

# **SPWLA**

# -Houston Chapter News

## January 2009 LUNCHEON MEETINGS

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Westside BP Plaza	Seismic Petrophysics - Integration to Enable Geologically- Sensible Rock Physics: A Gulf of Mexico Demonstration by Mark G. Kittridge		
Wednesday Jan. 14			
Northside	Advances in Coring Techniques		
Hilton Garden Inn Wednesday, Jan. 21	by Wade McCutcheon		
<b>Downtown</b> Hess Office	Haynesville Shale Reservoir Evaluation for Optimized Drilling and Stimulation		
Wednesday, Jan. 28	by Dan Buller		



## President's Corner

January 2009

Now that we have finally wrapped up a year many of us won't forget for a variety of reasons, its time to start planning ahead for 2009. Before we do that, looking back briefly on 2008, the Chapter held its Annual Software Show at the Omni Hotel on Wednesday, Dec 10th. Much to the delight of the Chapter and the vendors the event was well received and we thank everyone for participating.

This next year will see a lot of energy and activity going into planning the 2009 50th Anniversary SPWLA Symposium. It will be held at the Marriott Waterway in the Woodlands from June 21st through the 24th. I know many members of this Chapter are intricately involved with planning this event, so keep up the good work and get ready for a busy few months. You can check out their wonderful website at <a href="http://www.spwla2009.com/">http://www.spwla2009.com/</a> for more information.

We are also planning on hosting the Annual Spring Topical Conference on Wednesday, May 13th at the Chevron building in downtown Houston. If you are itching for some petrophysical banter and can't wait until the June symposium then this is the place for you. We typically have 5 to 6 talks on a common subject spanning most of the day. Last year's topic was "Residual Oil Saturation" and amid \$100+ oil we had a great showing. This year's topic has not been finalized, but we seem to be heading towards those highly laminated, gas-saturated, very fine-grained rocks that everyone has been so excited about the past few years. Stay tuned and we'll have more information in next month's newsletter.

We'll also be hosting our usual monthly luncheons at all three locations during the month of January. Please note the change in location for the Northside meeting on Jan 21st to the Baker Atlas Auditorium on Rankin Road. You can also go to the SPWLA Houston Chapter homepage at <a href="http://www.spwla-houston.org">http://www.spwla-houston.org</a> for more information.

Joe Comisky Houston Chapter President



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## Westside Luncheon Meeting

Seismic Petrophysics - Integration to Enable Geologically-Sensible Rock Physics: A Gulf of Mexico Demonstration

by

#### Mark G. Kittridge

Date:	Wednesday Jan. 14	Place:	BP Plaza Conference room on 3rd floor. Westlake 4 200 Westlake Park Blvd.	Reservations:	Email: jose.silva@techsia.com
Time	Lunch: 11:30 am Talk: 12:00 Noon	Price:	Purchase lunch in cafeteria and bring to conference room.	Parking	BP Plaza Garage
1		ne MUST sign in AND out at the Lobby Security desk! ceiving security badge, get your lunch and come to the 3rd floor. Follow the SPWLA signs to the conference room.			

#### Abstract

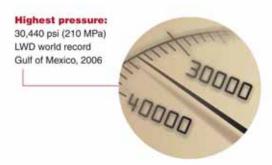
Rock physics relationships are an essential element in the evaluation and modeling of seismic attributes for hydrocarbon exploration. Calibration of seismic amplitude response requires accurate prediction of the expected acoustic properties for reservoir rocks, nonreservoir lithologies (e.g. mudrocks), and pore fluids at varying conditions. The estimation of seismic amplitude variation with offset (AVO) and time-lapse (4D) response is similarly dependent on reliable rock and fluid property information. Our recent experience in a number of global basins has demonstrated the value of an integrated approach to developing rock and fluid acoustic properties for the quantitative interpretation of seismic data.

Seismic petrophysics is the work process that integrates lab- and well-derived rock and fluid properties data, ensuring the development of rock physics models with predictive capability. Additional interpretive synergies are realized when the rock properties work is done within a collaborative workflow, leveraging petrographic observations and robust reservoir petrophysics to constrain the development of rock physics models. In this paper, we describe results from such an integrated well-based rock physics modeling study using data from a Gulf of Mexico discovery and offset dry hole.

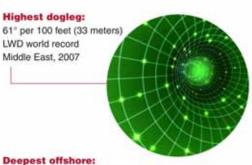
Tremendous industry interest and speculation have followed the July 1999 announcement of the Thunder (Crazy) Horse (MC778) discovery by BP. Holistic evaluation of the Thunder Horse well data, integrated with existing petrophysical data and rock physics modeling from Metallica (MC 911) yielded numerous insights into sand, mudrock, and fluid acoustic properties. Additionally, pressure data and associated fluid properties inferences helped in the description of Miocene unconfined turbidite reservoir architecture, lateral variability, and aquifer support. Using an established seismic petrophysics workflow, we describe results from the integrated multi-well evaluation.

#### **Biography**

Mark G. Kittridge is Principal Technical Expert (Quantitative Interpretation) and Regional Discipline Lead (Petrophysics) with Shell International EP Inc. He joined Shell in 1988 after earning BSc. And Professional Degrees in Geological Engineering from The Colorado School of Mines and a MSc. In Petroleum Engineering from The University of Texas. With Shell, Mark has worked in a variety of well operations and study settings, including carbonates, EOR monitoring, HPHT clastics, and the offshore GoM. His previous assignment was in the Exploration and Deepwater group of EP's Technology R&D unit, working on the development and integration of rock physics models in seismic attribute studies. Mark is chairman of the 2008 SEG Summer Research Workshop, focusing on rock physics modeling.



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## Northside Luncheon Meeting

Advanced Coring Techniques

by

Wade McCutcheon

Date: Wednesday, Jan. 21 Place: Hilton Garden Inn dean.jackson@bakeratlas.com Reservations

> 15400 JFK Blvd. Required: Reservations must be received NO LATER

Parking than Monday, Jan 20th

Excutive Lunch \$20.

Price:

Lunch: 11:30 am Talk: 12:00 Noon

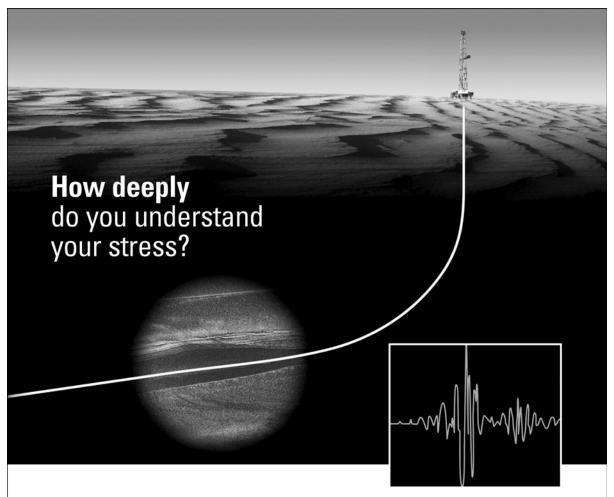
#### **Abstract**

Time

A complete understanding of the reservoir necessitates the need for a quality core and proper core analysis. Several advances have been made in core analysis, but the coring operation itself often uses traditional means with mediocre results. Recent advances in coring technology provides an improvement in core quality and the means for immediate analysis and decision making. These advances include an improved coring assembly, the ability to visualize the core at the rig site for timely decisions, and the means to trap fluid being expelled from the core on its ascent out of the hole. The process of coring is rig intensive and thus a costly operation. These technology advances provide a means to optimize the value of the coring investment by providing quality core and additional answers.

#### **Biography**

Wade McCutcheon is the Coring Business Manager for Reservoir Group which includes Diamond Oil Well Drilling Company (DOWDCO) in North America and Corpro internationally. Prior to joining Reservoir Group in 2008, Wade was employed by Schlumberger Oilfield Services for 18 years. He started as a wireline field engineer working primarily in the US Gulf of Mexico. After nine years with the wireline division, Wade became involved with Directional Drilling, Measurement While Drilling, and Logging While Drilling. His last assignment with Schlumberger was Vice President of Drilling and Measurements with responsibility for North America operations.



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## **Downtown Luncheon Meeting**

Haynesville Shale Reservoir Evaluation for Optimized Drilling and Stimulation

by

Dan Buller

Date:	Wednesday, Jan. 28	Place:	Hess Office One Allen Center 500 Dallas Street	Reservations:	Make reservations as early as possible. Call 713-609-5960 and leave a message for SPWLA Reservations or email at Kkemp@hess.com		
Time	Lunch: 11:30 am Talk: 12:00 Noon	Price:	\$15 with reservation	Parking:	Regency Parking at 1100 Smith Allen Center Visitor Garage Various outdoor lots		
Special Instructions:		entrance	One Allen Center is at the corner of Smith and Dallas. The Hess lobby is on the second level adjacent to the Smith Street entrance. You will need to check in through Security. Please arrive prior to 11:30 am to allow time to check in and get to the meeting room. There are numerous parking places in the area, a few of which are listed above.				

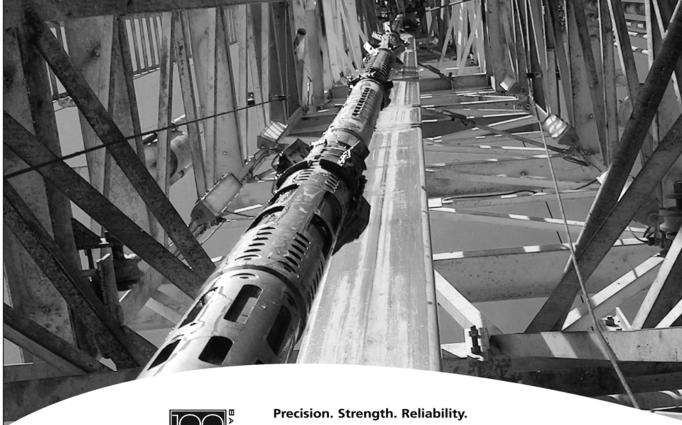
#### Abstract

Recent results from numerous vertically drilled Haynesville shale wells have demonstrated excellent horizontal economic viability when proper candidate recognition formation evaluation is performed and when crucial fracture planning information is obtained. Optimized techniques are presented to aid the geologic and completion teams in picking the best intervals to test vertically and ultimately offset horizontally. Also, where best to target horizontally if there is more than one shale interval present, and finally, determining the horizontal well's optimum directional azimuth for subsequent transverse fracs. Log information from traditional sources along with dipole sonics, spectral gamma ray, magnetic resonance, and borehole imaging are used to address specific applications.

#### **Biography**

**Dan Buller** has 28 years of formation evaluation experience spread between Schlumberger, Numar, and Halliburton. He has specialized in Southeast U.S. on-shore reservoirs since 1988 and has been employed by Halliburton since 1997. He is currently working as Principle Petrophysicist for Halliburton's Southeast Technology Team and is based in Shreveport, LA. He has published papers in JPT, World Oil, and The Oilfield Review. Dan obtained a BS degree in Physics and Math in 1980 from Nebraska Wesleyan University, and a MS in Physics in 1981 from Kansas State University. He is a member of SPE, AAPG, & SPWLA.

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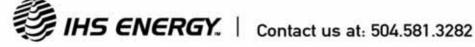
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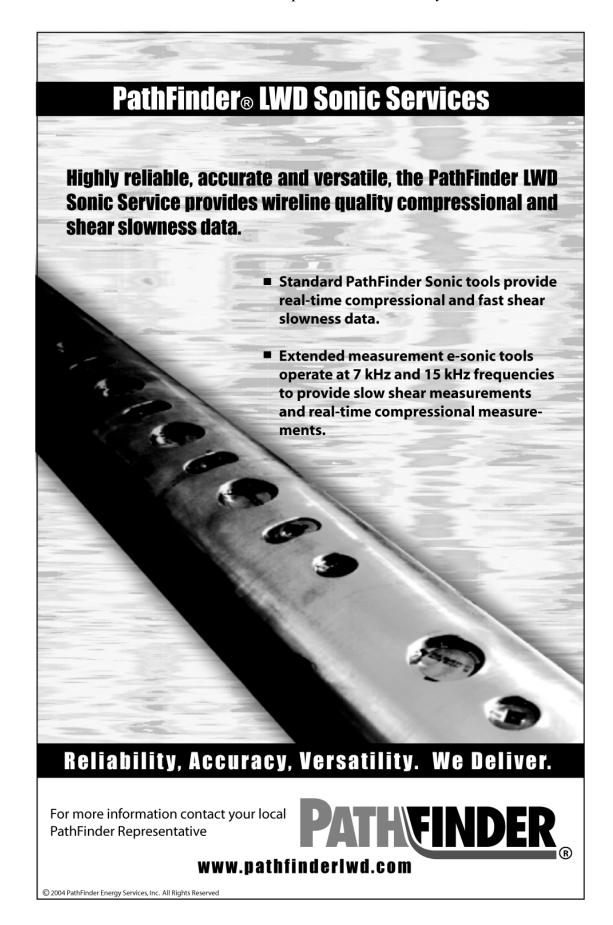
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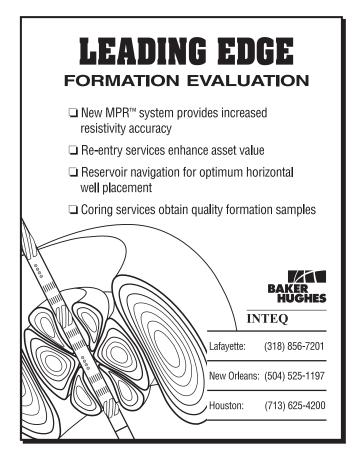
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