

AREAL GEOLOGY OF LANE COUNTY, KANSAS

State Geological Survey
of Kansas

With Water-Table Contours

Bulletin 93
Plate 1

by Glenn C. Prescott, Jr.

1948

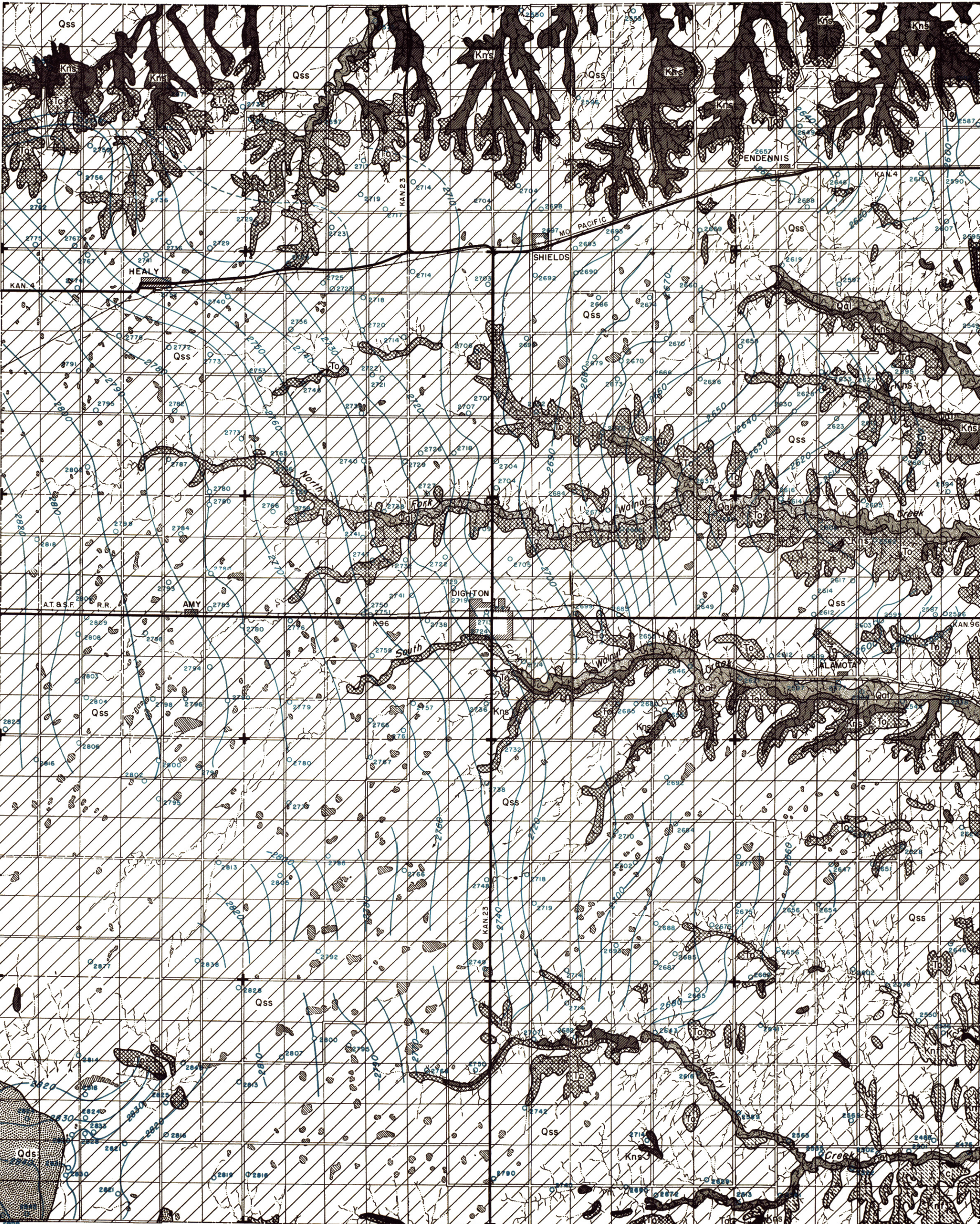
R. 30 W.

R. 29 W.

R. 28 W.

R. 27 W.

EXPLANATION



Qal
Alluvium
Sand, gravel, and silt comprising stream deposits along some of the valleys. Yields small supplies of water to wells in some areas.

Qds
Dune sand
Fine- to medium-grained wind-blown sand. The sand dunes are above the water table and do not furnish water directly to wells, but serve as intake areas for ground-water recharge.

Qss
Sanborn formation
(including slope deposits)
Tan to brownish massive silt. Locally contains sand and gravel at base. Generally lies above the water table but yields a small amount of water to a few wells.

To
Ogallala formation
Gravel, sand, silt, clay and calciche; sand and gravel beds sometimes cemented by calcium carbonate to form "mortar beds." The most important water-bearing formation in Lane County. Yields large to moderate supplies of water.

Kns
Niobrara formation
Smoky Hill chalk member
Chalk and cherty shale. Yields small amounts of water to wells in a few areas.

Knf
Niobrara formation
Fort Hays limestone member
Massive chalk beds separated by cherty shale layers. Yields water to very few wells in southeastern Lane County.

Kc
Carlile shale
Blue Hill shale member
Consists of sandy shale (Cudell sandstone zone) and bluish-gray noncalcareous shale containing gypsum seams and septarian concretions. Not known to yield water to wells in Lane County.

○ 2740
Well location. Number refers to altitude of water level

— 2770 —
Water-table contours based on instrumental levels. (dashed where position is inferred; absent where water table is discontinuous)

◡
Intermittent lake or pond

Contour interval 10 feet

— Federal or State Highway
— Graded road
— Railroad
— Ungraded road
--- County line (no road)
--- Township line (no road)
--- Section line (no road)
~ Intermittent stream

PLEISTOCENE
QUATERNARY

PLIOCENE
TERTIARY

GULFIAN
CRETACEOUS