

AREAL GEOLOGY OF CLAY COUNTY, KANSAS

By

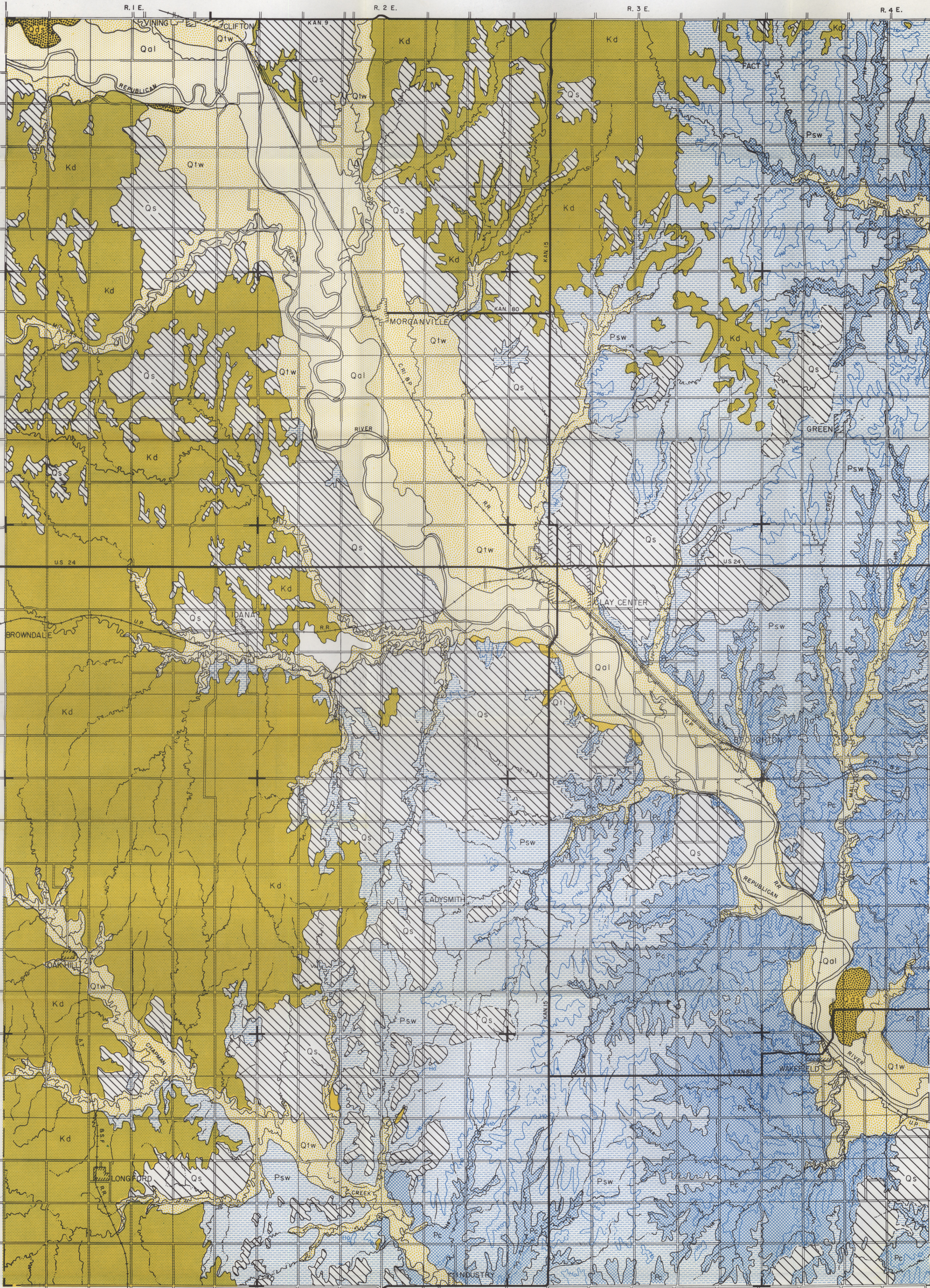
Kenneth L. Walters and Charles K. Bayne

Bulletin 136


State Geological Survey of Kansas

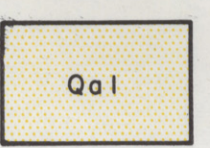
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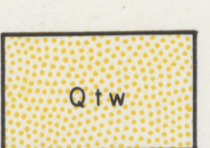
Plate 1

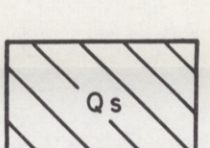


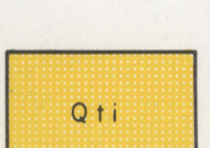
EXPLANATION


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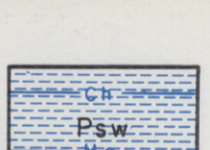
Dune sand
T. 6 S.
Fine to medium quartz sand. Above water table and does not yield water to wells.
- 

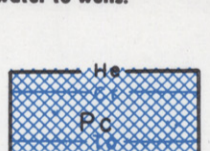
Alluvium
Qal
Clay, silt, sand, and gravel. Yields large quantities of water of good quality to wells.
- 

Wisconsinan terrace deposits
Q1w
Stream-deposited silt, clay, sand, and gravel. Yield large quantities of water of good quality to wells.
- 

Eolian silt
Qs
Reddish-brown massive silt. Yields no water to wells.
- 

Illinoian terrace deposits
Q1i
Chiefly silt and clay; contain much less sand and gravel than Wisconsinan terrace deposits. Yield small to moderate quantities of water to wells.
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Dakota Formation
T. 8 S.
Kd
Varicolored silt to sandy shale and massive sandstone; as mapped includes Kiowa Shale. Yields moderate amounts of water of good quality to wells.
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Wellington Formation
Psw
Chiefly gray shale containing a chert bed, Ch, and the Hollenberg Limestone member, Ho. Gypsum occurs locally at base of formation. Yields minor quantities of mineralized water to wells.
- 

Chase Group
T. 9 S.
Pc
Upper boundary marked by Herington Limestone member, He, of Nolans Limestone; includes as mapped, Crosswell Limestone member, Cr, of Winfield Limestone; Towanda Limestone member, To, of Doyle Shale; and Fort Riley Limestone member, Fr, of Barnston Limestone. Herington Limestone, Crosswell Limestone, and Towanda Limestone members locally yield small quantities of water to wells. Fort Riley Limestone member yields moderate quantities of water to wells.

PLEISTOCENE

QUATERNARY

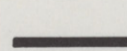
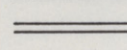
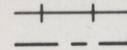
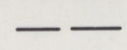
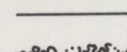
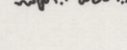
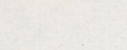
GULFIAN

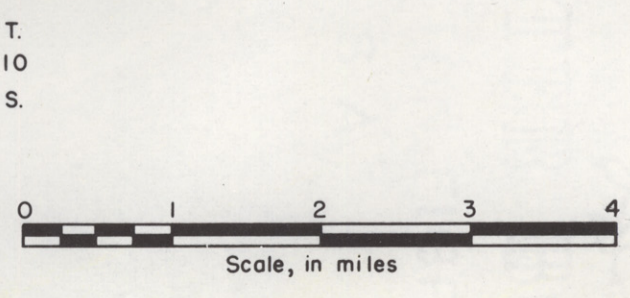
CRETACEOUS

LEONARDIAN

WOLFCAMPIAN

PERMIAN

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



Base compiled from maps prepared by the Soil Conservation Service

Drainage from map prepared by U. S. Dept. of Agriculture