

Houston Chapter Officers 2011-2012

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# SPWLA - Houston Chapter News January, 2012

## **Luncheon Meetings**

Northside Monday, Jan 9, 2012 The Greenspoint Club	Application of Resistivity Borehole Image Analysis in Unconventional Gas Reservoir Field Development		
	by Darrell Eubanks, Marathon		
Westside Wednesday, Jan 11, 2012 BP Plaza Terrace Room	Introducing the First LWD Crossed-Dipole Sonic Imaging Service by Jennifer Market, Halliburton		
Downtown Wednesday, Jan 18, 2012 Chevron Auditorium	From Correlation to Mechanisms: Petrophysical Models for Organic Mudstone by Peter Day, Marathon Oil		

## **Local SPWLA** Upcoming Events

#### **Software and Hardware Vendor Show**

6<sup>th</sup> December

OMNI Hotel, Westside

#### **Golf Tournament**

16<sup>th</sup> March, 2012

Event Sponsors required, contact Rob Hengel

#### **Spring Topical Conference**

16<sup>th</sup> May, 2012 (topic to be confirmed)

Chevron Auditorium, 1500 Louisiana St, Houston, 77002

#### 53<sup>rd</sup> Annual SPWLA Symposium

16<sup>th</sup> to 20<sup>th</sup> June

Cartagena, Columbia

**Complete Calendar of Events** 









Evaluating Unconventional Reservoirs Since 1984

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December, 2011

Dear Chapter Members,

I hope everyone had a great Thanksgiving holiday.

We take our usual December break from our Section Luncheon Seminars, and host our annual Software/Hardware vendor show, which will again be held at the OMNI Westside hotel, on Tuesday, December 6th. Exhibitor setup will begin at 8 am, and we swing the doors open for general attendance at 10 am. Lunch will be provided at 11:30, and you are welcome to stay until we shut down at 2 pm. The event provides an opportunity to get updated on the status of software and hardware related to Formation Evaluation and related disciplines. This has been a well-attended event, and has been helpful to many in keeping pace with the rapid development of computer-based methods over the past few decades. Don't miss this one!

Our Section Luncheon Seminars resume their schedule in January, so stay tuned to this website for the details about who, when, and where.

Our Golf Tournament has landed on the calendar this spring, March 16th to be exact. Start lining up your foursomes, and keep in mind the opportunity for sponsoring portions of this event. Contact Randy Mitchell (<a href="mailto:ramitchell@hess.com">ramitchell@hess.com</a>) or Rob Hengel (<a href="mailto:Robert.Hengel@bakerhughes.com">Rob Hengel@bakerhughes.com</a>) for sponsorship information.

Here's wishing you a great Holiday Season, and we'll see you in 2012!

Paul Connolly Houston Chapter President

Want to contribute to the SPWLA Houston Chapter Newsletter?

Contact: Simon Clinch

## **President's Corner**

January, 2012



### Dear Chapter Members,

Dear Chapter Members,

Happy New Year! I hope everyone had a safe and enjoyable Holiday season.

We resume our normal schedule of Luncheon Seminars this month, and they're coming up fast. Northside is first on the 9<sup>th</sup>, followed closely by Westside on the 11<sup>th</sup>, with Downtown holding their event on the 18<sup>th</sup>.

Our Golf Tournament is taking shape, scheduled for Friday, March 16<sup>th</sup> at the BlackHorse Golf Club in Cypress. Start lining up your foursomes, and keep in mind the opportunity for sponsoring portions of this event. Contact Randy Mitchell (<a href="mailto:ramitchell@hess.com">ramitchell@hess.com</a>) or Rob Hengel (<a href="mailto:Robert.Hengel@bakerhughes.com">Rob Hengel@bakerhughes.com</a>) for sponsorship information.

Your Chapter Board of Directors is already in the planning stages for the Spring Topical Seminar, which will be held on Wednesday, May 16<sup>th</sup> this year, again at the Chevron Auditorium in Downtown Houston. We have narrowed it down to a few favored topics, but are open to suggestion if you have something in mind. Please don't hesitate to contact any Chapter Officer with your suggestion. Our contact information is located on the "Officers" page of this website.

Speaking of Chapter Officers, I'll remind you that elections for next year's Chapter Board of Directors is just around the corner. We'll be opening up for nominations probably in March. Voting generally takes place online through April, with election results announced at the Spring Topical Seminar. I invite you to consider nominating yourself or someone you know to offer to serve the membership.

Here's looking forward to a safe and prosperous 2012 for our all.

Paul Connolly
Houston Chapter President

## **Northside Luncheon Meeting**

Date: Monday, Jan 9, 2012 Lunch: 11:30 Talk: 12:00 Place: The Greenspoint Club 16925 Northchase Drive, Houston, TX 77060

**Unconventional Gas Reservoir Field Development** by Darrell Eubanks, Marathon

**Application of Resistivity Borehole Image Analysis in** 

RSVP before 9:00 a.m. Thursday, Jan 5

E-mail: Jack Douglas

Map

Cost: Pre-payment. Please, use PayPal

\$35 (lunch\* if paying at the door)

\$32 (lunch\* if using PayPal)

\$20 (venue charge without lunch)

Cash, Check or Credit Card is acceptable for payment. Receipts will be provided.

\*This is a fixed meal package including Chef's choice of salad, chicken entrée served with vegetable and starch, dinner rolls, dessert, iced tea, and coffee. The salads, desserts and beverages will be pre-set menu.

**Directions: Map** 

From I-45, go East on Greens Rd. Turn right at 3rd light, onto Northchase Drive. The Greenspoint club is 1/4 mile on the right. From Beltway 8 (going West), Exit Imperial Valley and turn right. Turn left at first light onto Benmar. Stay on Benmar to Northchase. Turn right onto Northchase Drive. The Greenspoint club is on the left.

From Beltway 8 (going East), Exit and turn left on Greenspoint Drive. Go right at first light onto Benmar. Turn left at next light onto Northchase Drive. The Greenspoint club is on the left.

Parking: Ground, 4th and 5th Levels. To access the 4th & 5th levels, pull up to the contract parking gates. There is a call box on the lefthand side. Press the button, release and gates will open. Follow park signs to the 4th and 5th level. The Greenspoint Club is located on the 5th Floor.

#### Abstract

Typical problems associated with unconventional gas reservoirs are identifying productive zones and issues related to production or stimulation interference when wells are drilled in dense patterns. Borehole Image (BHI) logs can be used to identify gas zones in unconventional reservoirs when gas smear features are recognized. Gas smears are direct indicators of gas being released. These features are identified by the characteristic "white out" on the images. The cause is from a layer of gas froth that develops on the borehole wall. Froth buildup is a result of slow percolating gas from low permeability rock. Resistivity image tools respond to gas smear as very resistive readings. Tight gas-bearing sands commonly exhibit gas smear features on BHI logs. These features generally correlate with increased gas units on mud logs. Shales seldom exhibit gas smear features. Fracture stimulation is required with all unconventional gas plays and dense well spacing is essential to efficiently drain the reservoirs. Vertical boreholes with spacing of 20 acres or less are common. Dense well patterns increase the risk of fracing into adjacent wells. This risk can be avoided if in-situ stress orientation is taken into account when field development plans are prepared. Wells drilled near or over balance, generally exhibit in-situ stress features that can be recognized and analyzed with a high degree of certainty on BHI. This paper will show examples from various basins of using resistivity borehole image logs to identify gas smear and in-situ stress features that will aide in field development of unconventional gas reservoirs.

#### **Biography**

Darrell Eubanks is an Advanced Senior Petrophysicist in the Upstream Technology department with Marathon Oil in Houston, Texas. Since joining Marathon in 1998 he has worked a variety of domestic and international projects evaluating conventional and unconventional reservoirs. Currently his primary focus is on unconventional resource plays. He began his career in New Orleans with Schlumberger in 1985. In 1987, he joined Halliburton where he held technical and management positions in New Orleans and Houston. Eubanks hold a B.S. and M.S. in geology from Stephen F. Austin State University.

## **Westside Luncheon Meeting**

Date: Wed, Jan 11, 2011 Lunch: 11:30 Talk: 12:00

**Place:** BP Plaza Terrace Room, 1<sup>st</sup> floor, next to cafeteria 501 Westlake Park Boulevard.

Houston, TX 77079

**Map** 

Introducing the First LWD Crossed-Dipole Sonic Imaging Service

by Jennifer Market, Halliburton

RSVP Thaimar Ramirez before 3:00 p.m. Tuesday, Jan 10

E-mail: Thaimar Ramirez

Cost: Free.

Lunch is not provided, bring your own or purchase in the BP cafeteria.

Parking: BP Plaza Garage (4200 Westlake Park Boulevard, Houston, TX 77079).

#### Abstract

LWD Azimuthal sonic logging is a rapidly evolving field, providing 360-degree information where we have only had omni-directional data in the past. This opens up many opportunities for new applications and a more complete characterization of wellbore integrity than ever before. This talk will cover a review of sonic and ultrasonic azimuthal measurements, paying particular attention to such topics as geosteering and anisotropy from LWD sonic.

#### **Biography**

**Jennifer Market** has been in the industry 15 years and is currently the Global Acoustics Advisor for Halliburton. She has been involved in sonic and ultrasonic tool design, software and application development as well as data analysis. She studied at the University of Edinburgh and is an SPWLA distinguished lecturer. She frequently publishes on novel acoustics applications.

## **Downtown Luncheon Meeting**

Date: Wed, Nov 16, 2011

Lunch: 11:30 Talk: 12:00 Place: Chevron Auditorium

Ground Floor 1500 Louisiana St *Houston, TX 77002*  From Correlation to Mechanisms: Petrophysical Models

for Organic Mudstone by Peter Day, Marathon

RSVP: before 4:00 p.m. Monday, Nov 14

E-mail: Tsoan Ma

Cost: \$15 Pre-payment (includes lunch\*) Please, use PayPal

Cash, Check or Credit Card is acceptable for payment. Receipts will be provided.

\*Lunch will be a boxed sandwich, chips, cookie and soda or water.

Parking: Regency Parking, Allen Center Visitor Garage, various outdoor lots.

#### **Abstract**

Often the first stage in understanding how to interpret data in new environments is to look for correlations between measured properties. While this is a useful activity, a series of correlations should not be the end of the story: some effort should be made to convert empirical correlations into more general physics-based models – "mechanisms" – that explain why the correlations exist, and how they can be generalized to novel situations. Although it seems that interpretation of "organic mudstones" is moving along from the stage of generating correlations to developing and using mechanisms, there are still some areas in the industry where we could probably be doing a better job. This talk – which was first presented at the Unconventional Resources SIG Meeting in July, 2001 – will walk through a couple of simple examples using log and core data showing how mechanisms that reflect underlying physical principles can be teased out of some organic mudstone correlations.

#### **Biography**

Peter Day is currently a Senior Technical Consultant with Marathon Oil Corporation with oversight responsibility for unconventional resources. He earned a Ph.D., M.A. and B.A. in Electrical Sciences from Cambridge University, England. He started his oil-field career with Schlumberger, spending 3 years in Field Operations in the Middle East followed by 8 years at Schlumberger-Doll Research in Ridgefield, Connecticut. He then relocated to Unocal Science & Technology for an 11 year term in Brea, California and Sugarland, Texas. After 3 misspent years with another service company, followed by a year in preretirement, he moved to Marathon Oil Company in Houston, Texas where he will reach his 10 year anniversary early in early 2012. He has taken a leading role in a number of professional society activities, including Chair of the Technical Program Committee for the 1994 SPE Annual Technical Conference, Cochair of the 1995 Joint SPE/SEG Reservoir Development Forum, and has been on the steering committees for various SPE and SPWLA technical conferences.