March 2015

SPWLA Houston Chapter Newsletter

Luncheon meetings *in March 2015*	
Northside **Mon, Mar 02, 2015** Talisman Energy USA Inc. Suite 1200, 2445 Technology Forest Blvd, The Woodlands, TX 77381	Bringing Seismic Ideas to Acoustic Logging Shreya Biswas Ley & Partha Biswas
Westside **Wed, Mar 11, 2015** BP Plaza Westlake 4	Real time LWD use of Azimuthal Acoustic measurements to optimize Formation Evaluation, Well Placement and Hydraulic Fracturing program while drilling **Camilo Mejia,** Weatherford
Downtown **Wed, Mar 18, 2015** Kinder Morgan	Field Experience with Raptor Pulsed Neutron Saturation Tool **Dr. Darryl Trcka,** Weatherford Wireline R&D

Houston Chapter News

SPWLA Houston Spring Topical Conference

*The Houston SPWLA Chapter is pleased to announce that this year's Spring Topical Conference will take place on Wednesday May 13th at our usual location in the Chevron Auditorium in downtown. This year's topic is "**Mature Field Petrophysics: Maximizing the Value of Existing Assets**". We are inviting abstract submission on relevant topics including (but not limited to) finding missed pay, production petrophysics, cased hole analysis, well integrity, depletion, management and analysis of legacy data, extending production, cross well modeling and reservoir modeling. This will be an off-the-record event with no paper required - we encourage sharing new ideas and methodologies that would be of interest to other members.*

If you are interested in presenting at this event then please submit your abstract via email address [link]. The deadline for abstract submission is Wednesday April 15th. We are looking forward to an exciting conference and we need great speakers and interesting ideas to make this event a success!

If you have any questions on the event please feel free to contact any of the board members directly.

SPWLA Upcoming Events

SPWLA 2015 Spring Topical Conference: Pore- scale imaging and digital rocks: Expanding the Petrophysical Toolkit | Skamania Lodge, Stevenson, WA, May 3-7th 2015 **[Link]**

SPWLA 56TH Annual Symposium | Long Beach, CA, July 18-22, 2015

SPWLA 57th Annual Symposium | Reykjavik, Iceland, June 26-30, 2016

President's Corner

Dear Chapter Members

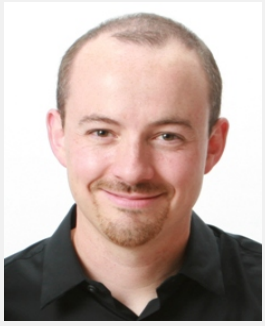
Hello again! Once more we have had three successful speaker meetings this month. On the Northside Darryl Trcka (Weatherford) presented on the field experience of the raptor pulsed neutron saturation tool. On the Westside Gary Simpson (Hess) delivered a repeat of his extremely popular talk from the December software show on the pitfalls in comparing core to log data in unconventional tight oil reservoirs and for the downtown session Ahmed Badruzzaman (Pacific Engineers) presented a talk about alternative nuclear-based technologies to mitigate risks of radionuclide well logging sources. Once again I would like to thank all of you who attended for your ongoing support of the chapter events and of course a big thank you goes out to our speakers.

We are in the process of finalizing the details of the May 13th Spring Topical Symposium. I am pleased to announce that the topic for this year's event will be "Mature Field Petrophysics". We will shortly be sending out the call for abstracts and the topics of interest will include (but not limited to) finding missed pay, production petrophysics, cased hole analysis, depletion, management and analysis of legacy data, extending production and reservoir modeling. This will be an off the record event and no paper is required so I encourage you all to submit topics you feel are of relevance.

In addition we are moving along with the development of our new website. We are getting closer to being able to roll out the first version for trial use by the chapter members and eventually we hope to be able to incorporate membership management, speaker session announcements, sign up for events and payment into the new site. We believe that this overhaul will deliver a much better experience for our members and a smoother system for the management of chapter events. Finally this is a friendly reminder to please join the SPWLA international organization if you are not already a member. Details can be found at www.spwla.org.

If you have any questions or comments about chapter activities then please feel free to contact me directly at president@spwla-houston.org.

Matt Blyth
Houston SPWLA Chapter President



Matt Blyth
Houston Chapter President
president@spwla-houston.org

SPWLA Houston Chapter Officers 2014 – 2015	
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Useful links

Sign up for the Houston Chapter Mailing List [Link]

Houston Chapter
spwla-houston.org

SPWLA International
spwla.org

Join SPWLA – become a member
http://www.spwla.org/member/join

Houston Chapter LinkedIn page

SPWLA Symposium 2015

Northside Luncheon Meeting

Monday, Mar 02, 2015 | Lunch: 11:30 | Talk: 12:00

Bringing Seismic Ideas to Acoustic Logging

Shreya Biswas Ley & Partha Biswas

Most acoustic logging processes were developed for conventional plays. As other technology became better adapted to directional drilling and unconventional plays became the norm, certain limitations in acoustic
logging have become more apparent. Two limitations, in particular, come to mind: First, shear anisotropy does not always demonstrate anisotropy in softer rock formations and, even when it does, the technique is unable to distinguish between anisotropic characteristics and natural fractures. Second, the azimuth computed using Alford from fast shear becomes error prone as the well deviates more than 20 degrees from the vertical. Instead of abandoning the use of acoustic logging, it may be time for the acoustic logging community to explore new methods adapted to these new challenges. Our seismic cousins have already begun to explore these limitations and begun researching ways to account for them. Why not borrow from their research and find ways to adapt their ideas to our own processes?
The following discussion will address the problems at hand with the use of shear anisotropy and Alford in unconventional plays and then propose solutions based on seismic research for, first, fracture identification in unconventional reservoirs and, second, for azimuth calculation for directional drilling.

Shreya Biswas Ley began her career as a chemical engineering graduate from the University of Texas at Austin. She promptly moved to Houston and began working for Mustang Engineering. After a couple of years working as a chemical engineer, Shreya moved on to go to law school at Tulane. Since becoming an attorney, she has worked almost exclusively with technology companies and honed her entrepreneurial tendencies. Although her background has not been in geophysics, she has been subjected to it her whole life as a product of the oil industry and watching her father plot acoustic logs from a young age. When her father approached her with his new ideas, she not only helped him with his patent and business from a legal aspect but jumped in with two feet to help him develop and commercialize his ideas. GeoBiz Technology, Inc. was thus founded around the Thanksgiving table.

Partha Biswas began his career as a petrophysicist when he accepted a position at ONGC approximately 45 years ago. Since then he has worked for the Kuwait Oil Company and Sonatrach before moving to the United States to work for Western Atlas (now, Baker Hughes). He spent a number of years at Baker working in Houston, Alaska, Saudi Arabia, and Norway. After leaving Baker, Partha has worked as both an independent consultant and as lead petrophysicist for Fronterra Geosciences before striking off on his own again. His extensive and diverse work experience as well as his obsession with finding the best possible answer have lead to his innovative ideas in Acoustic Logging. He is both excited about his new entrepreneurial venture with family and unhappy with being bossed around by his daughter

Venue Details Northside

Talisman Energy USA Inc.
Suite 1200, 2445 Technology Forest Blvd, The Woodlands, TX 77381

Parking: Parking Garage adjacent to the Talisman building. Visitor Parking available in 5th floor and above.

Reservations:
Email **Robin Slocombe**
northvp@spwla-houston.org

RSVP by noon, Feb 26.

Cost: $30.
Lunch is included.
Please use PayPal
(click this link to pay)

Student discount rate $15
(Students use this link)

Westside Luncheon Meeting

Wednesday, Mar 11, 2015 | Lunch: 11:30 | Talk: 12:00

Real time LWD use of Azimuthal Acoustic measurements to optimize Formation Evaluation, Well Placement and Hydraulic Fracturing program while drilling

Camilo Mejia, Weatherford

Today and for the foreseeable future, unconventional reservoirs dominate the U.S. oil and gas energy market, which is facilitated through hydraulic fracturing techniques and extended reach horizontal drilling practices. As these techniques and practices develop to become more efficient in producing better well productivity, operators require more advanced technology to provide the information needed to make quicker more informed decisions. LWD (Logging While Drilling) has answered the requirement of advanced technology by providing precise data in real-time while drilling.

The latest example of LWD advancement in technology is Azimuthal Acoustic acquisition in real-time, which provides a shear wave anisotropy measurement while drilling. When paired with the azimuthal bulk density, the shear wave anisotropy measurement enhances the evaluation of rock mechanical properties such as elastic modulus, closure stress and ductility in anisotropic environment. According to those mechanical properties a horizontal well is geosteered and the hydraulic fracturing completions design is made while the well is being drilled.

When designing an optimized hydraulic fracturing stimulation program where rocks with similar properties are isolated in completion stages, it is imperative to constrain the mechanical rock properties of those rocks in order to simulate accurate fracture modelling. Historically, the data to derive mechanical properties was acquired by pipe or tractor conveyed wireline after the drilling of a well. By acquiring the same data while drilling, the completions engineer can have the hydraulic fracturing completions design finished and the completions team on its way to the rig before the drill bit has arrived at surface after drilling to well total depth.

The geosteering of a horizontal well based on bed boundary detection using a deeper ratio of investigation measurement and anisotropic mechanical rock properties is a progressive technique that can only be done when reliable azimuthal acoustic data is provided in real-time. Properties such as closure stress, Anisotropy are monitored to place the well in the zone that will have the best success when hydraulically stimulating the well.

This paper demonstrates the advantage of advance real-time while drilling azimuthal acoustic data acquisition, and how it is used to for well bore placement and improved hydraulic fracturing completions design.

Camilo Mejia is U.S LWD Regional Formation Evaluation Supervisor with Weatherford Petroleum Consulting. Camilo has been supporting the formation evaluation expansion of Weatherford from several roles in operations, technical support, and geoscience. He has experience in areas such as Drilling, geological evaluation, Petrophysics, Acoustic applications, reservoir characterization, well placement, and completion optimization

Venue Details Westside

BP Plaza Westlake 4
Room 107
501 Westlake Park Blvd
Houston, TX 77079

Reservations:
Register online Here

RSVP by noon, Mar 10

Cost: Free
Lunch: not provided, bring your own or purchase in the BP cafeteria

Parking:
Visitor parking is available at Westlake 4 overflow lot
Sign In Process:
You can proceed directly from the BP reception to the meeting room.
Signing in at the security in not required.
Please sing in on the attendance sheet in the meeting room.

For questions only: Email Rohollah Abdollah-Pour

Your feedback matters. provide us with your feedback on why you will not be joining us [here]

Downtown Luncheon Meeting

Wednesday, Mar 18, 2015 | Lunch: 11:30 | Talk: 12:00

Field Experience with Raptor Pulsed Neutron Saturation Tool

Dr. Darryl Trcka, Senior Research Physicist and

Raptor Advanced Product Manager

Weatherford Wireline R&D

The Raptor is the latest generation of pulsed neutron technology from Weatherford and is currently being introduced worldwide. Greater depth of investigation, greater sensitivity to formation fluids and gas, and a calibrated response characterization are the foundations of the Raptor behind-casing saturation and formation evaluation products.

This presentation will introduce the Raptor technology and examine some of the recent experiences from the field.

Dr. Darryl Trcka, a senior research physicist at Weatherford Wireline R&D, the principal Raptor scientist, and the manager of advanced product development for the Raptor services.

Venue Details Downtown

Kinder Morgan
1st Floor Conference Rm
1001 Louisiana St
Houston, TX 77002

Reservations:
Email to **David Diaz**
downtownvp@spwla-houston.org

RSVP by noon, Mar 12

Cost: $30. Lunch is included.
Please use PayPal (click this link to pay)

Students discounted rate $10 (Link for students)

Parking: closest options:
- Travis Garage across milam, in front of Kinder Morgan
- Open Air parking between Kinder Morgan and Shell N 2