

Wells Drilled to Basement in Oklahoma

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In the interest of preparing a basement structure map of Oklahoma, an effort to identify all wells drilled to basement was initiated early in 2002. Electronic databases (NRIS; Dwight's / PI) were the first level of investigation; they identified about 300 and 660 wells, respectively. Both databases are dependent on operator identification of basement penetration, and required a family of aliases; i.e., basement, granite, Wichita granite, Tishomingo granite, Precambrian, rhyolite, and Carlton rhyolite.

A check of the databases was made against one-another, and against documents of the Oklahoma Geological Survey revealed that the actual number of basement wells would be significantly greater than 700. Three published, and three unpublished reports of the Oklahoma Geological Survey, and one publication each of the AAPG and the Oklahoma City Geological Society have been the sources of about 700 additional wells in the compilation.

The compilation of all known (and probable) wells drilled to basement in Oklahoma is near completion as of this writing. That is, probable wells, because the basement top has not been identified in about 32% of the data compiled. They are classified as probable basement wells because the sources of information are reports by geologists who have had personal experience, knowledge, or access to company information to identify basement wells.

As the compilation approaches completion, approximately 1400 wells have been identified as having been drilled (or probably drilled) to basement in Oklahoma.