as integrated parts of the rig. MPD cementing is thriving. Cuttings handling and chokes are improving. In conclusion, the faster, safer, and more efficient drilling that comes with MPD lowers the overall drilling cost. This should make adopting MPD as a normal way of drilling reasonable.

**09.30-09.50** [MPD Moving to a “Must Have” and Utilizing Brine and MPD Creates a Long-Term Optimization](#): Leiro Medina, Beyond Energy Services

Between early 2014 and the middle of 2015, rig count in Alberta dropped by more than 90%. In such a depressed market, a “Cheaper but Faster” slogan became the norm. With advancements in well design, Alberta’s Deep Basin and Duvernay fields have become prime candidates for MPD, transitioning to a “must have.” In 2017, rig count increased and MPD usage with it; these new wells have decreased NPT and AFEs. MPD’s implementation has led to gains in drilling performance with increased ROP, single BHA runs with lower mud weights, and decreased fluid loss and cost. A case for MPD’s design optimization is the implementation of low cost, solids free brine drilling leading to a >40% well-to-well increase in overall ROP.

**09.50-10.05** **Break**

**10.05-10.25** [Simplifying MPD for Wider Adoption in All Markets](#): Dwayne Barnwell, National Oilwell Varco

Drilling today and in the future will not get easier. MPD is a technology that can reduce most of the issues faced when drilling conventionally. However, cost, complexity, resistance to change, and overselling MPD are the primary barriers to wider adoption of MPD into becoming a standard drilling practice. Integrating MPD directly into the rig can lead to the technology being viewed through the same lens as a top drive. No one is looking at rigs with Kelly drives, and soon the industry should see rigs without MPD as obsolete and unfit for purpose.

**10.25-10.45** **MPD-Ready Solution Yields Positive Results and Synergy – Indicates Direction of Future Industry Role**: Adam Keith, Nabors Drilling

Drilling contractor ownership of fit-for-purpose MPD equipment and services enables new concepts to leverage today’s advanced land rig infrastructure. Engineering and integrating MPD capabilities into the rig unlocks advantages in capital requirements, elimination of pre-job surveys and engineering, high mobilization costs, and automation of tasks. The result is standardized utilization of MPD across a fleet of rigs with improved operational safety and influx management, lower onboard personnel exposure and cost, more efficient rig moves, and transparent performance analytics. Scalability across a common rig platform by the rig contractor is now possible. This presentation explores real cases of MPD’s role in the industry’s new business model: A success story of collaborative efforts between an operator and contractor-owned MPD-Ready rig that changed the drilling landscape by making MPD standard, and an opportunity where MPD may have served as an efficient, proactive solution.

**10.45-11.05** **MPD EVOLution 2019 – A Deepwater Drilling Contractor’s Perspective**: Neil Gooding, Seadrill

The traditional business model for Managed Pressure Drilling has been for the Operator to contract a rig and then separately contract third party MPD services. The Divide between Drilling Contractor and Service Company is a reality. Seadrill philosophy is to purchase the MPD spread and treat it as permanently installed rig equipment. When Drilling Contractor’s took on the Owner/Operator role there was a Major Step Change in the MPD World. Permanent installations are incorporated into

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our preventative maintenance and recertification systems. We believe that this provides a superior service for our clients.

## **11.05-12.00 Panel discussion**

The seven speakers will convene in a panel discussion with the audience to address the questions at the core of this event: Where is the industry now in the adoption of MPD? Is it becoming the normal, default way to drill wells? Should it be? Have we come as far as we should in adopting MPD? If not, how much further do we need to go, and what obstacles remain to maximizing the benefits to be realized?

## **12.00 Adjournment and lunch (sponsored by Wild Well Control)**