

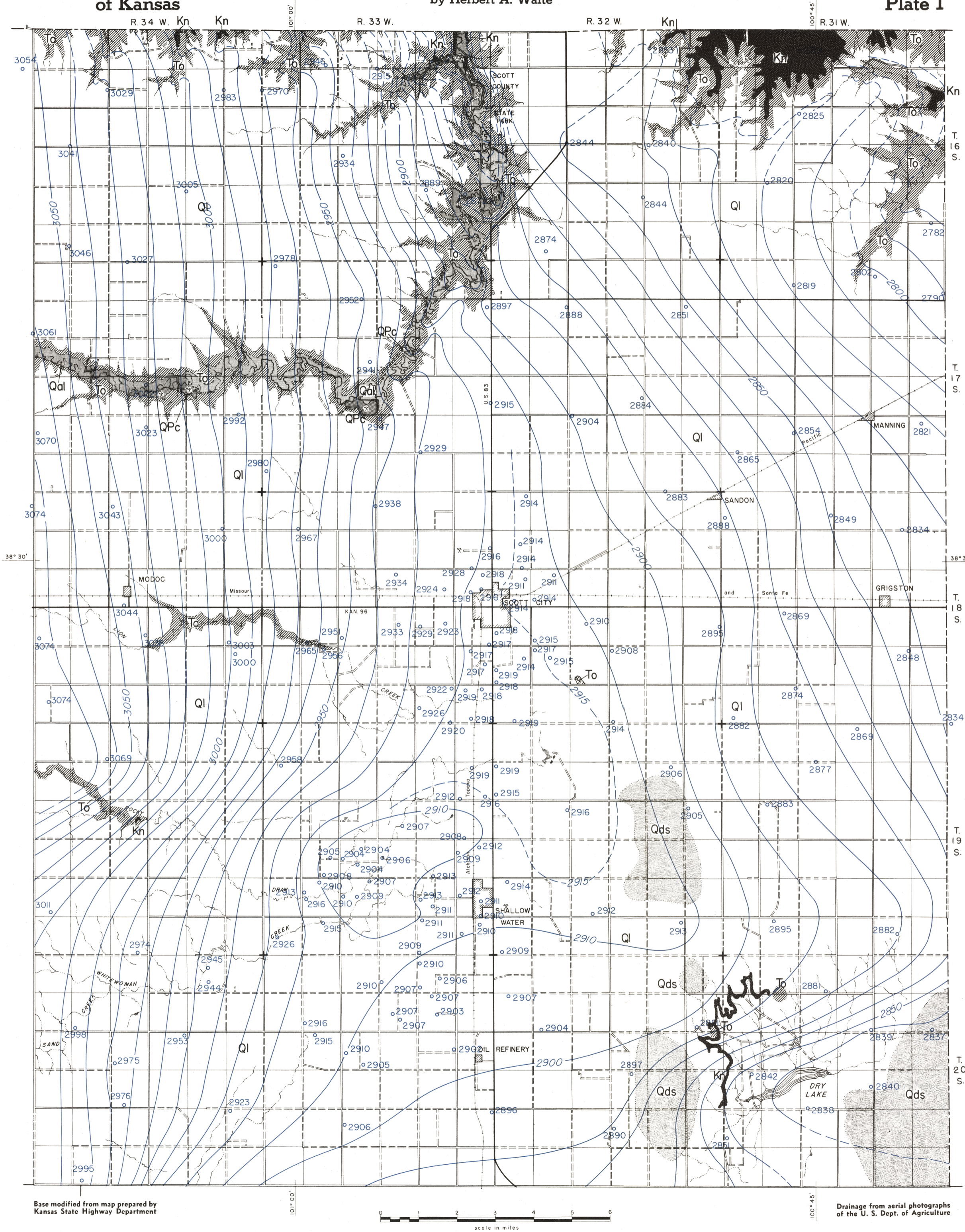
MAP OF SCOTT COUNTY

Showing Geology and Water-Table Contours, 1940

State Geological Survey
of Kansas

by Herbert A. Waite

Bulletin 66
Plate 1



EXPLANATION



Qal

Alluvium

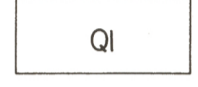
Gravel, sand, silt, and clay comprising stream deposits in Ladder (Beaver) creek valley. The alluvium yields small supplies of relatively hard water to wells in Ladder creek valley.



Qds

Dune sand

Fine to medium eolian sand. Sand dunes do not supply water directly to wells but are important as favorable intake areas for ground-water recharge.



Ql

Loess

Light buff silt containing fine sand and some clay. Loess deposits occur mostly above the water table and are relatively impermeable.



QPc

Channel deposits

Gravel, sand, silt, and clay comprising isolated remnants of channel deposits along the valley sides of Ladder (Beaver) creek. Channel deposits are relatively permeable but generally occur above the water table.



To

Ogallala formation

Gravel, sand, silt, caliche and some silty clay, contains hard and soft layers of sandstone and conglomerate, much of which is cross-bedded and cemented with lime. Constitutes the principal source of water for most of Scott county. Yields adequate supplies of moderately hard water to domestic, stock, industrial, and public supply wells. Yields large supplies of water to irrigation wells in the Scott basin.



Kn

Niobrara formation

Alternating beds of soft chalk and chalky shale consisting of the Smoky Hill chalk member underlain by massive chalk beds separated by thin, soft, chalky shale comprising the Fort Hoys limestone member. Not important as a water-bearing formation in Scott county. Yields limited supplies of hard to extremely hard water to wells in the southeastern quarter of the county where the overlying Ogallala formation is relatively thin. Water occurs principally along fractures and bedding planes.

Federal or State highway

Graded road

Ungraded road

Section line (no road)

Railroad

Perennial stream

Intermittent stream

Contour interval 10 feet

2850 Water-table contours based on instrumental levels

2882 Well location. Number refers to altitude of water level

RECENT

QUATERNARY

PLEISTOCENE

PLIOCENE

TERTIARY

CRETACEOUS

Base modified from map prepared by Kansas State Highway Department



Drainage from aerial photographs of the U. S. Dept. of Agriculture