

Oklahoma Gas Shales

(October 2008)

Shales account for 60% of the sedimentary record, but the recent increased interest in gas shales has spurred detailed research of them. This conference concentrated on Oklahoma's two gas shales, the Woodford and the Caney.

Topics addressed:

- Gas shale coverage and distribution of producing wells.
- Geochemistry: (a) K-U-Th spectral gamma-ray profiles to indicate depositional conditions. (b) Elemental analysis to enable field-scale correlations based on shales.
- Completion techniques: (a) Advantages of horizontal drilling and multiple laterals. (b) Impact of mineralogy as determined by borehole image analysis.
- Fracture techniques: (a) Ductility of Caney requires different approaches. (b) Use of microseismic to monitor and map fracture geometry.
- Production trends: (a) In Ardmore Basin – commercially-reported data do not account for days when system is down or pipeline use is restricted. (b) In Northeast Oklahoma – typically is orders of magnitude less than in other areas.
- Development: To decrease cost/lateral foot, design plan beforehand so downspacing is not necessary.

A field trip to examine Woodford Shale exposures in the Arbuckle Mountains and Criner Hills of Oklahoma was held in conjunction with the meeting. The field guide for that trip, *Oklahoma Gas Shales Field Trip*, is available as OGS Open File Report 2-2008.

To view the presentation material currently available, click on the links below.

Brian J. Cardott Overview of Woodford Gas-Shale Play in Oklahoma, 2008 Update

Rick Andrews Current Production Trends of the Woodford Shale and Surface to Subsurface Correlations of Overlying and Underlying Formation Boundaries