# IADC DEC Q1 2021 Tech Forum, "Effective Communication Drives Well Delivery"



March 24, 2021, 8:30am-12:05pm

This Tech Forum will explore whether today's tools and techniques help or hinder communication between drilling stakeholders as we execute wells in a fast-paced environment. Discover how organizations exchange information and maintain awareness to make good decisions when needed. For example, what is current best practice between disciplines and people to enhance our ability to listen, understand and respond with the best problem-solving efforts? Themes include:

- How do today's communication tools connect humans with minimal effort?
- How do we know when we communicate effectively?
- What are do's and don'ts about visual input to increase understanding, apply knowledge and reach conclusions?
- What are new approaches to clarify and sequence communication?
- What needs to be communicated and when for decision makers?
- When is face to face or a telephone call needed?
- What are the new ways to communicate when face to face isn't an option?

#### Minutes:

**08.30-08.35** Welcome – Dennis Moore, Chairman, and introduction to event – Matt Isbell, Hess

**08.35-08.55** DEC JIP proposal: Theoretical Analysis of Fiber Glass Casings, Robello Samuel, Halliburton Click here to view the powerpoint.

Understanding the failure envelope of fiber glass casing involves both theoretical and lab tests with various vendors. This JIP will include theoretical analysis of fiber glass casings, failure modes and envelop for nonmetallic pipes. It will also study different failure mechanism of laminae: fiber rupture; fiber buckling and kinking; matrix cracking under transverse tension and shearing; matrix crushing under transverse compression and shearing.

# **O8.55-09.25** The Missing Link: Communication to Enable True, Sustainable ROP Enhancement, Troy Oney, Helmerich & Payne

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We've all heard the phrase "break down silos." The expression extends beyond just one company. Completing a successful drilling program is not the job of just one person, department or service provider. This is especially true in the world of ROP enhancement, which has many moving parts. A successful partnership, enabled by thorough and united communication, allows for not only lower costs and faster drilling, but it also reveals additional key insights regarding the interconnectedness of all aspects of a sustainable well program.

The partnership between multiple parties, when managed efficiently with broken down communication silos and a common goal, enables performance improvement and successful implementation. The presentation will explore the many parts and perspectives necessary to

ensure a successful ROP enhancement program on a drilling rig. Best practices will be reviewed and additional benefits of integrating separate services into one operation will be discussed.

## **O9.25-09.55** Digital Solutions for Connecting Drilling Stakeholders in the Office and the Field, Celeste Shaffer, Nabors

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Nabors' RigCLOUD platform and 24/7 remote support through RigLine are effective tools that enables seamless communication across the field, technical experts and other stakeholders. This connection has increased collaboration for internal and client operations teams. Improved communication results in capturing lessons learned, proactive maintenance to prevent downtime and overall optimization of well delivery. This presentation will cover RigCLOUD as a tool for connecting drilling stakeholders; daily performance reporting; addition of a comment feature that enables stakeholders in the field, office or ROC to communicate within the data set; ability to share a variety of dashboards across stakeholders; SmartNAV, RigCLOUD enabled automated directional drilling that provides visibility into directional drilling operations from anywhere.

## 09.55-10.25 Eliminating Data Transfer Lag Times: Better Communications Happen When All Parties are Looking at the Same Data, Philip Neri, Energistics

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Active drilling operations involve many actors (drill site staff, operator, drilling company office, data logging, consultants, etc). Events affecting the progress of drilling require tight communication within this disparate group of experts to evaluate incoming information and decide on a course of action in a voice- or video-conference session. Working from different locations, everyone must be looking at the same data as it is recorded in real time. Legacy data transmittal protocols add a lag of 10 to 15 seconds to real-time transmittal, resulting in remote observers waiting for data to display on their screen. Communication with, and timely feedback to, the drilling operation suffers from this lack of a shared view of fresh data.

The industry's data transfer consortium recently published a new version of its 2016 WebSocket-based two-way protocol that shrinks the data lag to 1 second, while facilitating distribution to multiple recipients. Collaborative decision-making improves when all actors on a call are looking in real time at the same data and can rapidly apply analytics to contribute insights to the group.

#### **10.25-10.35** Break

# 10.35-11.05 Operations Control Center - Together, We Achieve Superior Well Construction Performance, Responsibly, Ana Da Silva, Schlumberger

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The Schlumberger Well Construction (WC) division has developed the "Operations Control Center" (OCC) with a mission to "drive technical and financial performance through a highly integrated network of subject matter experts and resource optimization." The covered job

horizons are short term (0-3 months) and tactical (3-12 months). The main goals of this organization are to assess and capture the risk levels of the projects, providing a suitable support throughout the planning and job cycle, based on an escalation protocol. New internal processes were defined to communicate the risk in a standard and effective way, by removing redundant tasks and provide data selection guidelines. If the identified risk cannot be mitigated at the location, the local teams have tools to escalate the risk by communicating and engaging the required levels of the organization. As many drilling product lines have recently been consolidated into the WC Division, we have a unique opportunity to connect SMEs from different domains such as drilling fluids, bits, drilling & cementing.

## 11.05-11.35 The Intent and Impact of Structured Communication on Decision Making at the Wellsite, Pradeep Annaiyappa, Nabors

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This talk will explore the intent of wellsite communications and the impact of structured communication on decision making. First, there are different types of decisions: Implicit – This should be done but you choose when; Explicit – This must be done now; Informative - This could be done). Secondly, we will consider how structured versus unstructured communication mediums impact the effectiveness of each of these communication by considering how they fit into workflows in the context of decision making by both humans and machines. There are new systems under development to assist in collecting and presenting the drilling design and execution plans in ways to structure decision points and increasingly formalize the bridge between the two. The authors will make the case that the tradeoffs of increasing the constraints between the two will ultimately pay off in terms of well design and process control.

# 11.35-12.05 Leveraging Cloud-Based Systems to Improve D&C Communication, William Turner, Oxy Click here to view the powerpoint. Click here to view the recording.

Cloud-based file systems and applications for notes and team communications have helped overcome many of the challenges present in D&C communications. The cloud systems provide significant advantages for users to opt in or out of conversations, work on the same version of a file, share files without using email, and access all files from personal and mobile devices. Advanced features make it possible to automate workflows such as approval of procedures. The cloud systems augment traditional communications systems such as morning meetings, email, phone calls, operational instructions, handovers with relief personnel, and Management of Change processes. This presentation will cover how the Oxy New Mexico D&C team achieved success with these various cloud applications and how the team managed the transition, including training and best practices.

#### **12.05** Adjournment