

Wednesday, February 25, 2015

Petroleum Club of Houston • 1201 Louisiana (Total building)

Social Hour 11:30 a.m.

Luncheon 12:00 p.m.

**Cost: \$45 Preregistered members; \$50 non-members/walk-ups**

To guarantee a seat, pre-register on the HGS website & pre-pay by credit card.

Pre-registration without payment will not be accepted.

Walk-ups may pay at the door if extra seats are available.

## HGS General Luncheon Meeting

Don Clarke

HGS General Luncheon Meeting

# Hydraulic Fracturing and Earthquakes: Ethically, How Do We Move Forward and Do the Right Thing?

In 2010 Senator Bingaman of New Mexico requested that Department of Energy Secretary Steven Chu engage the National Research Council (NRC), the operating arm of the National Academy of Sciences and National Academy of Engineering, to form an ad hoc committee to examine the topic of “Induced Seismicity Potential in Energy Technologies.” The committee of eleven members was formed from a large set of nominees sent to the NRC staff from a spectrum of professionals in academia, government, and industry and was approved by the chair of the NRC. The committee members, each of whom served pro bono for the duration of the project, brought a wide range of expertise to the study including oil and gas exploration and production, geothermal energy, drilling engineering, fluid injection, seismic monitoring and modeling, seismic hazard assessment, geomechanics, mining engineering, fluid-rock interaction, and regulatory oversight, with professional experience derived from academic research, private industry, and government service. During the course of a year, the committee convened five public information-gathering meetings and produced a consensus report that assessed the current situation related to induced seismicity in the United States for various energy technologies including hazards, risks, government roles and responsibilities, proposed research needs and suggestions on how to move forward. The report stands as an example of how a group of objective professionals with varying viewpoints can come to a consensus and produce a useful, scientifically-grounded document to help guide developments with emerging energy technologies. See more at: <http://www.aapg.org/career/training/in-person/distinguished-lecturer/abstract/articleid/3075/hydraulic-fracturing-and-earthquakes-ethically-how-do-we-move-forward-and-do-the-right-thing#sthash.oTotdhlI.dpuf>. ■

### Biographical Sketch

DON CLARKE is a consulting petroleum geologist in Lakewood, California. Don got a BS degree in Geology from California State University, Northridge and did two years of graduate work at CSUN, LBSU and CSULA. He worked for the California State Lands Commission for 6 ½ years and the City of Long Beach, Department of Oil Properties (Unit Operator for the supergiant Wilmington oil field) for 24 years. He taught geology at Compton Community College for 14 years and currently teaches petroleum geology at the University of Southern California. Currently Don does consulting work for clients that include Occidental Petroleum, Signal Hill Petroleum, City of Beverly Hills, City of Newport Beach, City of Hermosa Beach and Terralog Technologies. He has published over 60 papers and abstracts on topics that include computer mapping and Los Angeles basin geology. He has conducted many field trips and short courses for AAPG, PSAAPG, SPE and GSA. Don has appeared as a petroleum geology expert in the Swiss movie “A Crude Awakening”, the National Geographic series “Man Made” episode “Gallon of Gas”, the History Channel series “Trashopolis” episode 9 “Los Angeles” and VBSTV episode “Los Angeles” Hidden Wells”. Don has served AAPG as the Chairman of the House of Delegates, on the Advisory Council and on many committees. He is a past president of Pacific Section AAPG and has chaired and co-chaired conventions for PSAAPG, Cordilleran Section GSA and Western Region SPE.

