



MONDAY MAY 7

8:00 am to 4:00 pm Outdoor Exhibitor Check-in ONLY

Tuesday May 8

8:00 am to 8:00 pm Indoor Exhibitor Check-in ONLY

WEDNESDAY MAY 9

8:00 am to 4:00 pm Exhibits Open

Room # 1

8:00 a.m. - 9:30 a.m. Karen Ortega, Chairman, 2012 Four Corners Oil and Gas Conference, Welcome Honor Guard, Pledge of Allegiance, Introduction of LT. Governor John Sanchez

10:00 a.m. - 10:45 a.m.

Room # 1 Regulatory Updates from BLM, and State of New Mexico, Utah and Colorado,

11:00 a.m. - 11:45 a.m.

Room # 1 Northwest New Mexico Air Quality Monitoring Network
By Mark Jones and Terry Hartel, NMED Air Quality Bureau

Room # 2 Microbiologically Influenced Corrosion
By Dan Powell, Williams

Room # 3 Why go Wireless?
By David Southern, Schneider Electric , Telemetry and remote SCADA Solutions

12:00 a.m. - 1:00 p.m. Lunch and Exhibits

1:00 p.m. - 1:45 p.m.

Room # 1 Regulatory Update on the Hazardous Liquid Regulations and Recent Lessons Learned
By: Tom Finch, US DOT Office of Pipeline Safety

Room # 2 Certified PPE Hazard Assessment and FRC
By Rick Ingram, BP

Room # 3 NMOCD Pit Rule V4
By Myke Lane, WPX Energy

2:00 p.m. - 2:45 p.m.

Room # 1 Insurance a Changing Picture
Joel Parise, Travelers Oil and Gas

Room # 2 Improve Operations by Mitigating the Effects of Oxygen, Bicine and Heat Stable Salts in the Amine Plant.
By Michael Cooper, NALCO

Room # 3 Hydraulic Submersible Pump Revives Marginal Gas Wells
By Walt Chapman, Lufkin

3:00 p.m. - 3:45 p.m.

Room # 1 Does New Drilling Rig Technology Lead to Fewer Worker Injuries?
By P. Somerville, R. Hill, K. Retzer, NIOSH

Room # 2 Benefits and Strategy for Optimizing Field Compression
By T. Jacquez, ConocoPhillips and G. Tweedie, Exterran

Room # 3 Improving Hydraulic Fracturing with Monitoring Technology - How do we Know it Works?
By Mark Parker, Pinnacle

5:30 p.m. - 8:30 p.m. Reception

At the Courtyard by Marriott 560 Scott Avenue, Farmington

Thursday MAY 10

8:00 am to 2:00 pm Exhibits Open

8:00 a.m. - 8:45 a.m.

Room # 1 Geothermal Potential in the Four Corners region and Future Opportunity for Gas and Oil Industry
By Dr. Masami Nakagawsa, CSM/NREL

9:00 a.m. - 9:45 a.m.

Room # 1 Shale Gas
By Dave Simpson, Muleshoe Engineering

Room # 2 Optimization of Water Gathering using Capstone Powered Mini-grid Electrification Systems
By Hop Lee, Henry Production

Room # 3 NM OSHA's Involvement in the Oil and Gas Industry
By Carol Walker and Melissa Barker, NMOSHA

10:00 a.m. - 10:45 a.m.

Room # 1 Federal and State CDL Regulation Issues; Present and Proposed
By Maury Tiehen, San Juan College School of Energy

Room # 2 Lightning Protection for Oil and Gas Facilities
By Chuck Cooley, Erico, Inc.

Room # 3 When Do Solar Electric and Utility Backup Systems Make Sense
By Charlie Bachman, SunWize Technologies, Inc.

11:00 a.m. - 12:00 p.m.

Room # 1 Desalination of Oil and Gas Produced Water and its Potential as a Source of Fresh Water for Hydraulic Fracturing
By J. Rhodes, Rhodes Water Resources
By S. Lueck, RODI Systems Corp

Room # 2 Case Histories of Recent Field Results for Advancement of Milling of Cemented Tubulars
By Nick Biondi, Weatherford International Inc.

Room # 3 Energy and the Environment - 2012 and Beyond
By Greg Lorson, Teemco

11:30 - 1:00 p.m. Lunch

Exhibits Open until 2:00 p.m.

2:00 – 5:00 p.m. Indoor Exhibitors ONLY check out

NOTE: Exhibits can not be dismantled until after 2 p.m.

Friday May 11

8:00 a.m. – 5:00 p.m. Outdoor Exhibitors ONLY check out

**SunWize
Technologies,
Inc.**

Charlie Bachman , Sales Manager Oil and Gas Industries

Summary of Expertise

Bachman has been working in the solar energy industry since 1988. At SunWize, Charlie manages all sales for the oil and gas industry in the US and Canada. His expertise includes a deep understanding of remote site power issues such as sizing and specifying, installing and maintaining solar electric systems for industrial applications in gas well automation, cathodic protection, telecommunications, and general instrumentation. He has sold approximately two megawatts of solar electric systems into this market.

Professional Achievements

Bachman presents papers on solar power technology at ENTELEC and other regional industry conferences. He also conducts training classes at customer locations.

Educational Background

Bachman has a B.S. in Resource Management from the University of Idaho and an A.S. in Applied Science Electronics Technology, Community College of Denver.

When do Solar Electric & Utility Back-up Systems make sense?

Review applications and benefits of solar electric power

- Solar electric power technology definitions (PV)
- Basic solar system configurations and how they work
- Industrial vs. residential applications
- Questions to consider when deciding on the appropriate use of solar for an industrial application
- Review of specific examples of the effective use of solar in the oil and gas industry integrated throughout presentation
- Sizing calculations and troubleshooting procedures

**Weatherford
International
Inc.**

Nick Biondi, Global Fishing Technical Instructor Houston TX

Nick holds a BS in Petroleum Geology and is currently working as the Global Fishing Technical Instructor for Weatherford International Ltd. He has more than 6 years of extensive professional experience working with Weatherford and has travelled to many international locations such as Congo, Kuwait, Yemen, Dubai, Israel, Canada, USA, Europe, North Africa and Sub-Saharan Africa.

He is currently responsible for:

Overseeing the implementation of Weatherford's Global Standard & Competency systems to the Fishing Services Product Line.

Tasked with producing a set standard of learning and quality assurance to our global teaching practices and ensuring we have a compliant and consistent program throughout.

Overseeing the re-development of the Fishing Fast Track Program and ensuring it complies with our Standards and Competencies.

Corresponding Authors: Mohammed A. Haq , Jerry Fisher, Tom Bailey

Case Histories of Recent Field Results for Advancement in Milling of Cemented Tubulars

Description of the material:

Milling success depends on technologically advanced mill design and efficient job execution. This paper describes case histories of a new 2-pod mill designed for milling cemented tubulars. Field results have shown better performance in terms of higher Rate of Penetration (ROP) and longer service when compared to conventional mills.

A standard mill's average life ranges from 10-50 feet at 4-6 ft/hr ROP. New 2-pod mill field results average 106 feet at 8.3 ft/hr. The new cemented tubular 2-pod mills are significantly superior to conventional mill technology with reported field results averaging a 250% increase in footage milled and 100% increase in ROP.

Application:

Any milling operation of wellbore tubulars that are internally and externally cemented

Results, Observations, and Conclusions:

The 2-pod cemented tubular milling system with advanced technological application provides superior ROP, service life and significantly reduces number of trips required to complete milling operations; thus saving on non-productive time (NPT) and other drilling related costs. The following data in brief gives the total footage required to mill for the job and number of mills used to achieve this; all jobs were successfully completed.

Well # 1, US Region - 110 feet, using 1 mill.

Well # 2, US Region - 533 feet, using 4 mills.

Well # 3, US Region - 333 feet, using 1 mill.

Well # 4, India - 585 feet, using 16 mills.

Well # 5, Argentina - 33 feet, using 1 mill – job completed with mill in good condition, did not core-out.

Significant New Contributions:

Doubles the ROP with refined milling procedures; increasing the mill life on core point by 400%, thus reducing number of trips

Lufkin Industries

Walt R Chapman HSP Product Manager and Latin America Sales Houston, TX

Walt Chapman has extensive experience in business development and sales. He is able to provide technical support for HSP, gas lift and flow control systems. He has four patents that cover flow control and gas lift products. He has published papers for SPE and trade magazine articles. In 2005 Walt received the harts Special Meritorious Award for Engineering Innovation. He is a current member of the Society for Petroleum Engineers. He enjoys hunting, fishing, and outdoor activities with his family.

Hydraulic Submersible Pump Revives Marginal Gas Wells

Operators have for some time been faced with the problem of removing Low to Mid Volumes of water from producing or in many cases wells that will not produce due to watering out. The HSP or Hydraulic Submersible Pump addresses that problem.

The HSP is specifically designed to address these problems when normal means of artificial lift are no longer viable. The flexible nature of this system allows a wide range of water removal (form 1.0 to 150 BSD) which is difficult with standard pumping technology offered today. The HSP utilizes a positive displacement, low to mid volume pumps that virtually eliminates the possibility of Gas Locking.

Hydraulically powering the pump allow the motor to be mounted on the surface which reduces the use

of moving parts down the hole.

The HSP is installed using coil tubing which eliminate the need of a service rig. The system can handle comingled gas and fluid and will operate in the pumped off state for an extended period of time. A self-lubricating and cooling design allow the HSP to be pumped off with no resulting damage. The patented surface unit is environmentally friendly with a significantly smaller footprint than typical pumping systems. This coupled with quiet operation (65 decibels at 10 meters), and the ability to power with electricity, solar, propane, or field gas makes the HSP a very versatile system.

ERICO, Inc.

Chuck Cooley, Sr. Sales Engineer

Chuck has been with ERICO for over 20 years and has been in the electrical industry for 10+ years. He is currently the Northeast/Midwest/Great Lakes Sr. Sales Engineer for lightning protection and grounding products. His prior experience at ERICO, Inc. includes Application Engineering and Product Development for lightning protection and grounding. Chuck has a B.S. in Mechanical Engineering and Automated Manufacturing Engineering from the University of Akron. He is also a current member of the Lightning Protection Institute (LPI) and is a certified Master Installer/Designer for lightning installations.

Lightning prevention for Oil and gas facilities –

Lightning is one of nature's most beautiful phenomenon's. Just as it is beautiful, it is deadly and destructive. Over a 10-year average, there are 39 fatalities annually due to lightning and damages are in the tens of millions. There is no known method of preventing the occurrence of a lightning discharge. The purpose of a lightning protection system is to control the passage of a discharge in such manner that prevents personal injury or property damage. Using conventional (Franklin Rod Method) lightning protection systems is just one solution. However, there are other lightning protection methods which are more cost effective and offer the same level of protection.

NALCO

Michael Cooper Odessa, TX

Improve Operations by Mitigating the Effects of Oxygen, Bicine and Heat Stable Salts in the Amine Plant

Authors: Michael W. Cooper, Nalco Company, Odessa, Texas; Ronald Pongar, Nalco Company, Sherwood; Park, Alberta, Canada; Andrea Marek, Nalco Company, Naperville, Illinois

Over the last 10 years excessive oxygen in gas gathering systems and gas processing plants has become more of a problem. It is an issue because of poorly operated vapor recovery systems, poorly maintained valves, and lower field pressures. These all contribute to the problem. The harmful effects of oxygen in the system manifest themselves in corrosion in piping and processing equipment in the systems as well as curtailing deliveries to residue pipelines. This problem will not go away, but continue to get worse as field pressures continue to drop, forcing field production to use vapor recovery systems. One ppm of oxygen can be devastating to a gathering system and unit processes inside a plant. Reliability of the system can be improved through diligent review of the upstream process, and continual monitoring and managing the plant processes.

DOT Western Region

Thomas "Tom" Finch CATS Manager Lakewood, CO

Tom has been a Community Assistance and Technical Services (CATS) Manager for the Western Region, which is located in Lakewood, CO, since August 20, 2009. He was the State Liaison Representative (SLR). His role in the OPS focuses on

Pipeline Safety Programs	<p>enhancing communications with Stakeholders including the Western Region States Pipeline Safety Programs.</p> <p>Mr. Finch attended the Colorado School of Mines from 1964-1968 majoring in Petroleum Engineering. He has over 36 years of experience in the oil and gas industry. Prior to October 1999, he was employed by Cathodic Protection Services, working mainly in the cathodic protection of well casings and pipelines. Mr. Finch has completed the National Association of Corrosion Engineers (NACE) Cathodic Protection (CP) Level 1 thru Level 3 Courses. He joined OPS on October 12, 1999.</p>
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Regulatory Update on Hazardous Liquid Regulations and Recent Lessons Learned

Regulatory Update on the Hazardous Liquid Regulations and Recent Lessons Learned. To ensure the safe, reliable, and environmentally sound operation of the nation's pipeline transportation system.

BP North America Gas	<p align="center">Rick Ingram OSHA VPP Technical Authority</p> <p>Rick L. Ingram has over 30 years of experience in U.S. Onshore Oil and Gas Exploration and Production, holding HSE leadership positions for various companies as well as managing his own consulting firm. Rick has been employed by BP North America Gas for ten years, currently serving as the OSHA VPP (Voluntary Protection Programs) Technical Authority, and is an OSHA SGE (Special Government Employee).</p> <p>Rick is co-founder and Chairperson of the National STEPS Network and co-founder of SafeLandUSA. Rick serves on the NIOSH NORA subcommittee for Oil and Gas Extraction, the OSHA Oil and Gas Safety Conference planning committee, and teaches and writes articles aimed at making US Onshore E&P the safest of all industry segments.</p>
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Certified PPE Hazard Assessment and FRC

The March, 2010 FRC memorandum from OSHA has led to many questions and issues in the US Upstream industry to say the least, even two years later. This presentation will help to clear up some of those questions and bring attendees up to date on the discussions between industry leaders and OSHA, as well as the API FRC Recommended practice which is currently being developed. This presentation will lead the audience through the requirements of the OSHA PPE Standard and provide examples which will simplify the Certified PPE Hazard Assessment process. This will help to bring companies into compliance, and more importantly provide valuable tools for managers, safety professionals and the workforce.

New Mexico Environment Department	<p align="center">Terry Hertel Program Manager Santa Fe, NM</p> <p>Terry is the monitoring program manager at the New Mexico Environment Department Air Quality Bureau. He has worked at the Air Quality Bureau for 8 years. Terry holds a Bachelor of Science degree in Chemistry from the South Dakota School of Mines and Technology.</p> <p align="center">Mark Jones Environmental Analyst Santa Fe, NM</p> <p>Mark Jones is an environmental analyst with the New Mexico Environment Department □ Air Quality Bureau. He has worked in the Farmington Field office for 6 years on Four Corners area planning and outreach projects. Mark holds a Bachelor of Science degree in Environmental Engineering from the</p>
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Northwest New Mexico Air Quality Monitoring Network

The mission of the New Mexico Environment Department's Air Quality Bureau (NMED-AQB) is to protect the inhabitants and natural beauty of New Mexico by preventing the deterioration of air quality. This includes strategic planning to ensure that all air quality standards are met and maintained; issuing air quality Construction and Operating Permits; and enforcing air quality regulations and permit conditions. The Air Quality Bureau has authority over air quality in all New Mexico counties except Bernalillo County and except facilities on Tribal Lands.

New Mexico operates a network of air monitors called SLAMS, State and Local Air Monitoring Stations, throughout New Mexico to ensure that local and national standards are met. The purpose of the network is to support the National Ambient Air Quality Standards (NAAQS). It is designed to (1) determine highest concentrations expected to occur in the area covered by the network, (2) determine representative concentrations in areas of high population density, (3) determine the impact on ambient pollution levels of significant sources or source categories, and (4) determine general background concentration levels. Most regions in the state have one or more monitoring sites with continuous and/or non-continuous monitors. Depending on the site, parameters monitored are ozone, sulfur dioxide, nitrogen dioxide, PM10, and PM2.5. The continuous monitoring sites also monitor meteorological data. Some of the active sites in the network have been operational since 1974. Air quality in northwestern New Mexico and the greater Four Corners area has been a recurring issue. The states of Colorado and New Mexico convened the Four Corners Air Quality Task Force (Task Force) in November 2005 to address air quality issues in the Four Corners region and consider options for mitigation of air pollution. As a result of the Task Force and ongoing cooperation through the Four Corners Air Quality Group, several other monitoring projects, in addition to the State and Local network, have been initiated such as for Mercury and Ammonia. This presentation will review some of the background air quality issues in the Four Corners with a focus on ozone, describe the Northwest New Mexico monitoring network, and also discuss some additional collaborative monitoring projects that have emerged out of the Task Force recommendations. The Northwest New Mexico monitoring network has helped inform NMEDAQB and other agencies on ambient air quality and has served as a critical planning tool.

**Conoco
Phillips**

Thomas Jacques Supervisor Farmington, NM

Thomas Jacques has been with ConocoPhillips since 2005 working in the San Juan Business Unit. He started with the company as a Facilities Engineer and is now the Supervisor of the Compression Engineering and Quality Assurance Engineering groups in San Juan. His experience with ConocoPhillips includes wellsite facility design, water gathering systems, tank batteries, gas dehydration, gas compression, and pipelines. Prior to working with ConocoPhillips, Tom worked in natural gas processing, gathering, and transmission and chemical plant and refinery engineering and construction. Tom holds a Bachelor of Science degree in Mechanical Engineering from the University of New Mexico and is a Licensed Professional Engineer in the State of New Mexico.

Exterran

Gavin Tweedie Account Manager Farmington, NM

Gavin Tweedie is an Account Manager for Exterran Energy Services in the Four Corners Area. He joined Exterran, when it was Hanover, in 2005 as a Facilities Engineer and has been involved in site engineering, unit applications and unit retrofitting for the past 6 years. Prior to working at Exterran Gavin worked for IFC Engineering designing and retrofitting facilities in the San Juan Basin. He started his career in Farmington as a Wireline Field Engineer for Halliburton Energy Services. Gavin holds a Bachelor's Degree in Mechanical Engineering and a Bachelor's Degree in Mathematics from the Dalhousie University in Nova Scotia,

Benefits and Strategy to Optimizing Field Compression

Compression is the largest operating expense associated with the day to day operations of natural gas wells in the San Juan Basin. The efficient use of this equipment can be crucial in maximizing revenue and reducing expenses. Optimizing a compressor fleet can lead to cost savings via reduction in operating expenses, maintenance costs, and fuel gas usage. There are also significant reductions in emissions from a package that is operating efficiently rather than a unit that is under-utilized. This talk is about some of the strategies behind optimizing field compression and the benefits that can be gained by these types of projects. It will present the fundamentals behind choosing the correct compressor for the application and the limitations of various type of compression. Data from an optimization program that was put in place by ConocoPhillips will be highlighted and the benefits of the program will be discussed. The discussion will be directed towards production companies and compression operators on the potential benefits to optimizing their compression equipment.

WPX Energy

Michael K. (Myke) Lane PE Farmington, NM

Mr. Lane is the Environmental, Health and Safety Supervisor with WPX Energy Production, LLC, San Juan Basin Operations. He is actively involved in Environmental Compliance and Permitting involving air quality, waste management, water quality, noise, wildlife and culture resources to support the exploration, development and production for the WPX Energy San Juan and Green River assets.

Prior to joining WPX Energy (formerly Williams Production) in 2002, Mr. Lane was a Consulting Environmental and Petroleum Engineer in the Four Corners since 1990, and a Development Engineer with Shell Oil in California.

PROFESSIONAL ASSOCIATIONS: Member, Society of Professional Engineers; Member, American Society of Safety Engineers

PROFESSIONAL REGISTRATIONS: Registered Professional Engineer – Arizona, California, Colorado, New Mexico, Utah: Certified Environmental Specialist – New Mexico (inactive): Certified Remediation Specialist – Arizona: Registered NORM Inspector Oil & Gas – New Mexico (inactive)

EDUCATION: New Mexico Institute of Mining and Technology BSGE 1982 Emphasis Mining, Petroleum and Geotechnical

OTHER: Industry Task Force that development NMOGA Good Neighbor Initiative in 2005-6: Program Committee Member for Four Corners Oil & Gas Conference and presenter: Industry Task Force Member Pit Rule (2008 and 2011): BLM- Farmington Field Office Resource Advisory Committee member

NMOCD Pit Rule V4

In January 2012, the New Mexico Oil Conservation Commission held a hearing to revise the New Mexico Oil Conservation Division “Pit Rule” for the fourth time since 1992, and third time since 2002. This presentation will briefly summarize the history of the Pit Rule, discuss the recent changes and discuss possible challenges/opportunities.

Pumps & Service (Division of Henry

Hop Lee Senior Account Manager Durango, CO

Studied Economics at the University of New Mexico. 22 years with Pumps & Service and 18 years focused on sales of pumps, engines, compressors and power generators for the oil & gas industry. Recently the Project Manager for a multi-well water gathering and electrification system coordinating the design, logistics and installation of the 100+multi-well project in the San Juan Basin of NM.

Production)

Case Study: Optimization of Water Gathering using Capstone Powered Mini-Grid Electrification Systems

Handling, transportation and disposal of produced water from remote gas well locations represents more than 50% of the operating expense for most Oil and Gas Producers in the San Juan Basin. Due to their remote proximity to grid power and other infrastructure, the most practical method for hauling the water from the gas wells to a disposal facility (depth well injection or evaporation ponds) was to truck the water.

This presentation will discuss the design, construction and operation of a water gathering system recently installed in the San Juan Basin of New Mexico, using electricity generated off-grid from end-user mini-grids. The mini-grids were powered from small banks of low emission Capstone Micro-Turbines®. Design considerations, general construction methods, and operational procedures will be presented. Future challenges and opportunities for similar treatment options applications will be offered.

TEEMCO

Greg Lorson, CEO,

Greg Lorson is the CEO of TEEMCO, an environmental engineering company serving the oil and gas industry. Greg is a fourth generation oilman with thirty years management experience in oil and gas, real estate and investment banking. Previously the CEO of a national company, he's also been a member of corporate and charitable boards. He's been appointed by governors from six states to advise on environment, taxes, energy, and economic development. Lorson has served on various state and federal commissions. He is a FEMA certified Emergency Response Manager and licensed water treatment operator. Named a delegate to the United Nation's Conference on international Oil development, Mr. Lorson is also a published business author. His undergraduate study was in finance at the University of Oklahoma, graduate studies in business and anthropology at Harvard, and hosts a postgraduate certificate in Business Administration from 'Edinburgh Graduate Business school.

Colorado School of Mines

DR.Masami Nakagawa PHD Associate Professor Golden, CO

Dr. Nakagawa (Ph.D. in Theoretical Mechanics from Cornell University) is associate professor at Colorado School of Mines (CSM) and is leading the effort to create geothermal programs at CSM and in the state of Colorado. He was awarded funds from the Governor's Energy Office to develop courses on geothermal energy at Mines in collaboration with the School for Renewable Energy Science in Iceland, with which he was able to offer a truly interdisciplinary course entitled "Geothermal Energy" involving five academic departments, several research centers, and various industrial experts. In May of 2009, he created the Geothermal Academy with its main goal of becoming the focal institution that networks all existing and future geothermal programs. The Academy will help to increase the chance of a successful growth of geothermal energy production through EGS and energy conservation through direct use and applications of ground source heat pumps. In December of 2009, the DOE

awarded a fund for the Geothermal Academy. Dr. Nakagawa is now involved in several DOE funded geothermal projects at CSM. He also held a joint appointment with the National Renewable Energy Laboratory (NREL).

Geothermal Potential in the Four Corners region and Future Opportunity for Gas and Oil Industry

The combined geothermal capacity in these four states has been assessed somewhere between 630MW and 950MW by the National Renewable Energy Laboratory (NREL). Currently, there is no geothermal power production in Colorado or Arizona. In terms of favorability of deep Enhanced Geothermal Systems (EGS), the Four Corners region ranked somewhere between favorable to most favorable according to NREL. Nakagawa has also been looking at underground coal fire, which is present at a shallow depth in the region, as a next generation unconventional geothermal resource. Nakagawa will discuss fundamentals of conventional hydrothermal geothermal energy and EGS and unconventional geothermal energy sources in the Four Corners region and their implications in the context of oil and gas energy production.

Williams Midstream

Daniel E. Powell Principal Engineer Tulsa, OK

Dan earned his Master of Science in Engineering from Arizona State University. Over the last 35 years, Dan has focused on corrosion monitoring, internal corrosion control, and chemical treatments, the last 24 years of which were dedicated to maintaining system integrity for crude oil and natural gas systems. Dan has over 27 publications, including those within NACE's Materials Performance, the Oil and Gas Journal, and World Pipeline magazines. Dan is also receiving the Distinguished Service Award from NACE International (2012).

New Initiatives for Controlling Microbiological Populations and Corrosion

Samples of produced water collected from many of the pipelines within the Four Corners Area gathering systems have shown evidence of microbiological populations. Accordingly, producers and transporters regularly conduct analyses to quantify microbiological populations and measure the effectiveness of any treatment programs, which have been implemented. Many of the gathering systems have numerous cross ties, which provide the users with options for routing the produced gas and any associated liquids towards different compressor stations or processing plants. When the directions of flow are changed, that may affect the ability for upstream chemical applications to effectively treat downstream piping. Consequently, there is an increased need to incorporate flow modeling results into the chemical treatment planning. We will present some of the strategies we've employed in our quest to maintain the integrity of our gathering systems. We will also present an overview of presently available biocide

Travelers Insurance

**Joel R. Parise Regional Vice President, Oil and Gas
Denver, CO**

Mr. Parise has been in the insurance industry approaching 24 years. He has been with Travelers Oil and Gas division since its inception in 1998. He has held multiple positions with increasing responsibility throughout his career. Prior to insurance, Mr. Parise spent 10 years in the upstream Oil and Gas industry. Mostly in the Rocky Mountain region, he worked in the field, sales, and management. He is a graduate of Northern Michigan University.

Insurance, a Changing Picture

The insurance industry like the oil and gas industry has cycles. They cycles aren't necessarily in sync,

but the downside can be devastating to companies and each industry as a whole. 2012 will not look the same as in years past. The oil industry is booming in many basins and the insurance industry is nearing the end of a long downward cycle. With profit margins squeezed, insurance companies will begin looking to increase rates. Terms and conditions will likely be tightened and there could be less capacity for high limits of liability.

The oil and gas industry is rapidly changing with unconventional drilling activity in the forefront. These wells are more expensive to drill and complete. For operators and contractors it may be time to revisit your insurance program. If the Mancos Shale turns into a viable play, the game will change in the Four Corners area.

Controlling insurance costs while maintaining the necessary coverage can be a difficult balance. The best way to control premiums is through a solid safety program. Develop a strong safety culture, management should buy in and enforce it. Underwriters will key in on safety, and you will be a much more attractive risk.

Halliburton Pinnacle

Mark A. Parker Technology Manager Houston, TX

Mark is a Technology Manager supporting stimulation treatment design within the Fracturing Center of Excellence. Before joining Pinnacle he was a Technical Advisor for the Southeast Area Tech Team supporting production enhancement operations for the Haynesville Shale development. Prior to that he worked in Halliburton's Technology Center in Duncan, OK where he was responsible for all physical testing dealing with dynamic fluid loss and fracture conductivity. Interests include fracturing fluid systems and proppant development. He remains active with industry consortiums and ISO workgroups dealing with fluid loss, proppant testing and specifications, and conductivity testing. He has over 30 years of service in the oil and gas industry with Halliburton.

Improving Hydraulic Fracturing with Monitoring Technology – How Do We Know What We Are Doing?

Hydraulic fracturing is a critical part in realizing the ultimate production from conventional reservoirs. It is even more critical for unconventional reservoirs utilizing horizontal drilling. For all of its importance, we don't get to "see" the fracture that is created. However, there is a technology, downhole microseismic monitoring that can give us a picture of the fracture extents and orientation to guide completion choices and future reservoir development. Stimulated Reservoir Volume (SRV) can also determine effectiveness of treatment and indicate alternatives to improve the production results.

There is another technology that can let us "see" where treatment fluids go once they are pumped down the wellbore. Distributed Temperature Sensing (DTS) can give great insight into the results by indicating whether or not we have treated the intended locations in the wellbore. Perforating effectiveness, fluid diversion, and wellbore isolation can be identified and many times corrected at the time of treatment to improve results.

This presentation will show examples of downhole microseismic monitoring and Distributed Temperature Sensing (DTS) and how the data can lead to improved completions.

Schneider Electric, Telemetry and Remote

David J Southern P.E. Denver, CO

David Southern is a professional, licensed engineer with 29 years experience in industrial automation. David began his career on an off-shore production platform in Santa Barbara, California and today he manages regional customer and application support in the Rocky Mountains for Schneider Electric, Telemetry and Remote SCADA Solutions.

He is a published author, US Patent Holder, and a public speaker for several technical associations.

David also enjoys metal fabrication, motorcycle touring and drag racing

**SCADA
Solutions.**

motorcycles, legally. Be sure to ask him about his membership in the 100 MPH Skippers Club.
David, his wife of 29 years live in the Denver, Colorado area.

Presentation: Why GO Wireless

Whether overhead, underground or on the ground, wire poses an inherent danger to the humanity it was designed to serve. While the dangers of high voltage wiring are apparent to most, the hidden dangers of low voltage wiring are just as unhealthy.

The direct effect of a failed wire or conduit is the immediate interruption of service of a wired remote asset, leading to the potentially lethal damage from electrocution, equipment running out of control posing a threat to humans nearby, as well as consequential catastrophic affects. The indirect effects with a cut-in-wire service are lost production, lost productivity, repair costs, increased maintenance, environmental non-compliance, replacement costs, regulatory fines, legal costs, etc.

Water and Wastewater Utilities with remote distributed field assets wrestle to find ways to provide:

1. A Safe Working Environment
2. Compliance to Environmental Regulatory Requirements
3. Compliance to State and Federal Financial Regulations
4. Enhanced Operational Excellence
5. Cost Containment
6. Theft Protection

During this educational and entertaining, 1-hour, hands-on presentation titled "Why GO Wireless" the presenter covers the many reasons to go wireless including:

- o Enhanced safety
- o Reduced operating costs
- o Increased production
- o Reduced travel and land use
- o Remote diagnostics

In a highly generic format, the presenter reviews most of the popular industrial wireless technologies available today. The attendee will leave the presentation with a good understanding of how to set up a wireless network and during the hands on workshop is encouraged to walk around inside and outside the training center with the wireless gear to test range, data communications and diagnostics. To help engage the audience with the subject matter and ensure a successful presentation, several "wireless door prizes" are presented during the meeting to the attendees with the best questions.

**Muleshoe
Engineering**

David Simpson P.E. Farmington, NM

Mr. David Simpson has 32 years experience in Oil & Gas and is currently the Proprietor and Principal Engineer of MuleShoe Engineering. Based in the San Juan Basin of Northern New Mexico, MuleShoe Engineering addresses issues in Coalbed Methane, Low Pressure Operations, Gas Compression, Gas Measurement, Field Construction, Gas Well Deliquification, and Produced Water Management. Prior to forming MuleShoe Engineering, Mr. Simpson was a Facilities Engineer for Amoco and BP for 23 years. A Professional Engineer with his Master's degree, David has had numerous articles published in professional journals, has contributed a chapter on CBM to the 2nd edition of Gas Well Deliquification, by Dr. James Lea, et al. He is a regular contributor to

various conferences on Deliquification, CBM, and Low Pressure Operations. He holds a BSIM from the University of Arkansas and an MSME from University of Colorado.

Shale Gas

This talk is intended to provide some insight into the place that Shale Gas holds within the total U.S. natural gas production; the unique characteristics of Shale Gas; and the challenges that face Shale Gas producers.

San Juan College School of Energy

Maury Tiehen CDL Program Coordinator Farmington, NM

Mr. Tiehen has taught in the San Juan College CDL Program for the past ten years. He has a college degree with a business management background and is a licensed CDL driver with oilfield experience. As the San Juan College CDL Program Coordinator he directs activities in the largest truck driver training program in New Mexico and holds the college faculty rank of Associate Professor. He is also a NM State Certified CDL Examiner & Examiner Trainer with responsibility for 10 CDL Examiners at San Juan College (most in the state). Mr. Tiehen sits on the Board of Directors of the National Association of Publicly Funded Truck Driving Schools.

Federal and State CDL Regulation Issues; Present & Proposed

This presentation will discuss issues related to current CDL licensing, new Federal CDL regulations currently being implemented and regulatory proposals in process which could affect CDL drivers and the companies who employ them.

NIOSH

Phil Somervell PhD Anchorage, AK

Dr. Somervell received his Ph.D. in Epidemiology from the University of North Carolina at Chapel Hill, and did postdoctoral work at Yale University. Since 2007, he has been with the NIOSH Alaska Pacific Regional Office, in Anchorage, Alaska. His work includes occupational injury surveillance, and injury prevention research in agriculture, oil and gas extraction, and other industries.

Ryan Hill MPH Denver, CO

Ryan is a Safety Researcher for the NIOSH Western States Office in Denver, CO. He has worked as a safety researcher for 13 years – five of those years with NIOSH. Ryan’s primary duties with NIOSH include conducting research and prevention activities to reduce injuries among oil and gas extraction workers. He is the Coordinator for the NIOSH Oil and Gas Extraction Safety and Health Program and the Coordinator of the NORA Oil and Gas Extraction Council.

Does New Drilling Rig Technology Lead to Fewer Worker Injuries?

Authors: Phil Somervell, Ryan Hill, Kyla Retzer

During 2003-2009, thirty percent of all fatalities in the oil and gas extraction industry were the result of workers coming into contact with objects and equipment while on location. “Contact injuries” include a variety of events; the most common are workers being struck by objects or caught in running equipment. Fatal contact injuries are most common among workers employed as contractors, short

service workers, and workers employed by small companies. In 2008, NIOSH conducted focus group discussions and interviews with workers and supervisors employed by drilling contractors to better understand how to prevent these injuries. We asked questions about the risks and benefits of different kinds of equipment in relation to contact injuries, including the use of advanced drilling rigs. Some of the themes that emerged from this research included: workers identified newer drilling technology as usually safer than older technology; advanced rigs may present unexpected hazards; new rigs may be hard for workers to adjust to, even for an experienced worker; and maintenance and repair may be more challenging. In our interviews and discussions, workers often emphasized the need for additional training, and the importance of situational awareness and communication around the rig. Safe working practices and a strong safety culture are still extremely important aspects of rig safety. The purpose of this presentation is to: 1) use the most recent data available to describe contact injuries among oil and gas extraction workers and identify the groups of workers most at risk of suffering a contact injury; 2) to share with the audience what we have learned from workers about advanced drilling rigs and safety; and 3) to solicit input from conference participants about their experience with new drilling rig technology.

**New Mexico
Occupational
Health and
Safety
Bureau**

Carol Walker Compliance Officer Santa Fe, NM

Carol worked as a Compliance Officer with the New Mexico Occupational Health and Safety Bureau (NM OHSB) for five years, performing more than three hundred inspections and investigating 8 fatalities and other high profile cases. She assisted with the development and passage of the New Mexico Convenience Store Regulations. Following the Trade Center Bombings, she responded to a request by coordinating four groups of NM OHSB staff members sent to assist during the rescue and cleanup stages.

After spending two years at Sandia National Labs, she returned to NM OHSB as a Consultant and Coordinator of the New Mexico Oil and Gas Safe Site Program. For the past 18 months, she has served as the Acting Program Manager for the Consultation Section.

Carol holds a Bachelor Degree in Social Justice and a Masters in Occupational Safety Management. In addition, she holds two TEEK CSHO certifications.

Melissa Barker Compliance Specialist Santa Fe, NM

Melissa J. Barker is a Compliance Assistance Specialist with the New Mexico Occupational Health and Safety Bureau (NM OSHA). Ms. Barker began her career in occupational health and safety as a summer intern with the Bureau, which led to a permanent position as a Health and Safety Compliance Officer. After leaving NM OSHA for the private sector, she returned to the Bureau over four years ago to serve in her current role of working cooperatively with industry to improve the health and safety of NM workers. Ms. Barker has over 12 years of experience in occupational health and safety, and in addition to her experience as an OSHA Compliance Officer and a Compliance Assistance Specialist, she has served in roles including operations management, safety management and safety engineering.

Overview of NM-OHSA and the Oil and Gas Industry

This presentation is intended to provide participants with an overview of New Mexico Occupational Health and Safety Bureau and its relationship with the oil and gas industry. We will look at last year's statistics including citations, industry hazards, recent regulatory changes and elements of a strong safety and health program.