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Mid-Continent Section
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Mid-Continent Section Monthly Newsletter

March 2015
Issue No. 411

SPE Mid-Continent Section

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IOR Symposium 2016:			
Michael Wiggins, Mid-Con Energy			
Young Professionals:			
Charley Mathis, Cudd Energy Services	918-585-9807	918-629-5853 (c)	cmathis@cudd.com
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Nathan Nitchals, ENVENTURE	918-856-1091		nathan.nitchals@enventuregt.com
Sporting Clays Tournament:			
Mark Carr, Kaiser Francis	918-491-4369	918-491-4691	markc@kfoc.net

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Voting members consist of the Executive Committee. The Chairman only votes in the event of a tie. A Motion can be voted upon with a Quorum of the Voting Members present. A Quorum consists of five Voting Members present. An affirmative vote will consist of 51% of the Quorum present. Committee Chairmen and in their absence, the Committee Vice Chairmen are encouraged to attend board meetings and provide representation and committee reports. The editor welcomes newsworthy items about SPE members or events. Please provide a **draft to the newsletter editor by the 25th of the month.**

Change of address requests should be made to SPE in Richardson, TX, 800-456-6863.

Chairman's Gavel

Ashley Jorishie, 2014-2015 Mid-Continent Chairman

The SPE Mid-Continent Section is starting off 2015 right! It was great seeing everyone at the Summit Club for our second Distinguished Lecturer for this term, Mr. Joe Frantz Jr. With oil prices what they are at the moment, I thought it was perfect timing to discuss the implications that technology, governments, regulators, academia, and the public have on the world's energy supply and demand equation. Though I do not personally work in shale, I saw a lot of similarities regarding the challenges that we face here in Oklahoma.

February 18th brings us Mr. Jerry Fritsch who will be discussing Solid Expandables at the Summit Club. For those of us in operations, this will be a great talk on re-fracing opportunities and wells with casing integrity issues and some equipment used to aide in those projects. I hope to see you all there!

As a reminder on the Distinguished Lecturer Program, if anyone has someone in mind that they think would be a great candidate for the program, please visit the following website: www.spe.org/dl/nominations.php . Nominations are open from February 1 – March 15.

We are continually looking for feedback or ideas for upcoming events, so please don't be afraid to shoot any of the board members an email! We are here to serve you!

Kind Regards,

Ashley Jorishie
2014-2015 Chairman
ashleyjorishie@gmail.com

YP Happy Hour

Join us for a Young Professionals Happy Hour
Thursday, March 19th, 5:30-7:00pm
McNellie's Downtown (upstairs)
Contact Charley Mathis for more info, (**cmathis@cudd.com**).

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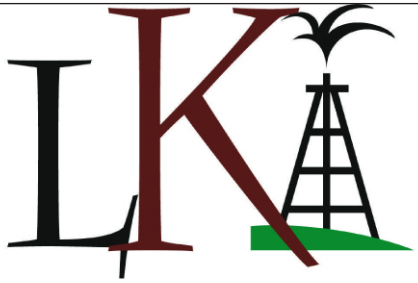

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From Your Editor

Betty Felber, 2014-2015 Editor

March is here already. After this month we have only two more months remaining for this group of officers as our leaders. We have had successful meetings so far. This month is another example of a great topic—"A Decade Monitoring Shale Gas Plays Using Microseismicity: Advances in the Understanding of Hydraulic Fracturing". Register early as we night just "sell out" of space. See you there.

Your Editor,
Betty Felber



Calendar of Events

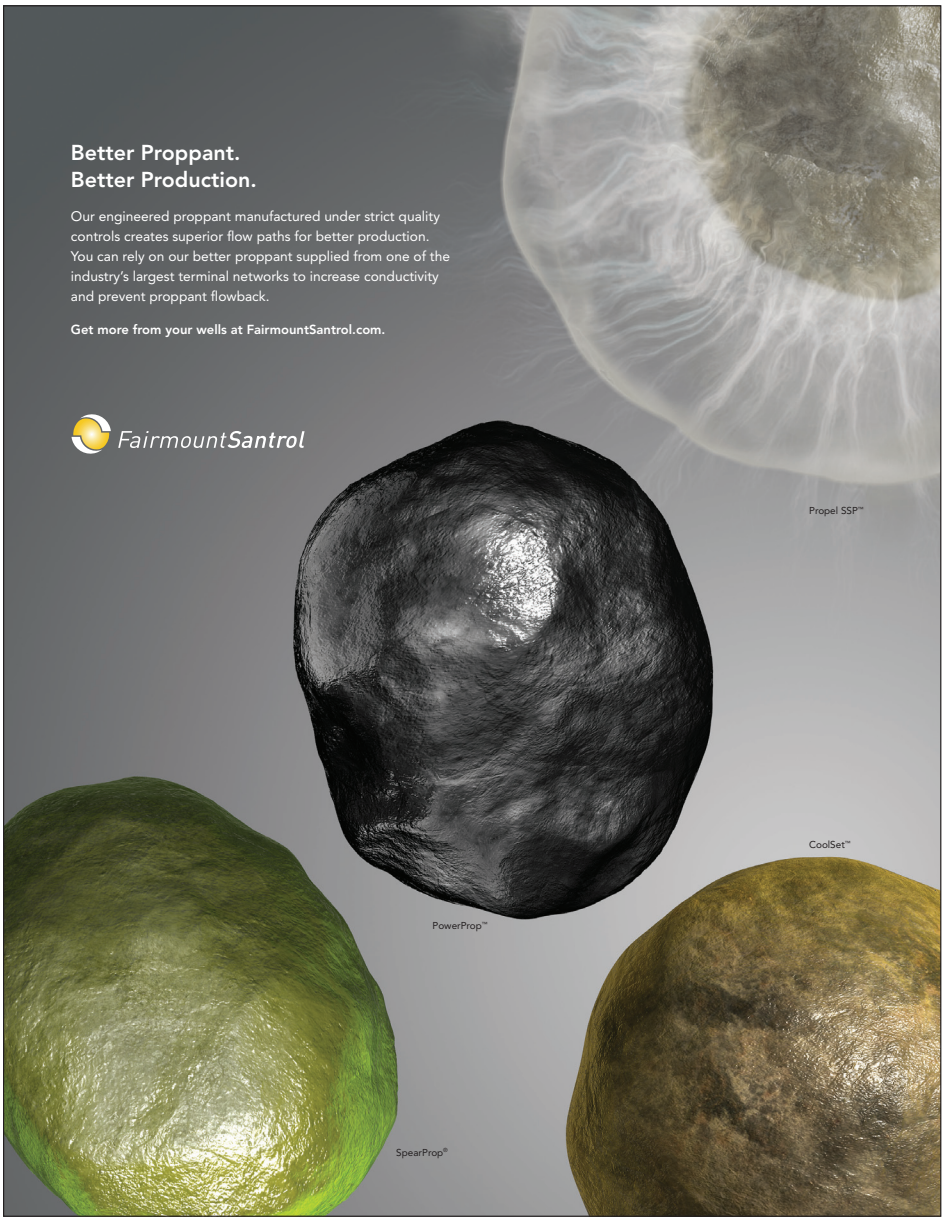
Thursday, March 19, 2015 - Summit Club

- Luncheon Meeting, Sheri Bowman-Young, ESG Solutions, "HA Decade Monitoring Shale Gas Plays Using Microseismicity: Advances in the Understanding of Hydraulic Fracturing"

Wednesday, April 8, 2015 - Summit Club

- Luncheon Meeting, Brian C. Gahan, Laser Rock Technologies LLC | *Distinguished Lecturer* | "Perforating With Lasers: Are You Ready for the Power of Light?!"

All SPE luncheons are held at the Summit Club unless otherwise noted - See p7 for more details.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2014-2015 Membership News

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New Members March 2015

Name	Company Name
Stephen Clayman	
Paul Dudley	
Maria Felzke	
Tony Isler	Stonebridge Consulting
Jared Kochick	
Krishnan Kumaran	ExxonMobil Research & Engrg
Robert Lovelace	Stonebridge Consulting
Fabio Rodrigues	
Kyle Rowe	
Eric Sallee	Sercel-Grc
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MARCH 2015

THURSDAY, March 19, 2015 - Luncheon Meeting
Location: Summit Club, 30th Floor, Banquet Room
Speaker: Sheri Bowman-Young, ESG Solutions
Topic: "A Decade Monitoring Shale Gas Plays Using Microseismicity: Advances in the Understanding of Hydraulic Fracturing"

Register: **http://spemc031915.eventbrite.com**

Description
Over the past decade, microseismic monitoring has become the most widely used approach to understand of in-situ reservoir behavior during hydraulic fracture stimulations. From early monitoring performed in the Barnett Shale to current programs in the Horn River and Marcellus formations, we review the evolution of microseismic monitoring from the viewpoint of data collection (single versus multi-well array configurations, use of long lateral stimulation wells), data analysis and the incorporation of microseismic parameters to constrain and validate reservoir models.

We conclude with a look at multi-array microseismic results from hydraulic fracture stimulations of various North American shale plays to illustrate how microseismic analysis has aided in the understanding of reservoir characteristics and in turn, helped to plan more effective stimulation programs. We highlight case studies where microseismic monitoring was used to help assess fracture dimensions, stage spacing and well spacing. In addition, we look at how the use of advanced analysis techniques such as seismic moment tensor inversion (SMTI) has helped propel the industry forward and allowed operators to gain a better estimate of the stimulated reservoir volume, the discrete fracture network and the effective fluid flow by understanding details on individual rupture mechanisms and how these mechanisms change depending on treatment program, local stresses and local geology.

Speaker
Sheri Bowman-Young
Sheri Bowman-Young is an engineer and senior level manager with ESG's global energy services division, where she oversees all analysis, interpretation and reporting for microseismic projects related to hydraulic fracture mapping and reservoir monitoring. Sheri joined ESG in 2007 as a geophysicist and has since held positions of Geophysical Analyst, Project Manager and Manager of Data Services. Sheri has played an integral role in the growth of ESG's FRACMAP services, leading efforts to better understand microsiesmic data beyond traditional event location while educating operators on the additional value that can be extracted from microseismic datasets.

SPE Mid-Continent luncheon meetings are held at various loactions around the Tulsa area. Please see the location details for each meeting. Summit Club is located at 15 West Sixth Street (NE corner of 6th & Boulder)

SPE Mid-Continent luncheon meetings are held from 11:20-1:00 p.m. unless otherwise noted. To register and pay by credit card, or for reservations to pay at the meeting by cash or check, go to the corresponding link for a luncheon. Luncheon cost is $25.00. Payment by credit card is for advanced registrations ONLY, no credit cards will be accepted at the meeting. Credit card sales will stop one hour prior to the meeting.

Sheri is a registered professional engineer (P.Eng.) and a member of the SPE and SEG. She holds dual degrees from Queen's University in Kingston, Ontario in Applied Math & Mechanical Engineering and Geological Sciences and has authored or presented over 20 papers on microseismic monitoring.

APRIL 2015

WEDNESDAY, April 8, 2015 - Luncheon Meeting
Location: Summit Club, 30th Floor, Banquet Room
Speaker: Brian C. Gahan, Laser Rock Technologies LLC |*Distinguished Lecturer*|
Topic: "Perforating With Lasers: Are You Ready for the Power of Light?"

Register: **http://spemc040815.eventbrite.com**

Description
Lasers are on track to provide safe, non-explosive, damage-free perforations.
For decades, experts have considered the potential of laser energy to penetrate rock as an alternative well construction and completion method. However, applications of lasers were dismissed as energy intensive and inefficient. Conclusions from nearly 50 years ago continue to affect industry misconceptions despite massive technical developments in laser systems and their applications.

Current industrial laser technology addresses efficiency, portability and reliability issues required for successful commercial field applications on all rock types, including shale. The latest multi-mode configuration of fiber lasers are now capable of delivering multiple kilowatts of power from an efficient, compact laser source with excellent beam quality, reliability and long life. They represent an enabling technology that opens the door for near-term subsurface laser applications under field conditions. Examples of remote surface field applications have been made.

The application of high power lasers for perforating could significantly reduce the primary drawbacks over traditional methods – safety and damage. Lasers can cut through steel, cement and rock, to permit fluid flow with minimal skin damage. Laser perforation concepts were proven under multiple downhole conditions, including pressure. Many drilling, completion and subsurface applications with high power lasers are envisioned.

Speaker

Brian C. Gahan



Brian C. Gahan is founder and president of Laser Rock Technologies, LLC, a private energy consulting firm in Cary, Illinois, USA. He was a Senior Scientist and Manager, E&P Technology Development for 16 years at Gas Technology Institute (GTI) in Des Plaines, Illinois. He holds a BS in petroleum engineering, Masters in chemical engineering and an MBA in finance, and a registered professional engineer. He is a member of several professional organizations, including the SPE since 1980, and as a fellow of the American Institute of Chemical Engineers (AIChE). Gahan has authored and co-authored more than 40 papers and technical publications, and is a co-inventor on a U.S. Patent.

A Free Service for Mid-Continent Section Members and Their Employers

SPE is offering a new free service to section members and their employers for the posting of jobs offered by employers (please, no third party recruiters) seeking to hire SPE members and for members seeking employment. Unless otherwise arranged, ads will stay on the website for one calendar month. To view available jobs go to the section website **www.spemc.org** and select Help Wanted/Situation Wanted. To submit an ad (120 words or less, please) e-mail **spemc@spemc.org** for consideration.



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Society of Petroleum Engineers

"Be a yardstick of quality. Some people aren't used to an environment where excellence is expected"

— **Steve Jobs**

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