



**EXPLANATION**



**Alluvium**  
Gravel, sand, silt and clay comprising stream deposits in the Arkansas valley and in the smaller stream valleys. Also includes terrace deposits. The alluvium yields large supplies of water to wells in the Arkansas valley. Typical waters from the alluvium are generally hard. Terrace deposits yield water only when they occur below the water table.



**Dune Sand**  
Fine white sand. Dunes probably do not supply water directly to wells, but constitute valuable intake areas for ground-water recharge.



**Kingsdown silt**  
Yellow to light buff silt and clay, containing small scattered lime nodules. Grades upward into loess of Pleistocene and Recent ages. Mostly dry and relatively impervious; sand and gravel deposits near the base may furnish some water to wells.



**Ogallala formation**  
Gravel, sand, silt, "caliche," and structureless silt and clay with 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 the county. Yields adequate supplies of water of good quality to wells. Includes this member of Kingsdown north of the river.



**Greenhorn limestone and Genesee shale**  
Cherty shales interbedded with thin cherty limestone. Genesee shale consists of dark bluish-black, non-calcareous fine clay shale. Very few wells obtain water from the Greenhorn; yields are limited and generally the water is hard. No wells are known to derive water from the Genesee shale in Ford county any water encountered is apt to be highly mineralized.



**Dakota formation**  
Fine-grained gray to white to yellow-brown sandstone, irregularly bedded, variegated clay and sandy shale. Yields moderate supplies of water of good quality to wells in the northeastern part of the county.

- Contour interval 10 feet
- Water-table contours based on instrumental levels (dashed where position is inferred)
- Well location. Number refers to altitude of water level.
- Federal or State road
- County road
- Township road
- Section line (no road)
- Railroad
- Perennial stream
- Intermittent stream

RECENT  
QUATERNARY  
PLEISTOCENE  
PLIOCENE  
TERTIARY  
CRETACEOUS

Base modified from map prepared by Kansas State Highway Department



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