

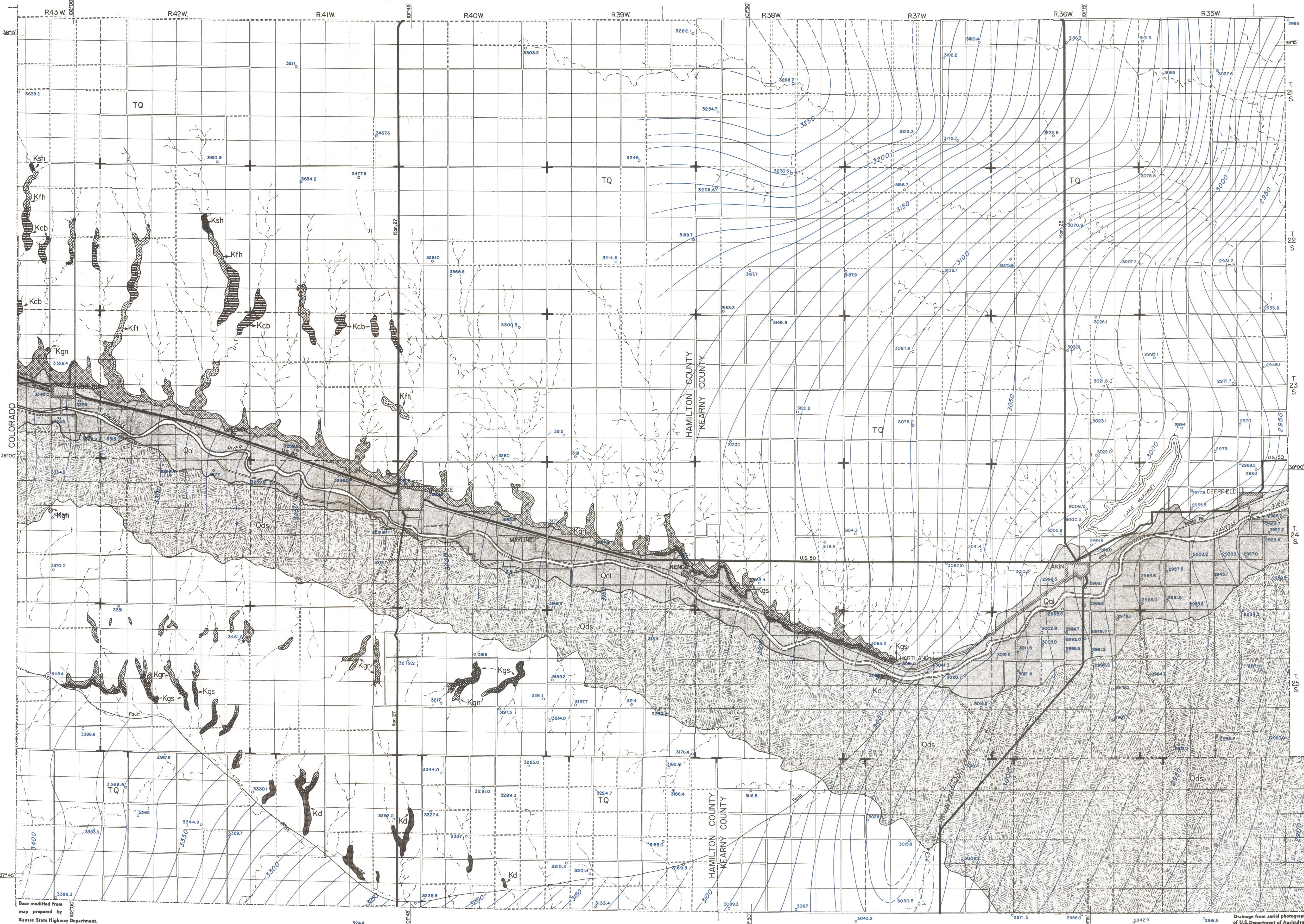
MAP OF HAMILTON AND KEARNY COUNTIES, KANSAS

Showing Geology and Water-Table Contours, 1940

By Thad G. McLaughlin

Bulletin 49
Plate 1

State Geological Survey
of Kansas



EXPLANATION

- | | |
|--|--|
| <p>Qal
Alluvium
Gravel, sand, and silt. Yields large quantities of hard water to domestic, stock, municipal, and irrigation wells.</p> <p>Qds
Fine cotton sand. Sand dunes are above the water-table and do not yield water to wells. Important catchment areas for recharge of the ground-water reservoir.</p> <p>TQ
Undifferentiated Pliocene and Pleistocene deposits
Sand, silt, gravel, and caliche. Yields moderate to large quantities of moderately hard water to domestic, stock, and irrigation wells.</p> <p>Ksh
Niobrara formation
Smoky Hill chalk member
Orange-yellow shaly chalk. Yields little or no water to wells.</p> <p>Kfh
Niobrara formation
Fort Flays limestone member
Cream-colored cherty limestone. May yield small quantities of water to a few wells.</p> <p>Kcb
Curtis shale
Codell sandstone and Blue Hill shale members
Codell sandstone member is comprised of fine-grained sandstone and sandy shale. Yields small quantities of water to a few wells. Blue Hill shale member is blue-black fissile shale and yields little or no water to wells.</p> <p>Kft
Curtis shale
Fairport cherty shale member
Calcareous shale in upper part. Basal part is thin-bedded cherty limestone and gray shale. Yields little or no water to wells.</p> <p>Kgn
Greenhorn limestone
Thin-bedded cherty limestone and gray limy shale. Yields very small quantities of water to a few wells in northern Hamilton county.</p> <p>Kgs
Graneros shale
Dark gray fissile shale. Yields little or no water to wells.</p> <p>Kd
Dakota formation
Buff, brown, and tan fine-grained sandstone containing vari-colored shale and clay. Yields moderate quantities of moderately hard water to domestic and stock wells in Hamilton county and southwestern Kearny county.</p> | <p>PLEISTOCENE AND RECENT
QUATERNARY</p> <p>PLIOCENE AND PLEISTOCENE
TERTIARY AND QUATERNARY</p> <p>GULFIAN
CRETACEOUS</p> |
| <p>— 10 feet —
Contour interval 10 feet</p> <p>— 2950 —
Water-table contours based on instrumental levels (dashed where position is inferred)</p> <p>○ 3063.2
Well location. Number refers to altitude of water level</p> <p>— — — —
Federal or State Highway</p> <p>— — — —
Graded road</p> <p>— — — —
Ungraded road</p> <p>— — — —
Section line (no road)</p> <p>— — — —
Township line (no road)</p> <p>— — — —
Railroad</p> | |

Base modified from map prepared by Kansas State Highway Department.

Drainage from aerial photographs of U.S. Department of Agriculture.

