Petroleum Club • 800 Bell (downtown) Social 11:15 a.m., Lunch 11:45 a.m.

Register online, call, fax or e-mail your reservation to Mrs. B.K. Buongiorno at Tel: 713-651-1639, Fax: 713-951-9659, e-mail: bkspee@aol.com by 12:00 Noon, Tuesday September 19, 2006. Members and Affiliates who register by September 19 pay \$30. The cost is \$35 for guests, non-members, and new registrations at the door. No-shows will be billed. You can now sign up for SIPES Meetings online at www.sipeshouston.org, but payment is still required by regular mail or at

### **Luncheon Meeting**

by Bob Lieber

# The Role of Petrophysics in the World of the Independent: Wow or Wizardry?

etrophysics (the integrated evaluation of a reservoir's hydrocarbons in place and potential deliverability) was once viewed as realm of the selected specialist. With the advent of computer based log analysis packages, many independent operators in the oil and gas industry feel the need for petrophysical specialization is past. Petrophysics is viewed as simply the science of putting four significant figures to the right of the decimal point when one or two will do, isn't it? This presentation looks at some of the assumptions about petrophysics widely held in our industry and shows them to be just that; assumptions. Among the topics to be discussed are "What does a porosity cut-off really mean"; "What does the Archie equation really calculate" and "I'm an independent, why do I have to worry about relative permeabilities." In these times of economic upheaval (hardly new to our industry) it is essential that technology levers be applied in the correct manner. Petrophysics may be "wow" or it may just be wizardry to you, but if you do not understand its correct

application you may not be exploiting your reservoirs to their maximum potential. ■

#### **Biographical Sketch**

BOB LIEBER is a petrophysicist with over twenty-five years of varied petrophysical, geological and geophysical experience in domestic and international offshore and onshore basins. He has spent time working for major oil companies, small independent operators and as a consultant. He is currently a petrophysicist with BP America working



tight gas reservoirs in the Anadarko Basin. Bob is an AAPG Certified Petroleum Geologist, a board member and past president of the SPE GCS Reservoir Study Group and a member of the SPWLA.

## So You Think It's Been Hot?

If you think it was hot last year you have reason; the global surface temperature in 2005 was the hottest in over a century of instrument data, according to scientists at the NASA Goddard Institute for Space Studies and Columbia University Earth Institute (Gutron , 2006; Hansen, et al., 2006). Last year surpassed the previous record holder, 1998, a year when a record El Nino

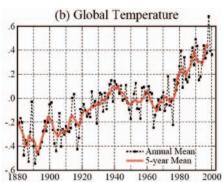


Figure courtesy NASA

ature by an estimated 0.2°C. Perhaps more importantly, the five hottest years in the past century have occurred in the last eight years. This is not an anomaly, but a long term trend that has seen global temperature increase

boosted global temper-

by 0.8°C in the past century with 0.6°C of that occurring in the last three decades. Since 1975 the temperature has risen rapidly at a rate of about 0.2°C per decade. Records of temperature inferred from tree rings and elsewhere have indicated the this warming is unique in the past 1000 years (Kerr, 2000). ■

#### References

Gutron, Rob, 2006: 2005 Warmest Year in Over a Century, NASA, can be viewed online at http://earthobservatory.nasa.gov/Newsroom/Nasa News/2006/2006012421540.html

Kerr, Richard A., 2000: Global Warming: Draft Report Affirms Human Influence, Science, Vol. 288, no. 5466, pp. 589 – 590.

Hansen, J., R. Ruedy, M. Sato, and K. Lo, 2006: GISS Surface Temperature Analysis, Global Temperature Trends: 2005 Summation, can be viewed at: http://data.giss.nasa.gov/gistemp/2005/?print=1&1=1&2=2&3=3