## Tuesday, February 15. 2011

Crowne Plaza Hotel - Greenspoint (former Sofitel) 425 North Sam Houston Pkwy E

Social 11:15 AM, Luncheon 11:30 AM

Cost: \$31 pre-registered members; \$35 for non-members & walk-ups.

To guarantee a seat, you must pre-register on the HGS website and pre-pay with a credit card. Pre-registration without payment will not be accepted.

You may still walk up and pay at the door, if extra seats are available.

## HGS Northsiders Luncheon Meeting

Charles L. Vorce

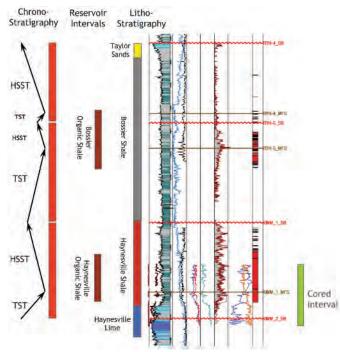
Houston, Texas

Devon Energy Corporation

## Interpretation of the Devon Energy Corporation Hull A-102 Conventional Core, Panola Co., TX; Extrapolation to a Depositional and Sequence-Stratigraphic Framework for the Haynesville and Bossier Shales

The Devon Energy Hull A-102 well, Panola Co., TX, was drilled in January of 2008. A total of 215 feet of conventional core was cut in the Jurassic Haynesville Limestone and Haynesville Shale. In ascending order, the primary rock types in the Haynesville Lime are skeletal lime mudstone/wackestone; dolomitic, argillaceous lime mudstone, and argillaceous limestone. Calcareous shale forms a transition between the Haynesville Limestone and the Haynesville Shale. The shale section is dominated by siliceous shale punctuated by thin intervals of argillaceous limestone.

The matrix of the siliceous shale consists of detrital clays, primarily illite, up to 50% by weight; biogenic and authigenic quartz, 20-47% of the rock; and filaments of marine algal kerogen, 3-8% by volume. The quartz is disseminated throughout the matrix as



Devon Hull A-102, a comparison of rock, reservoir and chrono-stratigraphic units.

biogenic quartz, i.e., radiolarian fragments and sponge spicules, and as authigenic microquartz derived from the breakdown and recrystallization of the biogenic quartz.

Interpretation of core and log data within the Haynesville Shale reveals a series of distal 3rd-order depositional sequences that are correlative throughout the basin. The GR log over the lowermost shale interval exhibits a retrogradational stacking pattern with increasing TOC values up to a 3rd-order maximum flooding surface. The GR log of the overlying shale contains a slight progradational stacking pattern up to a 3rd-order sequence boundary representing the base of the Bossier Shale. The overlying Bossier Shale represents a slow progradation of the depositional system to the south and southeast; it is capped by the marginal marine to fluvial Cotton Valley clastic wedge and the Knowles Limestone.

## **Biographical Sketch**

CHUCK VORCE received B.S. and M.S. degrees in geology from The Ohio State University in 1976 and 1979. In 1980 he began working for Exxon in Houston, Texas, where he worked in a variety of areas offshore and onshore in both exploration and production. In 2001 Mr. Vorce began working for Devon Energy Corporation in Houston. He has worked for Devon in the Miocene of



South Louisiana, the Wilcox of South Texas, and the Mesozoic-Bossier sands and shales in North Louisiana in the Vernon Field trend. In 2007 Chuck became involved in Devon's initial work in the Haynesville Shale of East Texas and Louisiana. Starting in 2009 he led Devon's regional team in developing a depositional and stratigraphic model for the Haynesville Shale. Mr. Vorce is currently the chairman of Devon's Geoscience Applications Steering Committee, responsible for evaluating and implementing new geoscience software across the company.