

**KANSAS GEOLOGICAL SURVEY  
OPEN-FILE REPORT ND-7**

PREPARATION OF "MINERAL RESOURCES OF KANSAS" MAP

by

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## PREPARATION OF "MINERAL RESOURCES OF KANSAS" MAP

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Shortly after the entry of the United States into the present war, the Technical Committee of the Kansas State Chamber of Commerce held several conferences concerning the possibility of establishing war industries within the borders of the state. At these conferences a great lack of information was demonstrated concerning the type, location, and distribution of raw materials within the state. In order to form a background for possible future development of mineral industries, the State Geological Survey undertook the preparation of a map to summarize the known facts concerning the distribution of these raw materials.

The mineral resources of Kansas have been classified into four general divisions: (1) fuels, consisting of oil, gas, natural gasoline, and coal; (2) metals, consisting of zinc, lead, pyrite, and the possibilities of utilizing Kansas clay as a source of aluminum and Kansas oil-field brines and dolomites as a source of magnesium; (3) nonmetallic mineral resources, including such materials as asphalt rock, bentonite, chalk, chat, clay, diatomaceous marl, fillers for plastics, gypsum, Portland cement, rock wool materials, sand and gravel, stone, tripoli, and volcanic ash; (4) water resources.

In general, the fuels are represented on the map by red symbols. The water resources are shown in blue and the metals and nonmetallic mineral resources are shown by various combinations of yellow, purple, and black. It will be noted that it has been necessary to use a different method of attack in the graphic representation of different types of resources. For instance, the entire area of coal reserve is fairly adequately known and for that reason the area depicted on the map is rather complete and final. On the other hand,

oil and gas reserves are definitely known to exist only when they have been drilled through production and for that reason the areas shown on the map represent only the known areas of reserve, although we are quite certain that new pools and therefore more reserves will be discovered in the future. In fact, new pools have already been discovered since the present map was published. Still another type of graphic representation has been necessary in the case of sand and gravel, stone, and volcanic ash. Large reserves of these materials are known to exist and have been mapped in some cases in considerable detail, but if such detail were shown on a mineral resources map the other symbols would be greatly confused. For that reason, only quarries that have been worked in these deposits have been plotted. In the case of clay deposits, still another inconsistency was necessary. The total area of reserve of the light-firing and refractory clays contained in the Dakota formation of north-central Kansas is shown by yellow bars. However, the brick and tile shales of eastern and southeastern Kansas have not been shown due to the great confusion of symbols that would result. Instead, brick, tile and pottery plants are located on the map. These illustrations serve to point out a few of the unsuspected difficulties that arise in any attempt to show graphically the mineral resources of an area as large and as diversified as the State of Kansas.

The explanation at the bottom of the map also presented a perplexing problem. Volumes could and have been written about many of the resources depicted, but it was necessary to select those few facts that seemed to us the most significant concerning each mineral deposit.

Both in the preparation and the use of such a map it must constantly be remembered that it is in reality a progress map. The information shown simply represents the extent of our present knowledge and before the ink is dry we should have acquired more knowledge concerning at least some of the

deposits. Thus, we can never produce a final product.

Judging from the interest that has been shown in the Kansas map and the apparent usefulness of the map to industries, research men, and military officials alike, it seems certain that a regional map embracing four or more states would serve an important need to Midwestern industrial development.