



ID	Title	Description	Presenter	Company
1A-4685	Remote Monitoring – A Next Generation Asset Health Strategy	Emerson's Remote Monitoring Solution (RMS) makes it easier for plant sites, like the J.J. Pickle Research Campus in Austin, TX, to maintain and administer their automation and production assets. As part of a pilot project at the University of Texas, the remote monitoring solution acts as a way to proactively detect issues with plant assets of all types, and of supplementing site personnel with the expertise in networking, security, process control systems, vibration monitoring, valve diagnostics and other technologies to effectively administer and maintain these systems.	Robert Montgomery	University of Texas Center for Energy & Environmental Resources
1A-4727	Selecting the Best Portable Tools for Maintaining Your HART and FOUNDATION fieldbus devices	Handheld configurations, calibrators, loop validators, laptops, notebooks, tablets, mobile phones, and other specialty devices are just a few of the possible tools that today's instrument technician may need to install a device or diagnose a problem in the field. Many of these tools have overlapping capabilities. Plant maintenance practices, budgets, and security are other factors that can affect what tools are used (or even allowed) in a plant. This session will address how to determine the right complements of tools for today's digital plants using HART and fieldbus devices.	Alan Dewey	Emerson Process Management
1A-4822	PROFIBUS Connectivity for AMS Device Manager	This paper will describe how to integrate and use the Emerson AMS Suite predictive maintenance software application in a PROFIBUS network that is controlled by a third party host. Today, Emerson's AMS Suite has become the leading asset management solution. To provide the asset management capability of the AMS Suite to operators of automation systems utilizing third party host systems, the functionality of the AMS Suite was extended by integrating network access independent from DeltaV, for fieldbus networks like PROFIBUS.	Christian Braeutigam	Softing Industrial Automation GmbH
1A-4936	Getting More from Plant Floor Intelligence	Asset monitoring sources include IT, control systems, process equipment, and field instrumentation. Smart instrumentation for measurement of process variables alone is archaic. Intelligent device integration provides greater flexibility and process intimacy for decision support resulting in safer, more reliable, and optimized processes at lower cost. This session will present strategies that leverage the rich information embedded in intelligent devices to improve plant safety and performance.	Paula Hollywood	ARC Advisory Group
1A-5133	Proactive Asset Management Survey Creates Roadmap to Parts Inventory and Obsolescence Plan	Inconsistent process control asset data at Palo Verde Nuclear Station impacted reliability, outage planning and plant operations. A parts storage reduction forced the need for up-to-date asset data. Caltrol and Emerson created an installed base asset data collection program database for Palo Verde using iPads and a SharePoint website. The comprehensive database included recommended spare parts, updated serial records and bill of materials, pictures and geo-location of each tag to be used for outage planning, inventory reduction, parts procurement, and a proactive roadmap to reliability.	Angelo Angeleri	APS PVNGS



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1A-5340	How to Maintain Your Wireless Field Networks	WirelessHART instrumentation provides solutions for many challenges presented in the process environment. The key to a successful wireless network starts with planning according to recommended design practices. But are you prepared to maintain it? The AMS Wireless SNAP-ON Application allows you to both design and maintain multiple wireless networks. It provides you with everything you need to ensure a high level of data reliability for all your wireless needs.	Nicholas Meyer	Emerson Process Management
1B-4220	Delivering Value through an Instrument Reliability Program	From 2011 – 2012, the Instrument Reliability team at The Dow Chemical Company (Dow) Deer Park facility established a program that provided instrumentation professionals a formal structure to improve instrument reliability across the site. The program delivered a practical set of tools that assists Instrument Reliability Engineers, Technologists, and Technicians in their daily activities. The framework for the program's strategy focuses on two main categories (Short-Term and Long-Term Strategies) and four improvement areas (Reactive, Proactive, Reliability-Centered, and Instrument Projects).	Shadrach Stephens	The Dow Chemical Company
1B-4282	Shell Puget Sound Refinery Using Wireless Technology to Monitor Remote Intermittent Pump Operation	Remote pumps that run intermittently are often difficult to monitor using the standard route based preventative maintenance routine that is common with continuously ran pumps. The intermittent run schedule is difficult to predict, which can result in pumps that can go months or even years without obtaining critical vibration analysis data. Without routine monitoring and diagnosis, pumps are often run until a critical failure occurs.	Guy Masters	Shell Puget Sound Refining
1B-4461	Best Practices for AMS Device Manager use in your plant	Best practices for the implementation of AMS Device Manager will be discussed. A work procedure for the use of Alert Monitor, its configuration and use for Proactive Maintenance will be provided, Device replacement and Device Configuration will be discussed as well. A sequence of activities will also be provided in order to optimize an online system and see immediate results. Emphasis will be made in the update of the Maintenance work procedures.	Rick DeVore	Cargill, Inc.
1B-4540	Optimization of Natural Gas Custody Transfer Stations of TRANSPETRO	In recent years the use of ultrasonic flow meters has increased significantly in all the TRANSPETRO's natural gas custody transfer stations of the Brazilian territory. A proper calibration and maintenance plan for these meters is critical not only to comply with the National Regulatory Agency ordinances (ANP) but also to ensure the specified accuracy and uncertainty of the meter runs and eventually to reduce unaccounted for gas on the pipeline system. TRANSPETRO decided to assign EMERSON an annual contract to manage the calibration services plan including technical assistance services.	Tulio Campos	TRANSPETRO
1B-4607	Implementation of predictive maintenance for Fieldbus Physical Layer in Peru LNG Plant.	Nowadays PERU LNG S.R.L. is the biggest liquefaction company in Latin America and it produces 620 million tons of LNG, the plant is a newly one with around 2 and a half years of operation. We've been experiencing plant shutdowns mostly caused by fieldbus instrumentation, initially we lost communication with several instruments and it worsens with production halts. This affected reliability tests as well as delays in ship loadings. The tests and improvements planned for the plant were delayed due to the lack of trust in the system.	Walter Flores	Colp SAC



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1B-4640	Creating a Calibration Management System using Emerson's APM	The Leland Olds Power Plant within the Basin Electric Power Cooperative required a full calibration management solution to satisfy increasing regulatory and insurance demands for documenting Calibration Results. They chose the Emerson Process Management's AMS: Asset Performance Management (APM) system as a way to store and update Instrument information (including RTD and Thermocouple data), create and schedule calibration actions, store and retrieve the as found and as left information, as well as producing acceptable documents containing the results.	Kim Jackson	Basin Electric Leland Olds Station
1B-4692	A Dynamic Duo: AMS Machinery Manager and Essential Asset Monitoring Solutions to the Rescue!	Emerson's AMS Suite: Machinery Health Manager and Essential Asset Monitoring (EAM) solutions are two options for asset health monitoring. EAM solutions combine process and asset data to provide a quick look at asset health and provide a proactive early warning system for issues with rotating equipment. AMS Machinery Manager provides the insightful expert data needed to diagnose the specific machine issues, such as full spectrum waveform vibration data. While each solution provides great value as a standalone application, combining the 2 solutions provides even greater value.	Steve Briggs	University of Texas - Austin
1B-4821	Rediscovering the Impact of AMS Device Manager as a Reliability Tool at QatarGas	QatarGas (QG) is one of the largest LNG plants in the world. Their corporate goal is to be a top quartile producer. One of their 4 gas trains has ~12,500 tags controlled by DeltaV and connected to AMS Device Manager. While AMS was utilized for commissioning, QG has struggled to apply AMS successfully as a reliability tool. A pilot project was initiated to revitalize the use of AMS Device Manager on a select group of 250 critical tags. The presentation will discuss important findings discovered by QatarGas and Emerson as they partnered in solving this challenge.	Abdel Attou	QatarGas
1B-4851	How Does a Heat Exchanger Automatically Tell You How It's Feeling? Ask PEMEX!	Fouling in heat exchangers is a common problem and results in heat losses, increased fuel costs and emissions and possibly reduced throughput. Wireless measurements provide valuable process data for heat exchanger monitoring. Analysis of the data is required to determine the optimal cleaning time to maximize effective onstream time. The Essential Asset Monitoring Solution for Heat Exchangers provides online data analysis through preconfigured algorithms and reports overall heat exchanger health, indication of fouling rate and when cleaning is required.	Gerardo Palomo	Pemex
1B-4909	Emerson's PeakVue® Technology Detects Faulty Bearing at OMIFCO, Preventing Costly Downtime	OMIFCO is state-of-the-art Ammonia-Urea manufacturing complex in Oman. This abstract is about detecting failure of turbine thrust bearing using PeakVue before any symptoms of Journal or rotor failure occurred. We were experiencing turbine thrust bearing failure problems frequently for last few years. We were unable to detect issues through our old vibration system until RTD's indicated high temperature of journal—after thrust bearing failure & too late to prevent machine damage. This changed after we started measuring vibration using CSI 2130. We saved a critical machine & production downtime.	Ali Al Siyabi Al Siyabi	Oman India Fertilizer Company, Oman
1B-4931	How To Justify Plant Reliability Improvements	It is well accepted that improving equipment reliability in refineries and petrochemical plants is desirable. Enhanced online real time measurements and use of predictive reliability analytic models based on these enhanced measurements can result in significant reliability improvements. But how should these enhancements be evaluated economically?	Douglas White	Emerson Process Management



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1B-5058	Petroleum Company improves Pump Health Monitoring and Secures Production Goals with Emerson Wireless Vibration Monitoring Technology.	Petroleum Company in ME monitors critical pumps across their oil field using an offline data collection technology. It takes one whole month for operators to collect all vibration data from all the pumps. Condition monitoring & reliability team have to wait for the output of every collection cycle to analyze and address pump health issues. The success of Emerson wireless monitoring technology Pilot project convinced Company to launch a full scale project that would cover 106 critical pumps across Company's South field and bring more benefits in terms of Operation reliability.	Asad Malik	Emerson Process Management
1B-5180	Online Vibration Monitoring (Braskem / Brazil): How to avoid unplanned shutdown using the predictive diagnostics (PeakVue)	Using the diagnostic capabilities of AMS machinery health manager and a CSI online vibration monitor, they found excessive vibration in the radial bearing pump supply reactor. They were able to identify a specific bearing as the cause and recommended planned shutting down to the process. However, the plant needed to stay in production for some days to fulfill a commitment to a customer. If the production system had to be shut down due to an unexpected failure, emergency repairs would have a cost to the company more than \$400 thousand in lost revenue.	Julio Magalhães	Braskem
2-4841	Third Party Benchmarking: Measuring & Comparing Performance Among Peers	Benchmarking programs are custom designed with the objective of delivering validated, comparative information that can be used to make business investment decisions and take actions to improve performance across the enterprise. Although companies compare their performance and progressive improvement on a regular basis, their comparisons tend to be against prior reporting periods and against their own operations. Participants will discover how the correct methodology can create a competitive advantage through monitoring their costs and performance against their peers on a regular basis.	Kevin O'Donnell	Phillip Thompson
2-4973	How to Assess Risk of Measurement Uncertainty with Custody Measurements	This presentation will outline Emerson's methodology for assuring a pacesetter hydrocarbon management practice within a refining company. Best practices and standards to be utilized will be summarized together with how to evaluate risk from measurement uncertainty and identification of areas for improvement together with the actual examples of potential benefit calculations.	Patrick Truesdale	Emerson Process Management
4-4588	ROC and Wireless Instrumentation Reduces Cost for Well Head Automation	Shell Exploration & Production Co. operates multiple oil & gas assets in North America producing natural gas, oil and/or hydrocarbon condensate as part of Unconventional Business in Shale Oil & Gas play. One of the major business challenge is to have a quick deployment of wellpad facilities including instrumentation & automation equipment once the wells are drilled and completed to minimize the production deferment. This presentation will discuss the reliable and quick deployable solution for the wellpad automation using Emerson Remote Automation Solutions and Rosemount Wireless products.	Rajesh Patwari	Shell E&P
4-4604	Reducing Cost with FOUNDATION Fieldbus Fisco and High Powered Trunk Solution in Zone 2 Environment	For an oil field gathering center, Kuwait Oil Company (KOC) installed a DeltaV integrated and control safety system (ICSS) with 4700 I/O installation including 35% FOUNDATION fieldbus (FF) I/O located in a Zone 2 hazardous area. A High Power Trunk (HPT) solution with FISCO protected spurs versus a pure FISCO approach allowed up to 2.5x more field devices per segment, reduced the number of segments required and overall cost of the ICSS.	Khaled Saleh	-



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4-4671	Minimize Time TO First Oil - Shale Well Head Site	Shale Gas Well Sites are challenging since there is always pressure to bring first oil faster once the well is complete. These sites are unmanned most of the time during operation. Critical equipment such as Separator, Heater Treater, Tank Farm, LACT unit and sales gas metering have their own control and instrumentation challenges. Each operator has their own philosophy for operating these sites for allocation, measurement and control. Emerson consultants participated actively in some of the Eagle Ford sites with users to understand a best fit solution.	Sudhir Jain	Goodrich Petroleum
4-4684	SANTOS Brisbane Primary Control Center – A Collaborative Environment for the Intelligent Field	SANTOS has been embarking on their Intelligent Field Vision for the past 4 – 5 years. The Intelligent field combines intelligent field devices with applications that use this data to enable better decisions about how to best operate their fields. Intelligent Fields is also a highly collaborative environment where multi-discipline teams work together to solve difficult problems. In order to achieve this vision, SANTOS built the Brisbane Control Center in 2010. This new Control Center allows them to monitor and control all their upstream facilities and collaborate with teams in the field	Patrick Gorey	Santos
4-4820	Pipeline Controls System Modernization	Industrial Gas experience in the migration of field flow computing and programmable logic controller technologies into a new ROC809 single platform in 2006. At the same time incorporating the latest industrial gas (oxygen, nitrogen, argon, hydrogen, helium) properties for the equations of state computation used for billing. Highlights the unique use of the Emerson ROC architecture to leverage company specific programs to setup, configure and provide special billing accumulation in the field. Includes the use of various communications connectivity, remote to remote and remote to master.	Charles Harper	Air Liquide
4-4997	Remote Monitoring of an Unmanned Oil Platform	This workshop presents aspects of the Solan Offshore project for which Emerson is providing communications and control systems. The presentation focuses on components of the control system that provide remote control and monitoring of the unmanned offshore oil platform that will be deployed west of the Shetland Islands. The components to be discussed include DeltaV, radar-based oil spill detection system, and IP video system for process, safety, and security monitoring. The KU band satellite system providing communication from the platform to the on-shore control room will also be discussed.	Stuart Chisholm	Emerson Process Management
4-5032	Remote Monitoring, Quantifying and Reporting of Greenhouse Gas Emissions (GHG) using Emerson SCADA Technologies.	In many industrial installations there is an absence of dedicated technology to track and quantify GHG emissions. In many areas this is a requirement by environmental watchdogs or government agencies. Additionally it can expose process waste and lost revenue as a result. Deploying Emerson's OpenEnterprise (OE) SCADA solution, RTUs and instruments, Clearstone Engineering has developed a sophisticated web based data acquisition system for GHG analysis and reporting. The system provides clients access to data and reports at various installations globally via a secure web portal hosted in Calgary.	David Picard	Clearstone Engineering



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4-5112	12 Rules for Specifying a SCADA System	As a supplier of SCADA Systems and Software, we see a lot of specifications for SCADA systems, and are often involved in helping customers develop their own specifications. The specification is probably the most important part of your SCADA system – it will determine the products and services you are going to receive, and it will be the reference against which you measure the final delivered product. This workshop will outline a process that we've found useful in accurately determining what your real requirements are. It's equally applicable to other large IT projects.	Steve Hill	Emerson Process Management
4-5235	The Ongoing Oil Measurement Saga	WPX Energy continues to develop our liquids measurement knowledge in the North Dakota oil field. Last year we discussed our oil measurement coriolis placement and reviewed our drivers to modify our automation design. This year we will update progress and share insights we learned around instrumentation deployment and measurement needs. We will share some instrumentation deployment 'gotcha's we have experienced with high level switches, mag meters, coriolis, and guided wave radar. We will report on our first ROC800L deployment including our downstream data challenges for this application.	Zach Wertenberger	WPX Energy
5-5348	Syncade Logistics for Material Movements	Loading and unloading of materials by has been a common way to transport liquid material through wheels and waves. Safety is essential and has to happen before material is transported.	Shoyeb Hasanali	Emerson Process Management
6A-4506	Optimization of crude measurement in separators of PEMEX Exploration and Production Kumalooob Asset	PEMEX Exploration and Production Marine NorthEast Region, comprehends the reservoirs located in Campeche. Currently the satellite platform Bacab PP-A has a system of measuring three phase separator where the oil and gas is conducted with primary meter type V-Cone flow and the reference is through recorders differential type flow. It should be mentioned that the flow measurement not corrected for temperature because they do not have to RTD thermowell for this effect. As part of the scope is considered to replace the Vcone meter for a Coriolis mass flow meter	Ruth Galvan	Pemex Exploration And Production
6A-4635	Coriolis well head measurement- Alternative to traditional well testing (MTS)	The industry has long been interested in a continuous well monitoring rather than the periodic testing that is the norm today. The high cost of ownership of conventional separators or multiphase meters has prevented wide spread implementation of dedicated well head measurement and control. Other option is to hire well test service with a mobile test separator which do not give a continues measurement and is expensive. An alternate solution to get a continues & reliable measurement from the well head was explored using Emerson Coriolis meter..	Ossama Salama	Qatar Petroleum
6A-4714	Best Practices for Gas Flow Measurement Using dP, Vortex and Coriolis	Gas applications are typically more challenging than liquid applications. The purpose of this short course is to help users understand the advantages and limitations of dP, vortex and Coriolis technologies and to learn how to apply each one most effectively. The user will learn best practices around installation and configuration, common misapplications, and sizing tips. In addition, users will learn about diagnostic capabilities to help troubleshoot difficult applications. Discussion will include challenging gas applications like supercritical fluids and wet gas.	Joel Lemke	Emerson Process Management



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6A-4761	Truck Loading / Unloading with Micro Motion	A Wisconsin based chemical distributor required an accurate and efficient truck loading and unloading solution. With over fifty chemicals needing to be loaded into twenty to thirty multi-compartment trucks daily, they required a flexible and robust solution. The plant desired a system that would minimize operator error and provide a safe solution in a Class I / Division I environment. The solution would need to be able to handle air in the system, as a blow down process was required.	Bj Korman	Emco Chemical
6A-4978	Waxy, heavy Crude Oil Custody Transfer on the World Longest Heated and Insulated Pipeline - A Case Study	Cairn Energy Ltd (CIL) developed a Crude Oil License Block RJ-ON-90/1 in the State of Rajasthan, India. The Crude Oil Sales was successfully implemented using Liquid Ultrasonic flow meter on a large commercial scale. The use of Liquid Ultrasonic Meters for Crude Oil custody transfer applications such as fiscal or allocation measurement is gaining world wide acceptance. Ultrasonic technology is an established technology but the use of this technology, for custody transfer is relatively new. Often users try to employ the same measurement practices that apply to turbine technology to the LUSM.	Neelesh Purohit	Cairn India Limited
6A-5001	2 Path Liquid Ultrasonic Flow Meters : Unique Applications in Process Flow Measurement	Usage of Liquid Ultrasonic flowmeters has seen significant Industry wide acceptance even in the non fiscal flow measurement situations. This paper will give an overview of 25 flow measurement applications where this technology is solving measurement challenges.	Trilochan Gupta	Emerson Process Management
6A-5127	Are you uncertain about accuracy? A look at Measurement Uncertainty.	Many providers and users of meters have embraced the term "accuracy" to define performance. This term can be misleading. The best estimate of meter performance is the uncertainty of a measurement which includes a tolerance Interval. In many cases this gives a more optimistic value. This course examines the concepts and methods involved in the uncertainty of a measurement, which variables have the greatest influence on the uncertainty, and how to effectively manage the influence of error sources on the measurement. An example of a Rosemount DP flow meter uncertainty will be reviewed.	Mike Hering	Emerson Process Management
6A-5143	Measurement of High Water Cut with very low uncertainties and Gross Production of production wells in marginal fields	YPF is the major Oil & Gas Company in Argentina. In upstream, gross production and water cut is vital for determining the quality of the product for the next step of the process. In this application, YPF, associated with ARTEC Ingenieria (company focused on providing technology solutions for the energy market) presents a technological development (R&D). This technology uses traditional online water cuts analyzers that enable wells production measurements with high water cut. This results in a very low uncertainty in net oil production measurements.	Martin Romero	YPF



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6B-4683	Tank Gauging Modernization, Best Practices	Vopak Deer Park is the largest bulk liquid terminal on the Houston ship channel. While some areas of the site are automated with tank gauges, a large portion is still operated manually with very little instrumentation infrastructure. New demands for more accurate and timely product inventory assessments require modern equipment. This presentation provides an update to the Deer Park automation initiatives and provides an in-depth review of a typical tank gauging system upgrade, the steps needed to make it work properly, and the benefits.	Pam Smolen	Vopak
6B-5053	Emerson Smart Wireless Technology Evolves Steam Injection Measurement	Injecting an oil field with steam is a common practice when drilling for heavy oil. This aids in increased production by reducing the viscosity as well as displacement toward the producing well. A common installation utilizes various components including a cone meter, impulse tubing, steam pots, remote thermowell, three transmitters, and a radio. A Middle Eastern company has seen an improvement with this recovery method by combining Smart Wireless technologies with a conditioning orifice plate. This has greatly reduced installation and maintenance costs, while minimizing construction delays.	Thomas McCulloch	Emerson Process Management
6B-5109	Is the radar correct? Verify your level measurement in a few minutes!	A major player in upstream Oil & Gas with an increasing demand to verify accuracy of Guided Wave Radars on production tanks needed a solution to verify radars without altering levels in tank, save time and to keep people off the tanks. With help from Emerson a method for verification was developed and tested in field. By verifying the radar against a set of calibrated high precision targets packaged in a rugged case for field use the user could save several man hours per verification, eliminate the need for tank trucks transferring product during verification and keep personnel off the tanks.	Hilary C. Gleitz Jr.	ConocoPhillips
6B-5192	Portable Production Measurement System Delivers 60% Savings in Heavy Oil Well Tests at PDVSA Morichal Region	PDVSA Morichal is located in the south of Monagas state and is a part of the Orinoco Belt in the Carabobo block. This is the the biggest Certified Crude Oil Reserves of the World. Morichal has a daily production of 168MBPD that represents almost 15% of Orinoco belt production.	Miguel Bravo	PDVSA
6B-5211	Chesapeake Reduces Emissions with Fisher Electric Level Loop	EPA regulations are becoming more stringent for the upstream oil and gas industry, Chesapeake Energy has had to add an amine sweetening unit to remove concentrated hydrogen sulfide from their produced natural gas. The Fisher Electric Level Loop has enabled Chesapeake to bypass the amine unit allowing them to recover the operation cost of the unit while realizing the added profit from the gas that was no longer being bled to the atmosphere. Maintenance has also been reduced due to the reduction in pneumatic equipment.	Justin Beatty	Chesapeake Energy



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6B-5264	The Upstream Oil and Gas Interface Challenge: How ConocoPhillips uses Guided Wave Radar to measure changing liquids in South Texas' Eagle Ford Shale	The current boom in domestic crude oil production has uncovered a big challenge: how do you measure the level and interface in a tank that has oil and water when you don't have consistent densities or dielectric constants in your produced liquids? What level transmitter will work in many different remote locations under changing, yet assumed constant conditions? We need a low maintenance interface level indicator that is easy to set up and reliable.	Daniel Vela	ConocoPhillips
6C-5088	TGS Excels in Gas Measurement practices with accurate and repeatable technology (and higher Return On Investment!)	TGS is the largest gas transportation company in Argentina. Operates the largest pipeline system in Latin America and is a leader in the production and commercialization of NGL for both, the local market and for export. Along the Argentinean south territory buys gas to several producers with different heating values. In the custody transfer points, TGS used calorimeters but there was a need to do this in a more accurate way. 65 Emerson chromatographs take part in the process.	Luis Diaz	TGS
8-4021	How to Obtain Optimum Accuracy When using Master Meter Method to Determine Base Prover Volume (BPV) for Your Prover	This presentation talks about how to obtain optimum accuracy when using master meter method to determine base prover volume (BPV) for your prover. Measurement systems are responsible for the financial health of Kuwait Oil Company (KOC) and also for maintaining the highest level of confidence with customers. In summary, the measurement is the "Cash Box" of KOC. It goes without saying, that any error in the transaction quantity affects one side of the partnership, usually translated in several million dollars.	Rashed Al-Marri	Kuwait Oil Company
8-4622	Evolution of the 1st Gen of Portable Oil-Gas Separation and Measurement Systems – PEMEX AIATG	In the last three years Pemex have improved the recovery factor of mature oil wells in the Chicontepec reservoir through the use of compact mobile 2-phase separation systems where, in collaboration with Emerson Process Management, they have installed Micro Motion Coriolis meters for what they called the "1st Gen System" for flow ranges of 0.1 MSCFD to 3 MSCFD for gas and 30 BPD to 2000 BPD for oil and the "2nd Gen System" for high capacity applications (0.1 MSCFD to 11 MSCFD for gas and 30 BPD to 3000 BPD for liquid). These systems have become fundamental to measure the well performance.	Gilberto Diaz	Pemex Exploracion y Produccion AIATG
8-4935	Increased production at Suncor-Oilsands through Delta-V based APC solution	In Oil Sands plants, it was thought that operators needed to manually control the amount of material processed in Extraction plants because feed rates fluctuate wildly and instruments are unreliable. Suncor's APC team challenged that assumption and implemented a Delta-V based APC solution to stabilize production rates that increased the tonnage processes/shift while reducing the overall water usage. This initiative won the 2012 Suncor President's Operational Excellence Award (POEA) for improving the reliability of Oilsands plants.	Eliyya Shukeir	Suncor Energy Inc.



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8-4939	Vapor Recovery... What You Need to Know	Any plant with a fugitive emissions problem or light hydrocarbon storage knows that Vapor Recovery Units (VRUs) are a requirement and regulations are only going to become stricter over time. This presentation describes what you need to know about VRUs and proposes a solution.	Lou Gonsalves	Sigma
8-4941	Small APC Yields Big Benefits	The natural gas processing industry has tended not to adopt advanced control technologies like Model-Predictive Control (MPC) for a number of reasons related to cost and support. But embedded MPC like Predict Pro overcomes the hurdles to acceptance. One gas producer tried a small "starter" MPC on their plant with good results.	Chad Poindexter	DCP Midstream
8-4974	Blend Optimization and Control Strategy for Today's Refinery	Maximization of benefits achieved from product blending depends largely on being able to adjust to meet new fuel specifications. These specifications include not only tighter standards for environmental regulations but also the requirement to utilize biofuel components both in gasoline and diesel.	Patrick Truesdale	Emerson Process Management
8-5187	Modernization with SCADA software and remotes in a Chevron oil field	Chevron is one of the largest oil producers in Argentina, with concessions in the Neuquen basin. Nowadays is the 4th largest producer in Argentina, producing 65 BOE per day. El Trapial is the major oil discovery of the last 15 years and the third largest producer of the country, with an approximated production of 48,000 barrels a day. In this application we will find out the process stages that lead to the modernization of the El Trapial oil field.	Daniel Lisiuk	Chevron
8-5202	Ship Loading Liquid Surge Mitigation With Emerson Solutions	Ship loading is a delicate process, requiring a thorough understanding of all variables involved. Any breakdown in the process could cause a surge wave that can rupture the dock loading arms and cause a major loss of product into the environment. There are also Coast Guard shutdown speed requirements that add an extra challenge to the flow dynamics of surge prevention. This workshop will advise you of these application challenges, and how Emerson can help mitigate surge events with Emerson technology.	Clayton Carroll	Emerson Process Management
8-5255	TBG Brazil/Bolivia Gas pipeline: changing operation for a new gas supply scenario	TBG Gas Pipeline transports gas from Bolivian fields with only two chromatograph in both sides of Brazil border and composition considered constant along the pipeline. Changes in scenario with new gas sources now challenges TBG with new contract clauses and demand studies of the effect of mixing streams and energy delivery in city gates and new operation conditions. The paper presents new pipeline operation, additional chromatograph points and the redesign of a transfer skid in São Paulo to operate Ultrasonic runs in reverse direction, receiving gas from PETROBRAS to TBG pipeline.	Julio Palhares	TBG - Transportadora de gas Bolivia Brazil
8-5289	Unique Uses of Embedded DeltaV MPC	The DeltaV Model Predictive Control (MPC) is embedded in the controller and can run as fast as once per second. Thus, DeltaV MPC can be utilized to easily solve some unique control problems that may be difficult to solve with regulatory controls. In some cases, MPC provides a solution that is not only easier to implement but outperforms regulatory controls. Several of these applications, including two valve manipulation, heat duty control and a reboiler heat duty split range application will be examined and the MPC solution for each will be demonstrated.	James Beall	Emerson Process Management



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8-5315	Instruments and DCS implementation on 3 Pumping Pipeline station (Catalina, Zoquital and Ceiba)	Pumping pipeline station in Mexico are critical operation because they need new instrumentation, new DCS and best practices. This modernization for operational goals can be challenging due to ineffective automation strategies. The net result is reduce operation costs due to safety incidents, good balance station, leak pipeline detection, and better take of decisions in daily operation. To address these challenges a total Pumping pipeline stations can provide a roadmap that aligns business requirements with an implementation plan for automation strategies that provide the greatest ROI.	Juan Gonzales	Burgos
8-5342	Light Hydrocarbon Measurement Exposed	This session will cover the API standards associated with measuring light hydrocarbons (NGL –Natural Gas Liquid), specifically those associated with Component Volume Calculations. We will be discussing this topic from the viewpoint of measurement accuracy and what implications this has on the overall profitability of an oil or gas well. We will also detail how the ROC800L is able to perform these API compliant calculations and what is required to do so.	Phil Rutledge	Anadarko
10-5051	New API2350 overfill standard explained by committee chairman	We will walk thru and explain the new API2350 edition 4 overfill prevention standard for storage tanks. You will get the basic concepts and understand how they affect your business. You will have a good idea of the procedures and equipment required for API2350 compliance. Detailed concepts such as proof-testing, independence, and the relation between API2350 and SIS/SIL will be discussed. Theory will be mixed with industry examples and live equipment. Presentation includes the current overfill prevention best-practices and typical solutions, which are generic and applies to virtually any tank.	Phil Myers	PEMY Consulting / API2350 committee chairman
11-4713	Regulator Technologies New Global Headquarters Tour	This is a facility tour on Wednesday, 10/2 in which guests will be guided through the new Regulator Technologies global headquarters, located in McKinney, Texas. Guests will be taken to the facility via shuttle bus from the Emerson Exchange host hotel in Grapevine, departing the Gaylord right after lunch at 1:15pm from the Convention Center Circle Drive, located on Level 1 of the Gaylord Texan Convention Center.	Trent Decker	Emerson Process Management
11-4913	Easy-Drive on Wellhead Production Valve	EOG Resources has installed a Fisher D4 Easy-Drive as a wellhead production valve due to it's low power consumption, modbus communication capability, flow characteristic, and accuracy. It has allowed them to remotely change flowrates on the oil well instead of relying on a fixed bean size on a choke valve. Production has been optimized and monitored remotely.	Cecil Hodges	EOG Resources
11-4962	Critical Control Valve Considerations for the LNG Market	This session will review critical control valve applications in LNG plant processes and present proven solutions based on the unique requirements for each. Selections to be reviewed include Expander Bypass Valves and Joules/Thompson Valves with consideration for cryogenic temperatures, noise attenuation, and tight shutoff., Compressor Antisurge Valves with consideration for fast stroke speeds and accurate performance, vibration potential, and noise attenuation. , and LNG Temperature Control vValves with consideration for cavitation, outgassing potential, and cryogenic temperatures.	Vincent Mezzano	Fluor



ID	Title	Description	Presenter	Company
11-5000	Water Hammer (Surge) Relief Systems for Marine Crude Oil Unloading System	Water hammer brings about challenges in liquid hydrocarbon pipeline applications that need to be effectively addressed at a project design stage. Mitigation of Surge is Critical for the life long mechanical integrity of any hydrocarbon transfer system.	Pc Choubey	Indian Oil Corporation Limited
12-4637	Wireless Tank Gauging enabled 1 million Euro savings in signal cabling	SIOT, the Italian branch of the Transalpine Pipeline, comprises a tank storage terminal and port facilities. 100 different grades of crude oil are stored in 32 floating-roof tanks and then pumped pure or in-line blended to be transported through a 753 km pipeline to any of eight refineries in Germany, Austria, and the Czech Republic. Accurate tank level measurement is critical for custody transfer pipe transportation, and SIOT chose the reliable, cost-effective wireless alternative when it was time to upgrade.	Massimo Diminich	SIOT (Società Italiana per l'Oleodotto Transalpino S.p.A.)
12-4643	Thanks to Smart Wireless - Oil Marketing Terminals Can Now Add Measurements Without Hot Permits!	Hindustan Petroleum Corporation Ltd., has 100+ Oil Marketing Terminals across India. There are manual Dyke Valves at these terminals which drain rain water during monsoons & are supposed to be closed after season but were never monitored. Safety Audit recommends that position of these dyke valves be monitored 24/7. Traditional wiring approach would prove to be difficult and would require hot permits. Smart Wireless helped to transmit the signal to the CCR without laying cables & hot permits.	Vikas Gupta	Hindustan Petroleum Corporation Limited
12-4703	Wireless Pressure Relief Valve Monitoring that works	Monitoring of pressure relief valves has historically been a challenge, did they release, or if after did they re-seat fully. Knowing exactly when and how long an emission lasted increasing in of value, especially with emissions regulations. In the past when relief valves went off costs associated with fines assumed the worst case scenario. This presentation will cause you to rethink your previous approached with an easy and proven approach.	Kurtis Jensen	Emerson Process Management
12-4719	Wireless Technology allow Australia's Largest Domestic Gas Company to Get to first Oil Faster and Improve Production	Santos has been providing Australia with natural gas and oil from the remote outback for more than 40 years, Applying new and enhanced technology, and recovery techniques, creates material values to new, old and under development fields. This is critical to the success of realizing the value from Charo Oil field. Data shows that a wireless wellhead solution can be deployed in up to 12 days faster than a conventional installation at a fraction of the cost. This allows SANTOs to get to first oil quicker, which is worth more than 4M earlier production.	Wendy Wang	Emerson Process Management



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12-4908	Implementing Wireless Leak Detection System on Inter-refinery Transfer Pipelines . KNPC - Kuwait	To build a multi tier Pipe rack between KNPC Refineries and replace the corroded underground Inter Refinery Transfer pipelines with above ground pipes. The new pipe rack will be utilized for new pipe lines between Refineries. Salient Features: The new pipe rack currently houses MOGAS, Gas Oil, Black Oil, Naphtha and LPG pipelines. There are 19 nos of Road crossings in the IRT corridor & hydrocarbon leak detection on all flanges was required. Wireless proved to be the best way of detecting leak on all the individual lines/flanges, as the pipeline distance was over 4KM with no power source.	Anil Ajith	Emerson Process Management
12-4949	Wireless Instrumentation for Leak Detection Expedites Start-up, Reduces Cost and Helps Protect the Environment	Costs are rigorously scrutinized for non-productivity related projects. Environmental safety is a necessary part of manufacturing but it must be achieved as cost effectively as possible. This presentation will show why a wireless instrumentation network was selected over hard wire and how it was employed to achieve the shortest measurement start-up schedule and minimize total installation cost. It will compare and contrast these aspects, as well as reliability, based on estimates defined for a traditional wired installation and the actual values documented using the wireless network.	Steve Mesner	Praxair
12-4952	How to keep obtaining 65% Maintenance Cost Reductions and 35% increase in Sales in Gas Production for 2 consecutive years with Smart Wireless Technol	Tecpetrol is one of the most important O&G Argentinean companies, with an annual production capacity of 31.7 million barrels equivalent. In 2011 Tecpetrol completed the second expansion of its Wireless network, integrating Lomitas, Aguaraque and C. Norte sites. This brought additional maintenance and operational savings, as well as a growth in the gas volume sold to its customers. In 2012 Tecpetrol started an expanding process of the Wireless network to a new site and the implementation of a TMS system.	Odin Fernandez	Tecpetrol
12-4963	Leona's Going to Gain Some Weight: Automated Storage Well Monitoring using Emerson Wireless HART And PFN Technology	Updating the manual, time intensive monitoring of 77 natural gas storage wells from their 1970's technology was a necessity to remain competitive in today's natural gas market. While traditional SCADA technology was an option, an Emerson Wireless HART / PFN solution provided a 20% project savings while improving the system diagnostics and process data. This session will include discussion of the design, material selection and installation details, and cost details as well as integration and data monitoring.	Vaughn Suddeth	Kinder Morgan
12-5074	Safety Shower Monitoring Increases Personal Safety, Reduced Capital Expense and Makes New Process and Machine Health Monitoring Practical	Safety shower and eye wash stations are strategically located around the plant near operations where workers could accidentally come in contact with hazardous compounds. Workers can be alone in these areas. An alert in the control room indicating that a station is in use and its location allows immediate dispatch of first responders to apply first aid quickly and minimize the risk of injury and loss. Building the initial wireless network made future projects easier to justify, execute and more cost effective to implement	Rick Bosch	VanDeMark Chemicals



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12-5113	How Samarco implemented a best-in-class system monitoring to avoid leakages and environmental penalties	The production of minerals has been growing fast to meet market demands, and part of this production are waste materials. These materials have been sending to specific dams, where the monitoring of pressure and level are core variables for safety and environmental regulations. During the lifecycle and operations, the points of measurement can be changed all the time and additional points may be required. Samarco has chosen the Smart Wireless solution as the best way to deal with these requirements and bring together system management improvement, easy integration and much more.	Eduardo Rodrigues	Samarco
12-5188	Wireless Valve Control for Midstream Gas Level Loop	Marlin Midstream has undertaken an expansion project for a gas compressor unit. They wanted to implement with as much wireless content as possible to take advantage of cost savings by eliminating wires. For this project, wireless on/off control of dump valves on the separator were desired, but until recently no solutions were available. This presentation covers how Marlin addressed the desire for a wireless level control loop with the 4300 Series Wireless On/Off control solution. Fully wireless control loops like this are a "Never Been Done Before" solution.	Rodney Clawson	Marlin Midstream
12-5220	BioDiesel Plant Solves Level Measurement and Overfill protection using Wireless Technology	Running wires underground to monitor continuous level gauges and overflow prevention switches in storage tanks is expensive. This paper discusses how a company in Las Vegas solved this application using Emerson Smart Wireless Technology.	Ted Hinderman	Emerson Process Management
12-5344	The Speed of Wireless	This Session will cover how XTO Energy has used the IEC 62591 Wireless HART Interface module for the ROC800 and Rosemount Wireless instruments to reduce the amount of labor and time it takes to get a newly drilled well pad commissioned.	Rex Mccarley	XTO Energy
EDU-5411	How do RTU's and Flow Computers do what they do? A look at configuring ROC 800s for use in oil or natural gas production	Emerson is an industry leader in providing primary meters and end devices for the oil and natural gas production, transmission and distribution markets. However, did you know that Emerson Process Management also provides hybrid flow computers remote telemetry units for the purpose of regulatory accounting and advanced control in the markets as well? Using PC's connected to ROC800 Series RTU's, this hands-on course explores simplified configuration of ROCLink 800 Software typical to commissioning the RTU for use in these applications.	Alfredo Sanut	Emerson Remote Automation Solutions