MAP OF WALLACE COUNTY, KANSAS

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

State Geological Survey of Kansas

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Plate 1

EXPLANATION

Qal — Alluvium

Stream-laid 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. (Dashed lines indicate minor terrace scarps.)

Qpl — Peoria and Loveland Formations

Silt, mostly eolian, becoming sandy in lower part. Mantles most of the uplands and masks much of the valley walls. Yields little or no water to wells.

Pleistocene — QUATERNARY

To — Ogallala Formation

Consists chiefly of sand, gravel, silt, and clay. Outcropping beds generally are cemented with calcium carbonate and locally with silica. Constitutes the principal aquifer in the southern, extreme western, and northwestern parts of Wallace County.

Pliocene — TERTIARY

Kp — Pierre Shale

Fissile, dark-gray shale which weathers to coffee brown, contains abundant selenite crystals. Yields no water to wells.

Kns — Smoky Hill Chalk Member

Light to dark-gray chalk and chalky shale, generally thin bedded and platy. Characteristically weathers colorfully to white, orange, and brown. Yields no water to wells.

Upper Cretaceous — CRETACEOUS

- Domestic well
- Public-supply well
- Irrigation well
- Observation well and domestic well
- Observation well and drilled test well
- Drilled test hole
- Augered test hole
- Jetted test hole
- Seismograph shothole

3540 / (3405) — Well or test-hole location. Number without parentheses refers to altitude of water table. Number in parentheses refers to altitude of base of Ogallala Formation. (Where Ogallala Formation is missing, the number in parentheses refers to the top of Cretaceous shales.)

3550 — Contours connecting points of equal altitude of base of Ogallala Formation based on instrumental levels (omitted where erosion has removed Ogallala Formation). Contour interval 50 feet.

3390 — Contours connecting points of equal altitude of water table based on instrumental levels (omitted where water table is discontinuous). Contour interval 10 feet.

- Federal or state highway
- Graded road
- Railroad
- State line
- County line (no road)
- Section line (no road)
- Township corner
- Intermittent stream
- Intermittent lake

Scale, in miles: 0 1 2 3 4 5

Base from maps by the State Highway Commission of Kansas.
Drainage from aerial photographs by U.S. Department of Agriculture.