

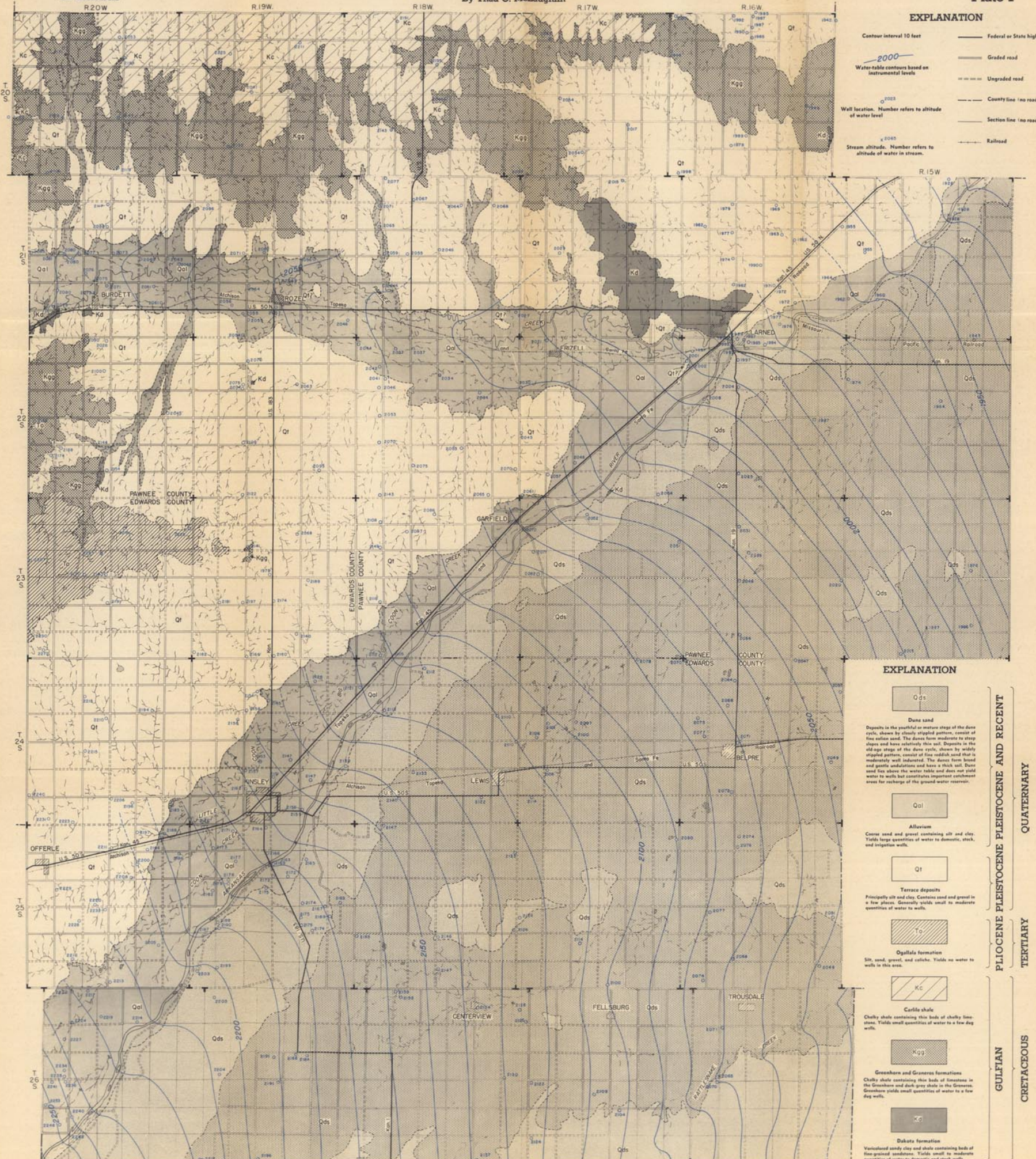
# MAP OF PAWNEE AND EDWARDS COUNTIES, KANSAS

Showing Geology and Water-table Contours, 1944-1945

State Geological Survey  
of Kansas

By Thad G. McLaughlin

Bulletin 80  
Plate 1



### EXPLANATION

- Contour interval 10 feet
- Water-table contours based on instrumental levels
- Well location. Number refers to altitude of water level
- Stream altitude. Number refers to altitude of water in stream.
- Federal or State highway
- Graded road
- Ungraded road
- County line (no road)
- Section line (no road)
- Railroad

### EXPLANATION

- Ods**  
Dune sand  
Deposits in the youthful or mature stage of the dune cycle, shown by closely stippled pattern, consist of fine yellow sand. The dunes from moderate to steep slopes and have relatively thin soil. Deposits in the old-age stage of the dune cycle, shown by widely stippled pattern, consist of fine reddish sand that is moderately well indurated. The dunes form broad and gentle undulations and have a thick soil. Dune sand lies above the water table and does not yield water to wells but constitutes important enrichment areas for recharge of the ground-water reservoir.
- Qal**  
Alluvium  
Coarse sand and gravel containing silt and clay. Yields large quantities of water to domestic, stock, and irrigation wells.
- Qt**  
Terrace deposits  
Primarily silt and clay. Contains sand and gravel in a few places. Generally yields small to moderate quantities of water to wells.
- To**  
Ogallala formation  
Silt, sand, gravel, and calciferous. Yields no water to wells in this area.
- Kc**  
Cretaceous shale  
Chalky shale containing thin beds of chalky limestone. Yields small quantities of water to a few dug wells.
- Kgg**  
Greenhorn and Gronox formations  
Chalky shale containing thin beds of limestone in the Greenhorn and dark gray shale in the Gronox. Greenhorn yields small quantities of water to a few dug wells.
- Kd**  
Dakota formation  
Unconsolidated sandy clay and shale containing beds of fine-grained sandstone. Yields small to moderate quantities of water to domestic and stock wells.

QUATERNARY  
PLIOCENE PLEISTOCENE  
TERTIARY  
GULFIAN  
CRETACEOUS

Base compiled from maps prepared by the Soil Conservation Service

Scale in miles

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