

Application of Unconventional Technologies to Appalachian Basin Conventional Reservoirs

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ABSTRACT

With the advent of the Marcellus Shale discovery and development in the Appalachian Basin in the mid-2000's, an entirely new and different set of oilfield tools as well as the professionals that know how to use them, entered the Appalachian Basin. Almost overnight wells in the basin went from predominately shallow, "conventional" reservoirs, drilled vertically, to deeper, "unconventional" reservoirs, drilled horizontally. Numerous operators have used the "new" tools at their disposal to drill lateral wells in reservoirs that traditionally, within the Appalachian Basin, would have been drilled and completed in a vertical borehole. These reservoirs include coal beds, Upper Devonian Sandstones, the Oriskany Sandstone and Trenton/Black River hydrothermal dolomites. One similarity of all these conventional reservoirs is that they are highly compartmentalized.