Size of molecules and pore throats in siliciclastic rocks

Philip H. Nelson, 2009, Pore-throat sizes in sandstones, tight sandstones, and shales: AAPG Bulletin, v.93, no.3 (March), pp.329-340, Figure 2. AAPG ©2009 Reprinted with permission of Philip H. Nelson, and by permission of the AAPG whose permission is required for further use.

Scale covered by Geoscience Scale of Investigation
Comments on *Size of molecules and pore throats in siliciclastic rocks*

The work of Nelson (2009) is especially significant when one considers that our exploration and production target formations are increasingly tighter (less porous and permeable) sandstones, and especially mudrocks or shales.

In shales, the pores and pore throats begin to approach the size of the molecules of hydrocarbons that we have targeted for production. As well as being a concern for production, we must also consider molecule sizes when we perform measurements on cores. Our choice of the fluid used in some core measurements may have a substantial effect on the results that are obtained.

See Nelson’s full paper for more information, available through the American Association of Petroleum Geologists (AAPG), Tulsa, Oklahoma (www.AAPG.org).

*This document is intended to be updated periodically as necessary to include new and corrected information.*

*Questions and comments about this document are welcomed and encouraged. Please contact Dan Krygowski at The Discovery Group; DanKrygowski@Discovery-Group.com.*