



**Joint Session with SPE
Penn Brewery – Pittsburgh
23 January 2008**

The Future of the Global Oil Industry: Resources, Challenges and the Geoscience Workforce

presented by

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Ammonite Resources Company
New Canaan, CT 06840

Abstract

Petroleum powers the world's economies, but is there enough oil and natural gas to meet surging demand as developing nations enter the consumer age? Current global oil consumption stands at 85 million barrels per day and is expected to rise to over 100 million BOPD within 10 years. Oil prices have soared to a sustainable level of \$60-80 per barrel. Will prices go higher or collapse? As production in the mature sedimentary basins of North America, Europe and Southeast Asia declines, the United States, with less than 5% of the world's population, consumes 25% of the world's oil and natural gas. Can this continue? Global peak hydrocarbon production is likely to occur between 2025-2040. Then what?

The world has significant remaining conventional and unconventional oil and gas resources with some estimates exceeding 4 trillion barrels, many times more crude oil than has been consumed to date. Where are these resources located, and who controls them? Unconventional hydrocarbon resources are adding significant new reserves. Improved recovery technologies and conservation will extend the life of known reserves in mature conventional oil and gas fields. Despite the current North American focus on continuous reservoir resource plays, there are still significant new exploratory plays, as demonstrated by the multi-billion

barrel ultra-deep Lower Tertiary play in the Deep Water Gulf of Mexico. Internationally, deep water delta systems, and the Arctic margins offer significant exploration potential.

A vibrant future global economy will require access to petroleum resources and major capital investment in exploration, development and infrastructure. There are many technical, geopolitical, infrastructure, economic, environmental, capital and workforce challenges to meeting near-term and future global oil demand. How can we deal with these? Where will capital be deployed? Graduates entering the petroleum workforce must have appropriate geoscience and business skills. What are they? Where will the industry find its future geotechnical employees? The public must have a better understanding of energy and the geosciences so realistic energy policies can be implemented. Finally, a serious commitment to developing affordable alternate energy technologies is essential, as by 2100, alternate energy sources are projected to supply fully 40% of global energy demand.

Author Biography

G. Warfield “Skip” Hobbs is Managing Partner of Ammonite Resources Company, an international petroleum geotechnical and business consulting firm the Hobbs founded in 1982 in New Canaan, Connecticut. Hobbs was the 1993-1995 Secretary of the American Association of Petroleum Geologists, and was candidate for AAPG President-Elect in 2006. He served on the Executive Committee of the American Geological Institute from 2004-2007. Skip writes and speaks frequently on energy economics and policy matters.

For reservations to this informative and entertaining evening, please complete the attached reservation form.

The January meeting will be held at Penn Brewery in Pittsburgh. Please see directions on the reservation form.



WHAT IS THE PAPG?

PAPG is a non-profit organization founded in 1984 to provide a forum for Petroleum Geologists in the Pittsburgh Area to meet socially and discuss technical topics relative to the exploration and development of reserves in the Northern and Central Appalachian Basin. PAPG is an affiliated association with AAPG (American Association of Petroleum Geologists) and has representation in the House of Delegates. Educational opportunities are provided via field trips, seminars and AAPG Sectional meetings, sponsored solely by PAPG or in conjunction with the PTTC (Petroleum Technology Transfer Council), PGS (Pittsburgh Geologic Society) and SPE (Society of Petroleum Engineers).

Although PAPG is predominately a geologic organization, numerous industry professionals including geophysicists, engineers, lawyers and landmen are among PAPG's members and find the interaction at meetings and educational opportunities beneficial to their professions. PAPG also encourages student membership and participation.

Meetings are typically held monthly from September through May in locations within 50 miles of downtown Pittsburgh. From time to time, meetings are held in conjunction with SPE and PGS.

NEWS AND EVENTS

[PAPG Website:](#)

Visit the website at <http://www.PAPGocks.org>.

Mark your calendar now for these upcoming events:

February

PAPG Meeting

TBD

March

PTTC - PAPG Carbonate Workshop

Details at a later date.

Spring 2008

PAPG Field Trip - Details at later date.

October 11th - 15th 2008, Pittsburgh PA

2008 AAPG-SPE Eastern Section

<http://www.aapgspe2008.org/>

Co-Hosted by: Pittsburgh Association of Petroleum Geologists & Pittsburgh Petroleum Section SPE

Have information you want to share with the organization?

Please contact the secretary to add the information to the next newsletter.

SPONSORS

PAPG wishes to thank the companies who have contributed to the PAPG 2007-08 season

Billman Geologic Consultants Inc.
P.O. Box 567
Mars PA 16046
724-625-3461

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Delmont, PA 15626

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4314 Old William Penn Hwy
Monroeville, PA 15146

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THE ENERGY FORUM
CONNECTING LEADERS

Fortuna Energy Inc.
203 Colonial Drive, Horseheads, NY 14845

Sponsor Information

If you or your company would like to sponsor the PAPG and help support the continuation of our Meetings, Field Trips, and other events, we ask that you send a donation to the PAPG. Any contribution of \$100.00 or more by any group or individual will be recognized on our website, in the monthly newsletter, and at scheduled monthly meetings.

We ask that you show your support for the PAPG by a contribution and your continuing attendance at the monthly meetings. We appreciate your continued support.

Contributions may be sent to:
PAPG
PO BOX 16352
GREENTREE PA 15242-0352

NOTICE OF JANUARY 2008 MEETING PITTSBURGH ASSOCIATION OF PETROLEUM GEOLOGISTS

DATE: Wednesday 23, January 2008

PLACE: Penn Brewery - Pittsburgh
800 Vinial Street
Pittsburgh, PA 15212
(412) 237-9400
www.pennbrew.com

TIME: 5:00 PM – Social Hour (w/ Cash Bar)
5:30 PM – Dinner
6:00 PM – Speaker

TOPIC: “The Future of the Global Oil Industry: Resources, Challenges and the Geoscience Workforce”

STUDENTS: *Special Student Meeting - For this meeting the PAPG will waive the attendance fee for all students in attendance. Enjoy a free meal, learn about the industry's needs and meet local industry professionals. (All Earth Science - Industry Engineer Majors)*

SPEAKER: G. Warfield “Skip” Hobbs IV

COST: \$30.00
FREE students
(Checks payable to PAPG)

DINNER OPTIONS: *Buffet - Includes:*
Tossed Green Salad
Sauerkraut
Green Beans
Sauerbraten
Wurst

RESERVATIONS: Call, email, fax, or mail this reservation form to:

Barbara A. Purks
412-787-5403 (phone)
412-787-2906 (fax)
bpurks@pittsburgh.oilfield.slb.com

NAME(S) _____

COMPANY

DINNER CHOICE(S)

DIRECTIONS TO PENN BREWERY

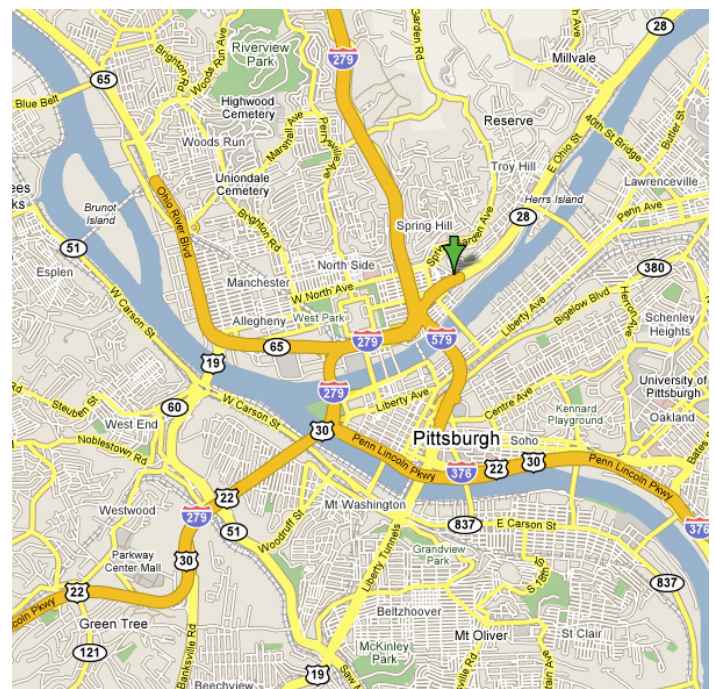
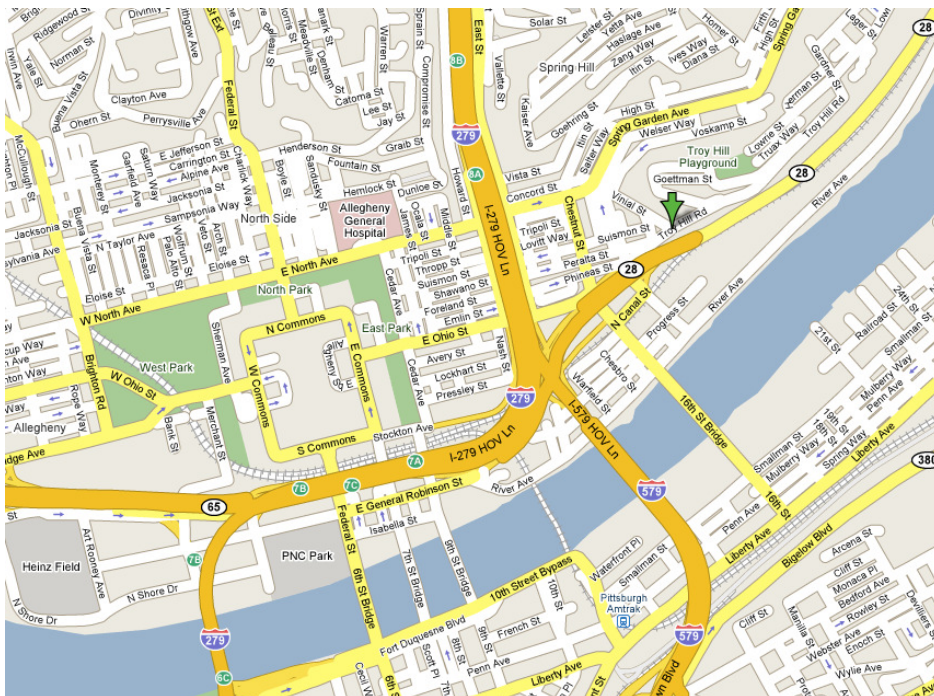
FROM DOWNTOWN Pittsburgh : Penn or Liberty Ave. to Strip District, left on TO 16th St. and cross the 16th St. Bridge. At the third stop light turn right on to Troy Hill Rd. We are 200 yds. on the left.

FROM THE NORTH: I-79 to I-279 South to exit 8B (East St.). Straight to the third light, then turn left on to East Ohio St. At the second light turn left on to Chestnut St., then immediate right on to Troy Hill Rd.

FROM THE EAST: PA Turnpike to exit 6 (Pittsburgh), follow I-376 West (the Parkway) to the center of Pittsburgh (the Point) then follow I-279 North. Take exit 7C (Chestnut St.) onto Route 28 for about 100 yds. then exit to the right for Chestnut Street. At the end of the exit ramp, turn left on to Chestnut St., straight ahead to second stop light and turn right on to Troy Hill Rd.

FROM THE WEST: I-279 North (The Parkway) through the Ft. Pitt Tunnels and Ft. Pitt Bridge following I-279 North. (Stay in the left lane on the Ft. Pitt Bridge and in the right lane on the second bridge, the Ft. Duquesne Bridge.) As soon as you pass PNC Park take exit 7C (Chestnut St.) onto Route 28 for about 100 yards, then exit to the right for Chestnut Street. At the end of the exit ramp, turn left on to Chestnut. At the second light, turn right on to Troy Hill Road.

THERE IS PLENTY OF FREE PARKING IN THE DOUBLE DECK LOT BEHIND THE BUILDINGS OR THE GRAVEL LOT ACROSS THE STREET.



CONTACT THE PAPG

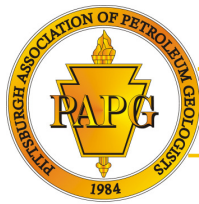
PAPG Officers:

- President:** **Greg Wrightstone** -- Texas Keystone, Inc..
Phone: 412-434-5616
Email: gwrightstone@texaskeystone.com
- Vice President:** **Jim Pancake** --Equitable Production Co.
Phone: 412-395-3912
Email: jpancake@eqt.com
- Secretary:** **Dave Boyer** -- Texas Keystone, Inc.
Phone: 412-434-5616
Email: dboyer@texaskeystone.com
- Treasurer:** **Eric Ober** -- Texas Keystone, Inc.
Phone: 412-388-0917
Email: eober@texaskeystone.com
- AAPG Delegate:** **Doug Patchen** – Petroleum Technology Transfer Council
Phone: 304-293-2867 ext 5443
Email: doug.patchen@mail.wvu.edu

PAPG 2007-2008 DUES

PAPG dues for the 2007-2008 season are now DUE!

*The membership form is attached to this newsletter. Please fill the form out **completely** so that we can ensure that we have your latest contact information. We are planning to publish a membership directory this year and your updated information is crucial.*



P·A·P·G

Pittsburgh Association of
Petroleum Geologists

An AAPG Affiliated Society

www.papgrocks.org

APPLICATION FOR MEMBERSHIP AND MEMBERSHIP RENEWAL

PLEASE INDICATE YOUR MEMBERSHIP STATUS BY CHECKING THE APPROPRIATE BOX:

PROFESSIONAL - RENEWAL

STUDENT - RENEWAL

PROFESSIONAL – NEW MEMBERSHIP

STUDENT - NEW MEMBERSHIP

The **PITTSBURGH ASSOCIATION OF PETROLEUM GEOLOGISTS** membership year runs from JUNE 1 through MAY 31. Monthly meetings are usually held the second Thursday of the month from September through May.

Professional Dues are \$25.00 per year

Student Dues are \$10.00 per year

NEW APPLICATION: If you have never been a member of PAPG, please fill out the remainder of the form, obtain the signatures of two members to sponsor you, and mail check, payable to PAPG, to the address below.

RENEWAL: Please fill out the mailing address/directory information below if your contact information has changed and submit dues, payable to PAPG, to the address below.

Mail completed form and dues payment (checks only - Payable to PAPG) to:

Dave Boyer
Texas Keystone, Inc.
560 Epsilon Drive
Pittsburgh, PA 15238

MAILING ADDRESS / DIRECTORY INFORMATION – PLEASE COMPLETE ALL INFORMATION

NAME _____ DATE _____

COMPANY / UNIVERSITY _____

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JOB TITLE: _____

EMAIL: _____ **Please fill this in – help us save those mailing costs!**

PHONE: () _____ - _____

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WOULD YOU BE INTERESTED IN PAPG PARTICIPATION?: Officer Speaker

**WOULD YOU LIKE YOUR CONTACT INFORMATION PLACED
IN THE MEMBERSHIP DIRECTORY (available to members only?)** Yes No

TWO SPONSORS REQUIRED for NEW MEMBERS

Name _____ Date _____

Name _____ Date _____