TEST DRILLING THE RUSH SPRINGS SANDSTONE

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A silty shale phase in the Rush Springs sandstone of the Whitehorse group, of Permian age, suspected by some geologists and indicated by geologic mapping and the records of water wells, is confirmed by test drilling. This testing was conducted in Grady and Caddo Counties as part of the cooperative program of ground water investigations in Oklahoma by the State and Federal Geological Surveys. The silty shale unit forms a broad wedge that is thickest southeast of the town of Rush Springs. As the lower part of the unit becomes progressively sandier westward, a threefold division, with two sandstones separated by shale, is apparent. In southeastern Caddo County, the zone of the wedge is entirely composed of sandstone typical of the Rush Springs, and no subdivisions within the unit appear possible. The maximum thickness of the Rush Springs indicated by the test drilling is 335 feet, near Alfalfa in west central Caddo County, although greater thicknesses are suggested from oil company records.