

### **2019 PANEL DISCUSSIONS**

# Quality Source Inspection – Tuesday, January 29 – 1:35 PM – 2:40 PM

This panel discussion will consist of both owner users and EPC firms that will share opinions and best practices related to Source Inspection activities for Fixed Equipment and the ever-increasing importance of this role. A systematic approach to Source Inspection provides confidence that materials and equipment being purchased meet the minimum requirements, as specified in the project documents and contractual agreements. The discussion will center on levels of training and experience required, project specific Source Inspection planning activities, equipment risk assessments, Inspection and Test plans, coordination of Inspection Events, project document review, welding procedures and qualifications review, project schedule review, pre-Inspection meeting, in process fabrication monitoring, nonconformance reports and final acceptance.

Panel Leader: Mason Thomas, Marathon Petroleum Corporation

Panelists: Blaise Cordier, Chevron Energy Technology Company, Michael Nickols, Marathon

Petroleum Corporation, Daniel Walker, Intertek Industry Services, Richard Wagner,

S&B Engineers and Constructors, Ltd.

### HTHA: Inspection, Damage Mechanism and FFS – Tuesday, January 29 – 1:00 PM – 2:40 PM

This panel will include HTHA industry experts from the fields of inspection, materials/corrosion, risk based inspection, and Fitness-for-Service. The panel will highlight learnings from the earlier HTHA session presentations, present new developments in the area of inspection (e.g., Onstream Acoustic Emission Monitoring for HTHA- S. Ternowchek), and recent changes to the inspection sections of API 941. An overview of work by the E2G JIP, Stress Engineering JIP, and API FFS Assessment Program will also be included.

Panel Leader: Joe Krynicki, NDE DTL - Materials Engineering, ExxonMobil Research & Engineering,

Panelists: Clay White, Phillips 66

Mark Carte/Brian Olson, Stress Engineering Services

Art Jensen, PBF Energy

## Midstream is Becoming Mainstream - Tuesday, January 29 - 3:30 PM - 4:55 PM

There have been numerous challenges, many of which are showcased in the public media, related to approvals and consultation for pipeline projects within the North American Midstream industry. As a result, companies have had to strengthen their integrity programs and provide assurance that heightened levels of safety and reliability can be achieved. This panel will discuss various technical innovations that have been implemented to achieve these results, and how the advanced inspection techniques and methods used in the field provide valuable information into these integrity programs. This panel will also highlight some of the current pitfalls and barriers that companies are working to

overcome to allow innovation in integrity management to reach these new heightened levels. These advancements will support companies in the journey to gain the social license and required changes that will enable Midstream industry growth.

Panel Leader: Rick Seaver, Williams

Panelists: Leslie Fangue, Plains All American, Mark Piazza, Colonial Pipeline Company,

Mark Maxwell, Enbridge

Big Data in Big Oil: How Do These Mix? - Wednesday, January 30 - 10:50 AM - 11:55 AM

Big data is a term that describes the large volume of data — both structured and unstructured — that inundates a business on a day-to-day basis. While the term "big data" is relatively new, the act of gathering and storing large amounts of information for eventual analysis is ages old. In general, big data is a term used to refer to data sets that are too large or complex for traditional data-processing application software to adequately deal with. Variety - Data comes in all types of formats — from structured, numeric data in traditional databases to unstructured text documents, email, video, audio, and other data transactions. We need to remember it is not the amount of data that's important. It's what organizations do with the data that matters. Big data can be analyzed for insights that lead to better process decisions, strategic business moves, pattern and trend recognition, on-stream risk analysis and mitigation, and so much more. Join our panel discussion as we consider how big data moves around in the world of big oil through a conversation on vision and applied use."

# Piping CMLs: Optimizing Numbers, Placement, and Data Analysis – Wednesday, January 30 - 1:35 PM – 2:40 PM

A common historical approach of determining the number of piping CMLs based upon a calculation incorporating pipe length and number of fittings have given way to methodologies incorporating other factors such as damage mechanism-specific details and estimated corrosion rates. Similarly, the historic point-by-point analysis of thickness to determine the long and short corrosion rate to predict piping remaining life have evolved to piping circuit and statistical thickness analysis techniques. This panel will highlight current techniques and methodologies used by various owner-users in establishing their piping CML inspection program. The facets of the program covered by the panelists will be approaches to determining the number and placement of CMLs and the analysis of the thickness data. Included will be rationalizing historic CML placement approaches to current approaches.

Panel Leader: Ray Konet, Valero Energy

Panelists: Clay White, Phillips 66, Mark Geisenhoff, Flint Hills Resources, Andy Gysbers, Becht

Engineering, James McVay, Andeavor

## Permanently Mounted Sensors – Wednesday, January 30 – 8:35 AM – 9:40 AM

The same basic challenges remain for the continuous drive to improve inspection effectiveness and efficiency, the probability of detecting corrosion and erosion and the accuracy of measured degradation rates for increased integrity assurance. Many of these challenges such as the accuracy and repeatability of ultrasonic thickness measurements have been significantly reduced by the use of permanently installed NDT sensors. This panel discussion will query owner-operators on their experience and feedback on use of these technologies, including incentives and barriers to wide scale use of permanent sensors within their companies.

## Robotics in Tank Inspection – Wednesday, January 30 – 3:50 PM – 4:55 PM

With an ever-increasing demand for crude and refined product storage within a dynamic, customer-focused midstream sector, operational reliability and up-time has become a priority for terminal and tank farm owners and users. The industry sees significant value in optimizing tank turnaround schedules and extending tank in-service intervals by predicting and avoiding failures while reducing HSE impacts associated with waste removal and human exposure. Robotic applications to support internal tank inspections are now maturing to the point where they can serve as powerful tools for owner/users to improve the reliability, safety and costs of the tank storage business. This panel will present the vision of owner/users on how to incorporate robotics into their tank integrity programs. The panel will consider three different robotic in-service tank inspection approaches supported with case studies and discussions of future development opportunities. This panel will also highlight some of the current barriers that owner/users and vendors are working to overcome to facilitate the inclusion of robotics into tank integrity management programs and help capture the benefits mentioned above. This panel discussion will provide valuable insight and discussion opportunities applicable to robotic developers, service companies and owner/users looking to advance the adoption of this technology within the industry.

Moderator: Mauricio Calva, Chevron

Panelists: Rafael Rengifo, Phillips 66, Steven Trevino, Diakont, Mark Slaughter, Intero Integrity,

Eric Levitt, Veritank

# 2019 Midstream Recap Panel – Thursday, January 31 – 1:00 PM – 2:05 PM

With an ever-increasing growth in midstream and the number of interesting sessions we have this year in this sector. This panel offers the opportunity to wrap-up the summit with a casual discussion with our very own midstream chairs and track leaders. They will share with the audience their insights and perspectives on the different sessions, promoting and facilitating discussions that couldn't fit within the time allowed for Q/A during the sessions. This panel will also provide an opportunity to discuss your feedback on the midstream sector and its tracks, your suggestions for the next summit and the opportunities you see to continue growing this sector.

Panelists: Jerry Brown, Brown Corrosion, Mark Maxwell, Enbridge, Mark Piazza, Colonial, Rafael Rengifo, Phillips 66