

Estimating Organic Porosity from TOC Data in The Marcellus Shale

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Recently published organic shale scanning electron microscope images summarized by Wang (2009) show that there is porosity in the organic fraction of the rock. Wang (2009) assumed that a fixed fraction of the organic material is converted to porosity. This paper examines the relationship between RockEval geochemical data using data from a 149 sample public domain database from New York to estimate the amount of organic porosity that is theoretically calculated with limited assumptions. A second goal is to look for empirical equations that can be applied to log data sets to facilitate regional estimation of the amount of organic porosity created throughout the Appalachian Basin.