



Sensia Petro-technical Applications Seminar

SPAS Calgary 2023

Wednesday, 29 March 2023

Schlumberger Canada Head Office, Suite 200, 125-9 Ave SE, Calgary, Alberta

Purpose

Introduce Sensia's powerful and exciting vision for the future of digital technology within the Oil and Gas Industry while building confidence and enthusiasm for Sensia as the preferred partner for digital transformation.

Overarching Message: Intelligent Action and Connection from the Edge to the Enterprise

A uniquely powerful combination of connected domain knowledge, real time automation and edge intelligence with automated insights for better decisions and execution across all cycles, at speed to continuously optimize operational and production performance, reduce costs and reduce carbon footprint.

Agenda

| 8:00 – 8:30 | Arrival & Registration | |
|-------------|---|--------------------------|
| 8:30 – 8:45 | Welcome Message Introduction to Sensia and SLB relationship and market alignment now and into the future. | John Wilkins Sensia |
| 8:45 – 9:05 | Flex to Fit Solutions for Intelligent Operations Digital solutions are playing an ever-important role in oil and gas operations. New digital production technologies are evolving beyond just the well to break down data silos and impact operations. We are connecting basic assets and converting them into intelligent ones to enable better, more informed decisions. This results in better insights, lower operating costs, and maximized output | Jared Bruns SLB |
| 9:05 – 9:30 | Unlocking the Value of Data Through an Operational Data Platform Data is oftentimes segregated and siloed in organizations both inside and external to the energy industry. Aligning various types and formats of data is time consuming and expensive. Cognite's Data Fusion Operational Data Platform can ingest and contextualize various forms and types of data including high frequency time series data, reports, emails, accounting, etc. This allows users to efficiently visualize, manipulate and analyze data to make observations and gain insights that lead to effective and impactful operational decisions. | Jason Dressel Cognite |



9:30 - 10:00**Digital Applications in Production to Improve Operations** Jason Baihly SLB SLB and key partners have developed digital solutions to gain valuable insights into production operations. Our solutions allow operators to better visualize, alert, and diagnose challenges that arise in artificial lift and processing operations in real-time. When it comes to artificial lift, SLB has focused solutions for ESPs, PCPs, and rod pump. Some of our solutions go as far as suggesting operational changes for the lift system and even automatically making the desired change on the equipment. On the processing side beyond the aforementioned benefits, digital twins can be constructed with the industry leading Symmetry engine to optimize processing in real-time and perform scenario modeling to best plan for dynamic system changes. **COFFEE BREAK** 10:00 - 10:15Cybersecurity Services - A risk based approach to Cyber 10:15 - 11:00 Elton Thimodo/ William Reed **Rockwell Automation** The cyber threat environment is the most volatile it has ever been. Sift through the noise with the threat intelligence expert at Rockwell Automation to review the state of the threat landscape for industrial operations in FY23. This Paper will provide insights into how attack adversaries or 'threats' operate. The session will walk through the cyber kill chain describing some common attack vectors and how Rockwell Automation leverages the NIST Cybersecurity Framework to help clients defend their Operational Technology (OT) networks. 11:00 - 11:45 **Acid Gas Injection Line Optimization for Water Dropout** Zayn Aladin - Sensia and Hydrate Prevention Linnea Russel - SLB Acid gas injection is a critical part of many oil and gas operations, a large component of this process is compression, combined with conditioning. hydrocarbon Fluid behaviour is reasonably well known however, accurately predicting the phase behaviour of injection systems is complex and requires specially developed models. Sensia's Throughput optimization solution utilizes SLB's thermodynamic modelling to provide new levels of dynamic optimization for acid gas injection, within automation and control systems. 11:45 - 1:15**LUNCH** PM1:15 - 2:00**Solving problems with Well Pad Automation** Zack Munk Sensia

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Changing or modernizing control systems can be a time consuming and costly exercise, our customers prefer a design-



once-build-many strategies that is flexible, scalable and reusable. With the Multi-Well Pad Process Automation, the high cost to design, build and test new control systems can be reduced significantly with the flexibility and scalability of a control system capable of managing artificial lift and production testing. Benefits can represent a valuable savings on Engineering labor for designing, building and testing of a control system with reusable Controller and Visualization applications with scalable hardware architecture and flexible I/O options.

2:00 – 2:45 Creating Value for SRP & PCP Artificial Lift Systems

Darcey O'How Sensia

During times of uncertainty, upstream producers and operators focus on cost optimization and maximizing net profit bound by highest safety and environmental impact. They seek the ability to decrease system failure rates consequently minimizing down time and lifting cost by extending equipment running life and optimizing operating costs. The primary objective is to provide an automated system focused on optimizing the productivity and minimizing operating costs for sucker rod pump and progressing cavity pump systems. We will identify operational challenges and the value that automation and remote surveillance creates with an end-to-end system.

2:45 – 3:00 **COFFEE BREAK**

3:00 – 3:45 Realtime Multiphase Flow Metering

Liviu Husoschi SLB

Regardless of its 2 decades of development, multiphase flow measurement remains new technology, however the role it can play in production optimization is well known. As North American operators drive to implement news CAPEX, OPEX strategies to enhance production, reduce lift cost, digitalize operations, and reduce CO2 gains momentum, so too does multiphase flow acceptance. SLB is one of three manufacturers selected to work with the Alberta Energy Regulator with the goal of accepting Multiphase Metering Technology for use in Allocation Metering without the need for special acceptance. This is a step change is acceptance of Multiphase Metering technology and movement toward enhanced production.

3:45 – 4:30 **Panel Review**

Sensia/SLB/Rockwell Automation

5:00 PM – 7:00 **Hospitality Event** PM

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