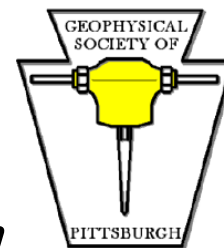


# *Geophysical Society of Pittsburgh*



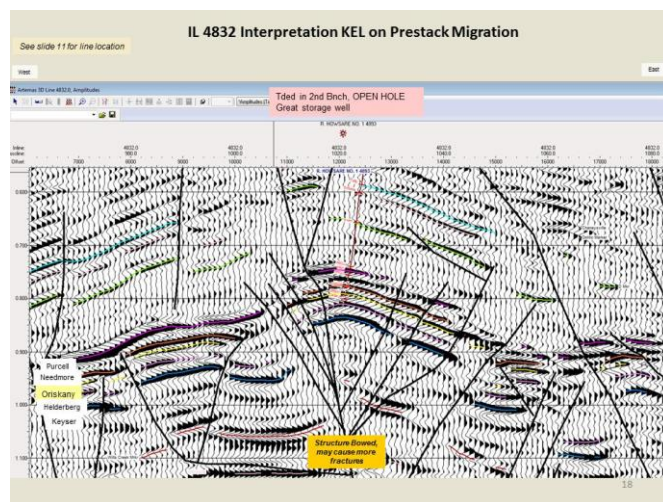
*Proudly Presents Tuesday, April 9<sup>th</sup>, 2013  
At  
Doubletree by Hilton, Green Tree, Pennsylvania*

## *Case Study on Artemas Storage Field: Structural Clarity with State of the Art 3D Seismic, Bedford Co., PA & Allegany Co., MD.*

**Abstract:** Artemas Oriskany Field was a gas field discovered in the mid-1960s (Artemas A was originally called Five Forks) which was converted to storage in the 1970's after the native gas had been depleted. The field was originally discovered using a combination of surface geology and older vintage seismic data. Artemas is one of a series of thrust-faulted anticlines within the Broad Tops synclinorium. The strike of these fault-bounded structures is generally northeast to southwest. Artemas Storage Field's reservoir is the Oriskany sandstone (also called Ridgeley), fractured due to the intense faulting during the uplifting compressional event. Artemas is located in the southern portion of Bedford Co., PA and just west of Purcell Field.

In the past, wells in this area frequently deviated more than anticipated due to intense dips and faulting within the Purcell through Oriskany section. Operator Columbia Gas wanted to have a state-of-the-art seismic image of the field to better understand the structural picture of the Oriskany in the area, and to develop additional storage capacity in the field. PreSeis Exploration Consultants, Inc. was contracted to design and manage the 3D acquisition for Columbia Gas, with Karen Lanning as the consulting geophysicist. In 2010, GeoKinetics recorded a 40 square

mile 3D over both the Artemas A and B fields. Western Geophysical was contracted to do the processing of the data, with Elias Ghattas of Custom Geophysical aiding in the QC of the processing. Karen Lanning did the interpretation and mapping for the project, integrating the extensive well control available in the area with the new 3D seismic data. This presentation will present an overview of the acquisition of the 3D program, and the results of the interpretation of the Artemas Storage 3D Project. An example dip line (east to west) is shown to the right.



**Biography:** *Karen Lanning has over 30 years of experience as a geophysicist and started her career in Houston, TX, working at Texaco and Hess in multiple basins in the US. She left Hess to start consulting in 1998 and has been working in the Appalachian Basin since 2000 when she became a consulting geophysicist with PreSeis Exploration Consultants, Inc in Lexington, VA. She has a B.S. in Physics from Stephen F. Austin St Univ, TX and a MBA from the University of Houston.*

*Please RSVP using the PayPal link on the Geophysical Society of Pittsburgh website at: [www.thegsp.org](http://www.thegsp.org)  
Cost \$35 (\$20 for Students). Meeting Location: Doubletree by Hilton, 500 Mansfield Ave, Green Tree, PA, 412.922.8400*

## *Tuesday, April 9<sup>th</sup> Meeting Menu*

### *5:00 pm Social Hour*

*This months social hour is proudly sponsored by*

*[Dawson Geophysical!](#)*

*Large Selection of Bottled Beer & Wine!*

### *Hors D'oeuvres*

### *6:00 pm Dinner Buffet*

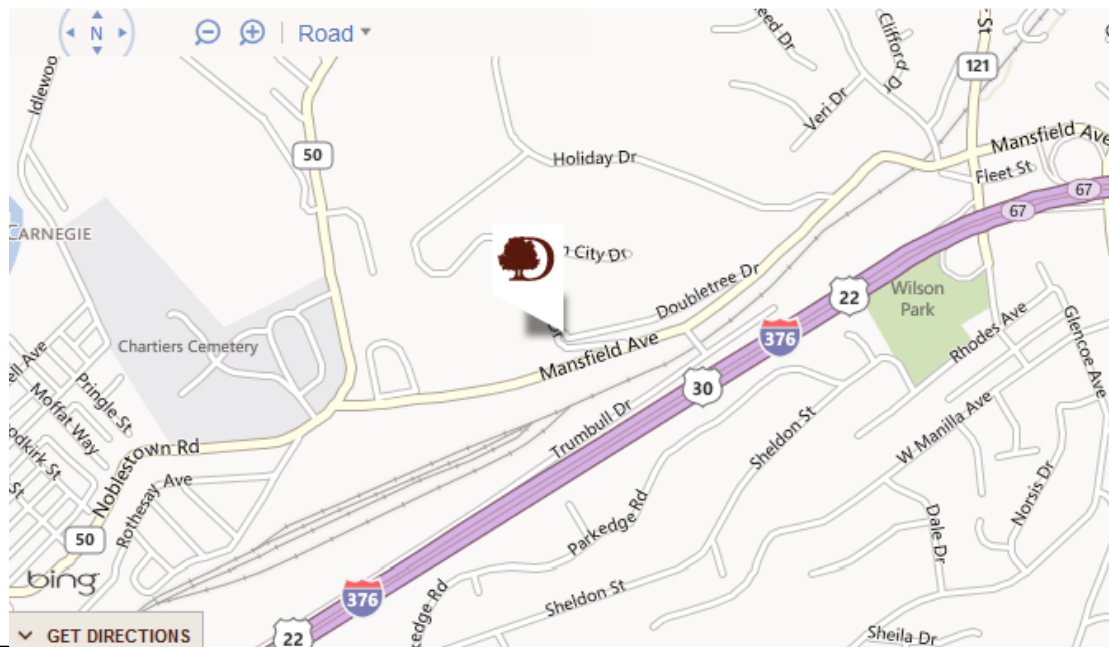
- *Potato Salad with Bacon and Chives*
- *Grilled Vegetable Pasta Salad*
- *Dry Rubbed New Orleans Style Beef Brisket*
- *Chipotle Chicken Breast with Pineapple Salsa*
- *Cape Cod with Lemon Butter Sauce*
- *Roasted Red Potatoes Seasonal Vegetables*
- *Sliced Watermelon*
- *Soft Rolls, Butter*
- *Warm Apple Cobbler*
- *Bread Pudding with Vanilla Anglaise*
- *Iced Tea and Starbucks Coffee Service*

### *7:00 pm Lecture*

*We are pleased to announce that this months lecture will be held at :*

### *Doubletree By Hilton*

*500 Mansfield Avenue  
Green Tree, PA 15205  
412.922.8400*





*Geophysical Society of Pittsburgh Upcoming Lecture Series:*

*April 9<sup>th</sup>: Seismic Imaging of Complex Structure in the Valley and Ridge Province, Karen Lanning, PreSeis, Doubletree By Hilton, 500 Mansfield Avenue, Green Tree, PA 15205, 412.922.8400.*

*May 16<sup>th</sup>: 5-D Interpolation, Dennis Langlois, CGG (Tentative)*

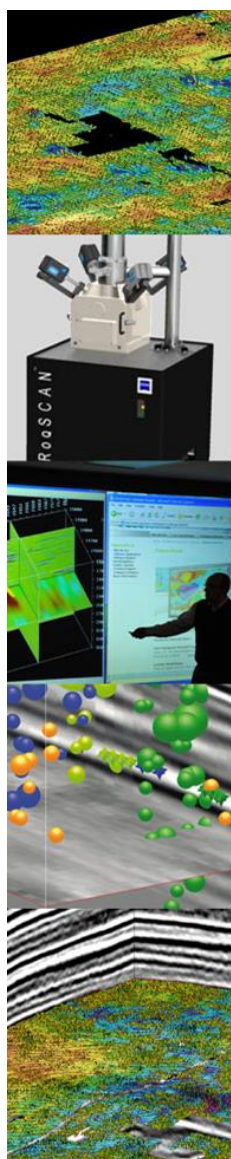


*Photo: Bill Harbert*

# News and Events from Geoscience Organizations



"We are excited to announce [NAPE East](#) in Pittsburgh following the tremendous success of this year's Winter NAPE. While we broke records for attendance, exhibitor participation and charitable donations here in Houston, it is still difficult for companies in many parts of the country to get to Houston for NAPE so we are going to bring the Expo to them by expanding regionally." - Marty Schardt, Executive Vice President of the American Association of Professional Landmen (AAPL) and General Partner of NAPE



## You're invited to the Pittsburgh Shale Science Symposium *A one-day industry event sponsored by CGG.*

Friday April 26, 2013  
Cefalo's Banquet and Event Center  
428 Washington Ave. Carnegie  
Pittsburgh, PA 1506



Registration and breakfast at 8:00am, begins at 8:30am  
Space will be limited. Contact Erin Gilmore to reserve your place. [Erin.Gilmore@CGG.com](mailto:Erin.Gilmore@CGG.com)  
Speakers:

- Rich Newhart, EnCana, Haynesville Shale Play - Perspectives
- Steve Roche, Cimarex, Multi-component/Microseismic in the Woodford
- Joel Starr, EQT, A Perspective on the Value of Micro-seismic in a Marcellus Drilling Program
- Joint Presentation, (To be announced), 3D Seismic in the Marcellus; Objectives and Challenges to Acquiring Useful Data

Additional speakers are currently being arranged and will be announced shortly.

This exclusive one-day event will feature four peer presentations from various E&P companies - highlighting their successes and key best practices in several of the major shale plays around the country. The agenda includes discussions on several major challenges of developing and producing shale fields, such as: microseismic, petrophysics, fracture detection, mineralogical and rock property measurements, processing, inversion and multicomponent. Current speaker list and abstracts below.

Following each talk, the attendees are encouraged to participate in interactive discussions; asking questions, posing challenges, and deliberating about shale exploration.

Breakfast, lunch, social hour and dinner will be provided.

Space will be limited. Contact [Erin Gilmore](mailto:Erin.Gilmore@CGG.com) to reserve your place. [Erin.Gilmore@CGG.com](mailto:Erin.Gilmore@CGG.com)

[RoqScan](#), "The Robertson RoqScan machine will be on location to demonstrate real time physical rock property measurements."



# News and Events from Geoscience Organizations

**WORKSHOP**

**SEG/SPE Workshop**  
**Seismic While Drilling:**  
**Managing Risk and Optimizing Well Placement**  
*Moody Gardens Hotel & Convention Center*  
*Galveston Island, TX • 1-3 May 2013*



Top international E&P operators, service companies, and applied research personnel will gather to discuss the latest advances in Seismic-While-Drilling (SWD). The Abstract submission deadline is 15 February 2013. For more information see: <http://www.seg.org/documents/10161/7379860/GALV13-Call4Papers.pdf>

**WORKSHOP**

**SEG WORKSHOP**  
**Unconventional Resources:**  
**The Role of Geophysics**  
*Omni William Penn Hotel*  
*Pittsburgh, Pennsylvania • 2-6 June 2013*



The objectives of this [SEG Workshop](#) are:

- Share the state of the art geophysical technologies in play evaluation, reservoir characterization, sweetspotting, drilling and completion, understanding and providing information for integrity of wellbore, reservoirs and seals, as well as practice in HSE.
- Discuss a way forward to understand today and tomorrow's technologies as well as their full value and potential in maximizing subsurface information of multi-disciplines with multi-scales.
- Probe common issues and solutions. An optional field trip on the Marcellus shale will be co-organized with the Penn State University to apprehend this workshop.

For more information see: <http://www.seg.org/events/upcoming-seg-meetings/pittsburgh2013>

## Pittsburgh Geological Society

The PGS Generally Meets on the 3<sup>rd</sup> Wednesday of the Month From September through May. More information is available at <http://www.pittsburghgeologicalsociety.org/>



## P·A·P·G

Pittsburgh Association of  
Petroleum Geologists

An AAPG Affiliated Society

[www.papgrocks.org](http://www.papgrocks.org)

The PAPG Generally Meets on the 2<sup>nd</sup> Monday of the Month From September through May. More information is available at <http://www.papgrocks.org/>

*We would like to thank our 2012-2013 Corporate Gold Sponsors:*

**GOLD**



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*We would like to thank our 2012-2013 Corporate Silver and Bronze Sponsors:*

SILVER



BRONZE



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- 



### Your Dues and Sponsorship in Geophysical Society of Pittsburgh go toward:

- *Outstanding Monthly Lecture Series*
- *SEG Distinguished Lecturers*
- *Annual Scholarship Awards*
- *Annual Golf Outing*
- *Short Courses*

Please contact Eddie Gonzales  
([egonzales@dawson3d.com](mailto:egonzales@dawson3d.com)) for  
Sponsorship Opportunities.

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