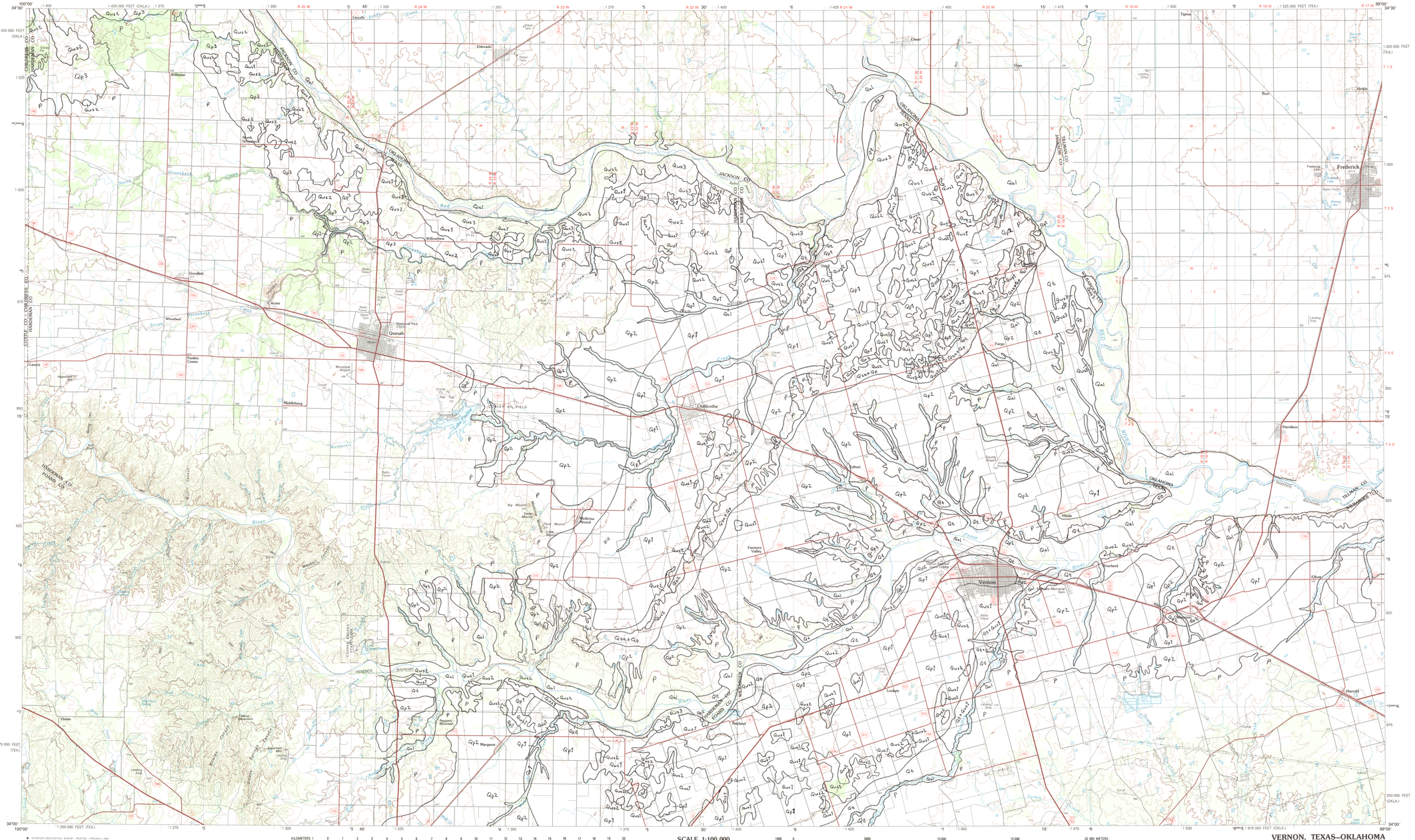
VERNON, TEXAS–OKLAHOMA

30X60 MINUTE SERIES (TOPOGRAPHIC)




SCALE 1:100 000

1 CENTIMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUND

CONTOUR INTERVAL 10 METERS

KILOMETERS 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

MILES 0 1 2 3 4 5 6 7 8 9 10 11 12 13

1000 0 5000 10 000 15 000 20 000 METERS

5000 0 10 000 20 000 30 000 40 000 50 000 60 000 70 000 FEET

INTERIOR-GEOLOGICAL SURVEY, RESTON, VIRGINIA—1991

VERNON, TEXAS–OKLAHOMA

34099-A1-TM-100

1986


BUREAU OF ECONOMIC GEOLOGY
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THE UNIVERSITY OF TEXAS AT AUSTIN


In cooperation with the STATEMAP component of the National Cooperative Geologic Mapping Program, administered by the U.S. Geological Survey


# GEOLOGIC MAP OF SEYMOUR AQUIFER DEPOSITS, VERNON, TEXAS, 30 × 60 MINUTE QUADRANGLE

**Open-File Geologic Map**

## QUATERNARY

### Holocene

**Younger Paducah Group** (after Caran, 1990; Caran and Baumgardner, 1990)

**Qal** **Stream alluvium.** Sand, silt, clay, gravel.

**Qt** **Terrace deposits.** Sand, silt, clay, gravel.

**Qws1** **Windblown deposits.** Sand and silt. Gently rolling and hilly topography. Several feet to about 20 ft thick.

**Qws2** **Windblown deposits of mostly vegetated, stabilized to partly stabilized dunes.** Sand and silt. Hummocky to hilly topography. Thickness mostly between 10 and 30 ft. Thickness may exceed 30 ft locally.

**Qws3** **Windblown deposits of dunes.** Sand and silt. Partly vegetated. Includes some active dunes. Thickness mostly between 10 and 30 ft. Thickness may exceed 30 ft locally.

**Qt + Qws1** **Undivided Qt terrace deposits and Qws1 windblown deposits.**

### Middle to Upper Pleistocene (approximate)

**Older Paducah Group** (after Caran, 1990; Caran and Baumgardner, 1990)

**Qp1** **Thick Paducah deposits.** Lower interval of gravel, sand, and minor silt and clay. Upper interval of sand, silt, clay, and minor gravel. Commonly includes undivided thin surficial windblown sand and silt. Thickness mostly between 25 and 75 ft. Thickness exceeds 100 ft in some areas. Lower gravel- and sand-rich interval between 25 and 65 ft thick in some areas.

**Qp2** **Thin Paducah deposits.** Sand, silt, clay, and gravel. Gravel-rich sand, silt, and clay most common in lower part. Thickness between a few feet to about 25 ft. Commonly includes undivided thin, surficial, windblown sand and silt.

**Qp3** **Paducah deposits of unknown thickness.** Sand, silt, clay, and gravel. Commonly includes undivided thin, surficial, windblown sand and silt.

### Holocene to Pleistocene (approximate)

**Qsa + Qp** **Undivided slope-wash alluvium and thin Paducah deposits along topographic escarpment marking edge of inset drainage valley.** Sand, silt, clay, and gravel.

## PERMIAN

**P** **Undivided Permian deposits.** Sandstone, siltstone, mudstone, conglomerate, and gypsum.


**Edward W. Collins**

**2003**
**scale 1:100,000**

Geology illustrated by this map is based on field and aerial-photograph interpretations, review of previous work cited in the accompanying report, and interpretations of subsurface data from more than 550 wells and test holes. The subsurface data were provided through Texas Water Development Board well and drilling records and published hydrogeologic reports cited in the accompanying report. Work for this map was also supported partly by the STATEMAP component of the National Cooperative Geologic Mapping Program, administered by the U.S. Geological Survey. The views and conclusions contained in this map are those of the author and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. Government. The author disclaims any responsibility or liability for interpretations from this map or digital data or decisions based thereon.


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