

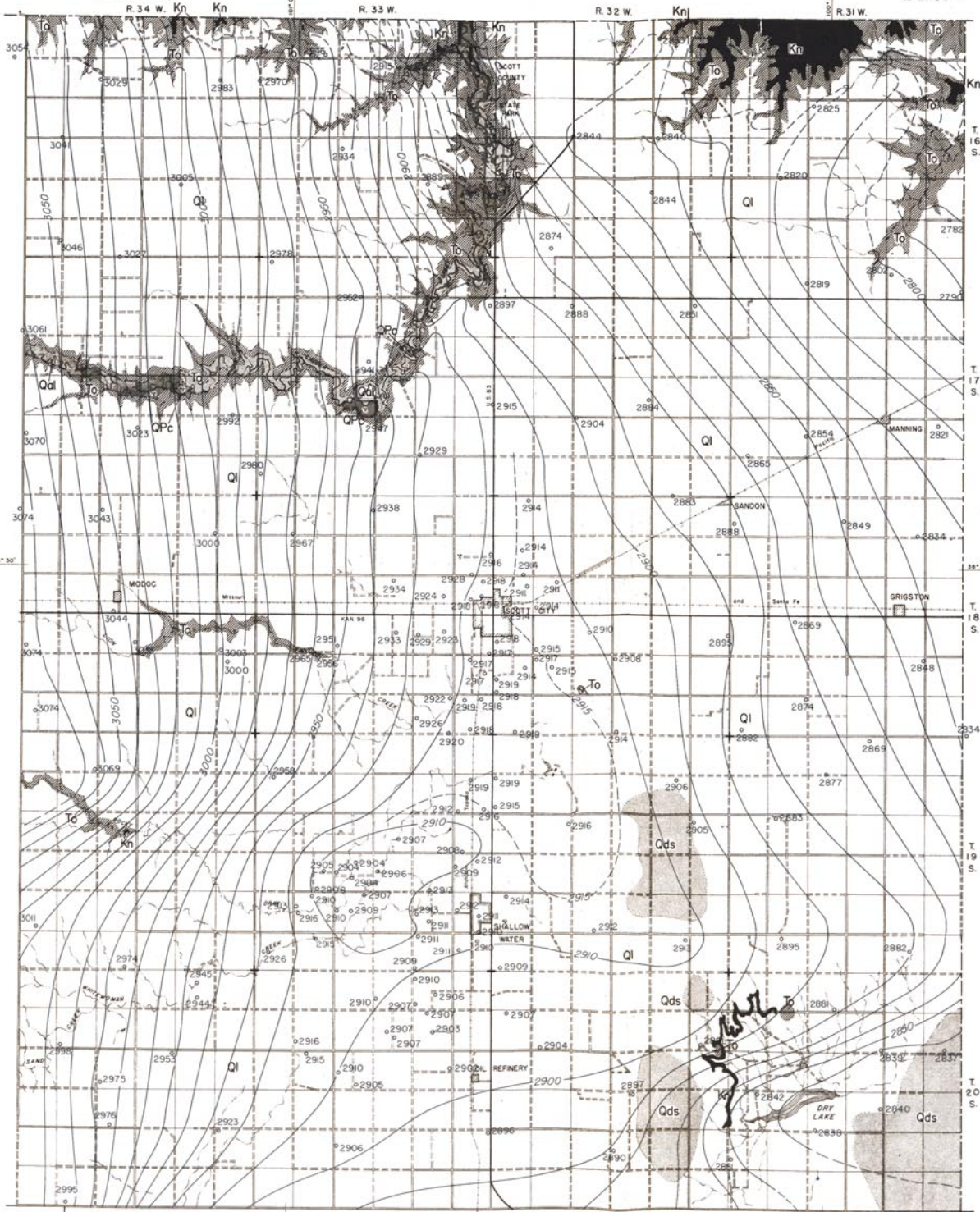
MAP OF SCOTT COUNTY

Showing Geology and Water-Table Contours, 1940

State Geological Survey
of Kansas

by Herbert A. Waite

Bulletin 66
Plate 1



EXPLANATION



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.



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



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



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.



Ogallala formation
Gravel, sand, silt, calcic 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.



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, clayey shales comprising the Fast Hays 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
- Water-table contours based on instrumental levels
- 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