



WELCOME AND RECEPTION

Tuesday Evening, May 18

Sellers Auditorium

5:30-6:00 p.m. Welcome

Charles Willis, 2010 Symposium Chair, President and General Manager, Black Warrior Methane Corp., Brookwood, AL; **Carolyn C. Dahl**, Ed.D., Dean, College of Continuing Studies, The University of Alabama

6-8:30 p.m. Reception

Sponsored by the **Coalbed Methane Association of Alabama**, Birmingham, AL

TECHNICAL SESSIONS

Wednesday, May 19, 2010

Note: all paper presentations will take place in the Rast room

7:00-8:00 a.m. Continental Breakfast and Exhibits (Sellers Auditorium)

Breakfast hosted by **Pense Brothers Drilling Company**, Brookwood, AL

8:00-8:10 a.m. Welcome

2010 Symposium Executive Committee Chair: **Charles Willis**, 2010 Symposium Chair; President and General Manager, Black Warrior Methane Corp., Brookwood, AL

Presider: **Charles Willis**

8:10-8:30 a.m.

Research Partnership to Secure Energy for America (RPSEA), The Energy Policy Act

Steve Beach, Director of Corporate Affairs, RPSEA; Executive Committee member, Coalbed & Shale Gas Symposium

8:30-9:00 a.m.

Key Paper 1016

Devonian Shale Plays in the Black Warrior Basin and Appalachian Thrust Belt of Alabama

Jack C. Pashin, David C. Kopaska-Merkel, and Rashmi L. B. Grace, Geological Survey of Alabama, Tuscaloosa, AL

9:00-9:30 a.m.

1026

Development of Technologies for the Reuse of Flowback and Produced Waters Associated with Shale Gas Production

Dr. Tom Hayes, Gas Technology Institute, Des Plaines, IL

9:30-10:00 a.m.

1024

Potential Paleozoic Shale Gas Resources in Utah

Thomas C. Chidsey, Jr., Utah Geological Survey, Salt Lake City, Utah

10:00-10:30 a.m.

1003

New-Generation Microbial Testing Compares Favorably with Traditional Technologies in Identification of Bacterial Contamination of Oil and Gas Systems

Jennifer Fichter and Kim Dockens, Baker Hughes Incorporated; Pat Whalen, LuminUltra Technologies Inc.; and Stan Leong, OSP Microcheck Inc.

10:30-10:50 a.m. **Break**

10:50-11:20 a.m.

1023

New Albany Shale Gas Project

Iraj Salehi, Gas Technology Institute, Des Plaines, IL

11:20-11:50 a.m.

1007

Enhanced Gas Recovery Field Trial Utilizing a Coal Mine Gas Drainage System to Minimize Fugitive Emissions

Russell Packham and Roy Moreby, School of Mining Engineering, University of New South Wales, Sydney, Australia; and Yildiray Cinar, School of Petroleum Engineering, University of New South Wales, Sydney, Australia

11:50 a.m. – 1:00 p.m. **Buffet Lunch** (Sellers Auditorium)

Presider: **Charles D. Haynes, Ph.D., PE**, President, Haynes Mineral Services LLC, Guntersville, AL

1:00-2:00 p.m.

Panel and Group Discussion: Critical Research Needs for Development of Gas Shale and Coalbed Methane Resources

George Koperna, Jack Pashin, Andrew Scott, Doug Wight

2:00-2:30 p.m.

1011

Development of a New Azimuthal Gamma Ray Logging While Drilling Motor (LWDM) with Near Bit Inclination and Rotary Acquired Focused Gamma Ray for Optimal Wellbore Placement in a Coal Seam Gas Well

Ben Hawkinson and Brian Gleason, Applied Technologies Associates; and Asong Suh and Jonathan Lightfoot, Scientific Drilling International

2:30-3:00 p.m.

1006

A Multi-lateral Case Study in the San Juan Basin: Integrated Geosteering Technology Combined with Near Bit Azimuthal Gamma Tools

Rocky Mottahedeh, United Oil & Gas Consulting Ltd., Alberta, Canada

3:00-3:30 p.m. **Break**

Refreshment break hosted by **Harbison-Fischer, Inc.**, Fort Worth, TX

3:30-4:00 p.m.

1004

Assessment of Factors that Impact Coal Seam Gas Production

Dennis J. Black and Naj I. Aziz, University of Wollongong, Australia

4:00-4:20 p.m.

1005

Use of Early Stage Gas Emission Data for Estimating Total Gas Content

Dennis J. Black and Naj I. Aziz, University of Wollongong, Australia

4:20-4:40 p.m.

1002

Seal Evaluation of the Early Pennsylvanian Breathitt Group for Carbon Dioxide (CO₂) Enhanced Coal Bed Methane Recovery in the Nora Field, Virginia

Ryan Grimm and Nino Ripepi, Virginia Center for Coal Energy Research, Virginia Tech, Blacksburg, VA

4:40 p.m. General Announcements

Thursday, May 20, 2010

7:30-8:00 a.m. Continental Breakfast and Exhibits (Sellers Lobby)

Breakfast hosted by **Norris Rods**, Tulsa, OK

Presider: **Jack Pashin, Ph.D**, Director, Energy Investigations Program, Geological Survey of Alabama, Tuscaloosa, AL

Rast Room

8:00-8:30 a.m.

Key Paper 1015

Exploration of the Shallow Chattanooga Shale in North Central Alabama

Charles D. Haynes, Philip G. Malone and Brett Camp, GeoMet, Inc.

8:30-8:50 a.m.

1022

SIMULATION INVESTIGATE THE CHANGE IN PERMEABILITY DURING PRODUCTION

Xingjin Wang, Arrow Energy Limited, China University of Geoscience

8:50-9:15 a.m.

1012

Inducing Fractures and Cleat Aperture Enhancement in Bituminous Coal via the Application of Microwave Energy Under Hydrostatic Stress Conditions

Philip M. Halleck, Hemant Kumar, and Jonathan P. Matthews, Department of Energy and Mineral Engineering & The EMS Energy Institute, The Pennsylvania State University, PA; Aled Jones, Sam Kingam, Edward Lester, and John Robinson, National Centre for Industrial Microwave Processing, Department of Chemical and Environmental Engineering, University of Nottingham, Nottingham, UK

9:15-9:35 a.m.

1008

Identification of Litho Units from Well Logs for CBM Exploration in Jharia Coalfield, India

Rima Chatterjee, Ujjwal Nandi, and Suman Paul, Department of Applied Geophysics, Indian School of Mines, Dhanbad; S. K. Gupta and P. K. Hazra, and Exploration Division, Central Mine Planning and Design Institute, Ranchi

9:35-10:00 a.m.

1028

Proppant Transport in Slick-Water Fracturing of Shale-Gas Formations

Adam Dayan, Shaun M. Stracener and Peter E. Clark, The University of Alabama, Tuscaloosa, AL

10:00-10:30 a.m.

1027

Coalbed Methane Potential in Northern Turkey

Doug Wight, Hema Endustri, A.S., McKinney, TX, Steve Spafford, Mustafa Yilmaz and Raci Asik

10:30 – 11:00 a.m.

1014

Stored Gas Recovery in Coal by Nitrogen Injection

Raul Florentin, Naj Aziz, Dennis Black and Long Ngheim, School of Civil Mining and Environmental Engineering, University of Wollongong, Australia

11:15 a.m. – 1:00 p.m. **Barbecue Lunch** (Sellers Auditorium)

Recognitions, awards and prize drawing

Presider: **J. Read Holland, Ph.D.**, President, J.R. Holland & Associates, Inc., Tuscaloosa, AL

1:00-1:30 p.m.

1010

Case Study of the Application of a New Azimuthal Gamma Ray Logging While Drilling Motor (LWDM) with True Near Bit Inclination and Rotary Acquired Focused Gamma Ray Logs Combined with Enhanced Real-Time Geosteering and Geomodeling Technologies for Optimal Wellbore Placement in a Coal Seam Gas Well

Russell Perkins and Jeff Harrison, ConocoPhillips; Ramsey Clinton, Scientific Drilling International; and Rocky Mottahedeh, United Oil & Gas Consulting

1:30-2:00 p.m.

1020

Modeling Enhanced Coalbed Methane Recovery with CO₂ Storage in Coal-bearing Formation

Chai Zhenjie and Sohei Shimada, Graduate School of Frontier Sciences, The University of Tokyo, Japan

2:00-2:30 p.m.

1001

Unlocking the Shale Gas Potential in Africa

Dr. Selim Hanna and Usman Ahmed, Reservoir IntelliLogic, Houston, TX

2:30-3:00 p.m.

1017

Developing Produced Water Management Strategies for Coalbed Methane Operations in the Black Warrior Basin

Jack C. Pashin, Marcella R. McIntyre, George M. McKinney, III, and David C. Kopaska-Merkel, Geological Survey of Alabama, Tuscaloosa, AL

3:00-3:30

1009

Unconventional Gas Production Using Multilateral Fracturing Technology

David Nguyen, Baker Hughes Incorporated, Houston, TX

3:30 p.m. Concluding Announcements