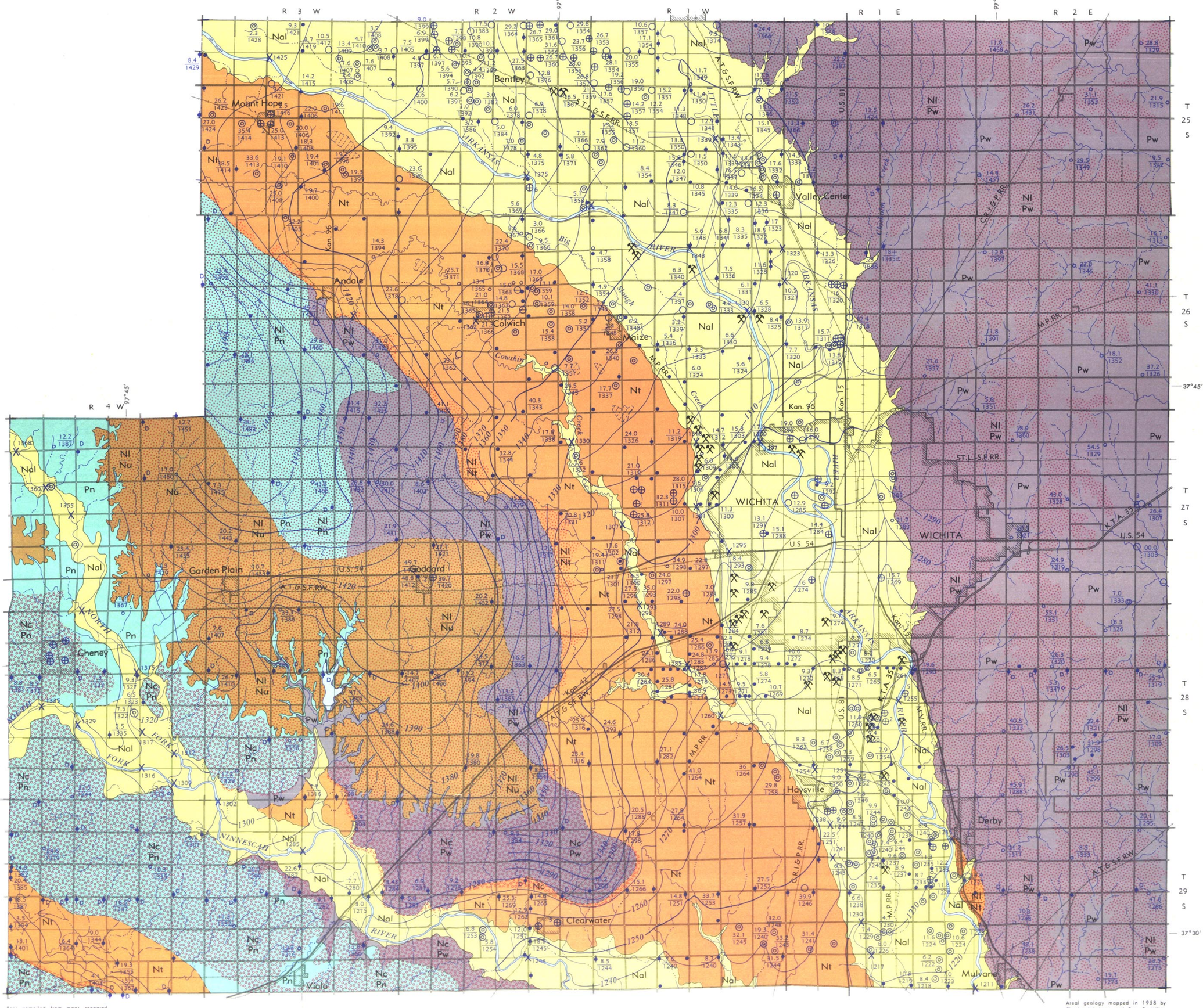
HYDROGEOLOGIC MAP OF SEDGWICK COUNTY, KANSAS

State Geological Survey
of Kansas

By Charles W. Lane and Don E. Miller
1965

Bulletin 176
Plate 1



Base compiled from maps prepared by the Soil Conservation Service.

Areal geology mapped in 1958 by Charles W. Lane and Don E. Miller.

EXPLANATION

NEOGENE SYSTEM

Pleistocene Series

Upper Pleistocene Subseries

Nal — Alluvium and terrace deposits (Wisconsinan to Recent)

Chiefly fine to coarse sand and fine to coarse arkosic gravel with clayey silt in upper part. Yields large quantities of water.

Nl — Loess (Illinoisan to Recent)

Tan to pinkish-tan calcareous silt; contains zones of caliche nodules and some sandy zones. Overlies Permian or Pleistocene deposits in most upland areas of the County. Generally lies above water table, but locally basal part is saturated and may yield small quantities of water.

Lower Pleistocene Subseries

Nc — Colluvium (Illinoisan to Recent)

Heterogeneous mixture of silt, clay, sand, gravel, and bedrock fragments. Generally lies above water table, but locally basal part is saturated and may yield small quantities of water from sandy zones.

Nt — Terrace deposits (Illinoisan)

Chiefly fine to coarse sand and fine to coarse arkosic gravel with sandy silt in upper part. Sand and gravel beds locally contain silt and clay lenses. Yields large quantities of water.

Nu — Undifferentiated deposits (Nebraskan and Kansan)

Light tan to gray, sandy silt and clay, fine to coarse sand, and fine to coarse arkosic gravel. Locally contains lenticular bed of volcanic ash in upper part. Yields small to moderate quantities of water in upland position and large quantities in Arkansas Valley.

PERMIAN SYSTEM

Lower Permian Series

Pn — Ninnescah Shale

Composed chiefly of beds of brownish-red silty shale and siltstone. Contains some thin beds of grayish-green shale, dolomite, and fine-grained sandstone. Yields small quantities of hard water.

Pw — Wellington Formation

Chiefly gray and blue shale. Contains small thin beds of maroon shale, impure limestone, gypsum, and anhydrite. Thick salt beds present in subsurface. Yields small to moderately large quantities of very hard water.

- Gravel pit
- Sink hole
- Flood-routing system
- Observable contact
- Concealed contact
- Approximate contact
- 1264 X — Altitude of stream level
- • 4 — Number of wells at this location included in Table 14
- • — Drilled test hole
- • — Augered test hole
- ○ — Domestic or stock well
- ○ — Observation well
- ⊕ — Municipal well
- ⊖ — Industrial well
- ◎ — Irrigation well
- Q — Spring
- D• — Indicates dry hole

Where test hole and well are at same location, test hole was omitted from map

1350 — Contours on water table dashed where approximate; contour interval, 10 feet

10.7 / 1276 — Upper number, depth to water below land surface, in feet; lower number, altitude of water table above mean sea level, in feet

0 1 2 3 4 5 6
Scale in miles