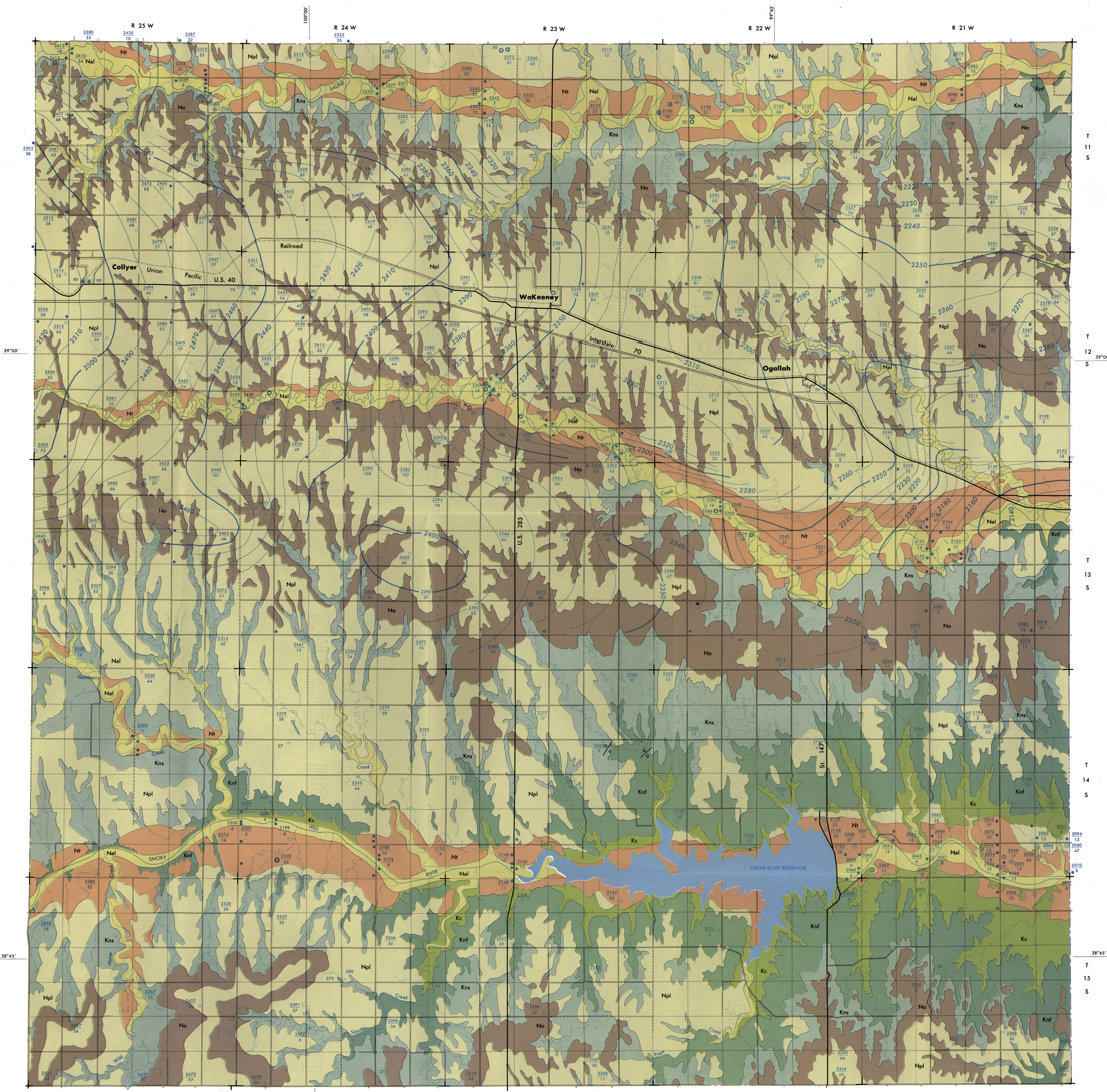


# MAP OF TREGO COUNTY, KANSAS

showing areal geology, water-table contours, and location  
of wells and test holes for which records are given

By Warren G. Hodson

1965



## EXPLANATION

- |             |                  |  |  |
|-------------|------------------|--|--|
| Pleistocene |                  | <b>Alluvium</b><br>Stream-lid deposits ranging in composition from clay to coarse sand and gravel. Occurs along principal stream valleys. Yields moderate to moderately large quantities of water to wells along larger valleys, lesser amounts along smaller valleys.   |  |
|             |                  | <b>Peoria and Loveland Formations, undifferentiated</b><br>Silt, mostly eolian; sandy in lower part. Mantles most of the uplands and masks much of the valley walls. Includes slope wash derived from the Ogallala formation along the edge of the uplands. Yields small quantities of water to wells locally. |  |
|             |                  | <b>Grand Island, Sassa, and Crete Formations (Terrace deposits)</b><br>Stream-deposited sand, gravel, and silt in a terrace position along the major valleys. Mostly continuous, but locally consists of remnants. Yields moderate quantities of water to wells.   |  |
| Pliocene    |                  | <b>Ogallala Formation</b><br>Consists chiefly of sand, gravel, silt, and clay, generally very calcareous. Mostly unconsolidated, but cemented at places to various degrees. Occurs in the uplands, chiefly in the northern and central parts of the county. Yields moderate quantities of water to wells.      |  |
|             | Upper Cretaceous |  | <b>Smoky Hill Chalk Member</b><br>Chalk and cherty shale, thin-bedded and platy; bentonite beds occur throughout. Light gray to dark gray when fresh; weathers to brown and orange at outcrop. Yields no water to wells. |
|             |                  | <b>Fort Hays Limestone Member</b><br>Massive beds of chalk, separated by thin partings of cherty shale. Generally grayish-white, but may be yellow or light brown at outcrop. Yields small amounts of water to wells locally.  |  |
|             |                  | <b>Carlile Shale</b><br>Lower part consists of calcareous shale and thin beds of cherty limestone; upper part consists of dark-gray clayey shale with lenses of silt, fine-grained sandstone near top. Yields small quantities of water to wells from Codell Sandstone Member at top of the formation.         |  |
|             |                  |  | 2430<br>Contour connecting points of equal altitude of water table, based on instrumental levels (omitted where water table is discontinuous). Contour interval 10 feet.   |
|             |                  |  | Upper number, altitude of water table above mean sea level, in feet; lower number, depth to water below land surface, in feet. (Single set of numbers indicates depth to water).   |
|             |                  |  | ○ Domestic well<br>● Irrigation well<br>○ Municipal well<br>○ Observation well<br>○ Test hole  |
|             |                  |  | — Four-lane Interstate Highway<br>— Federal or State Highway<br>— Graded road<br>- - - - - Ungraded road   |
|             |                  |  | — Railroad   |
|             |                  |  | - - - - - County line (no road)  |
|             |                  |  | - - - - - Section line (no road)   |
|             |                  |  | + Township corner  |
|             |                  |  | - - - - - Approximate geologic contact   |
|             |                  |  | ~ Intermittent stream  |
|             |                  |  | ⌘ Fault  |

NEOGENE

CRETACEOUS

Base and drainage compiled from maps prepared by the Soil Conservation Service

Areal geology mapped by Warren G. Hodson in 1959

