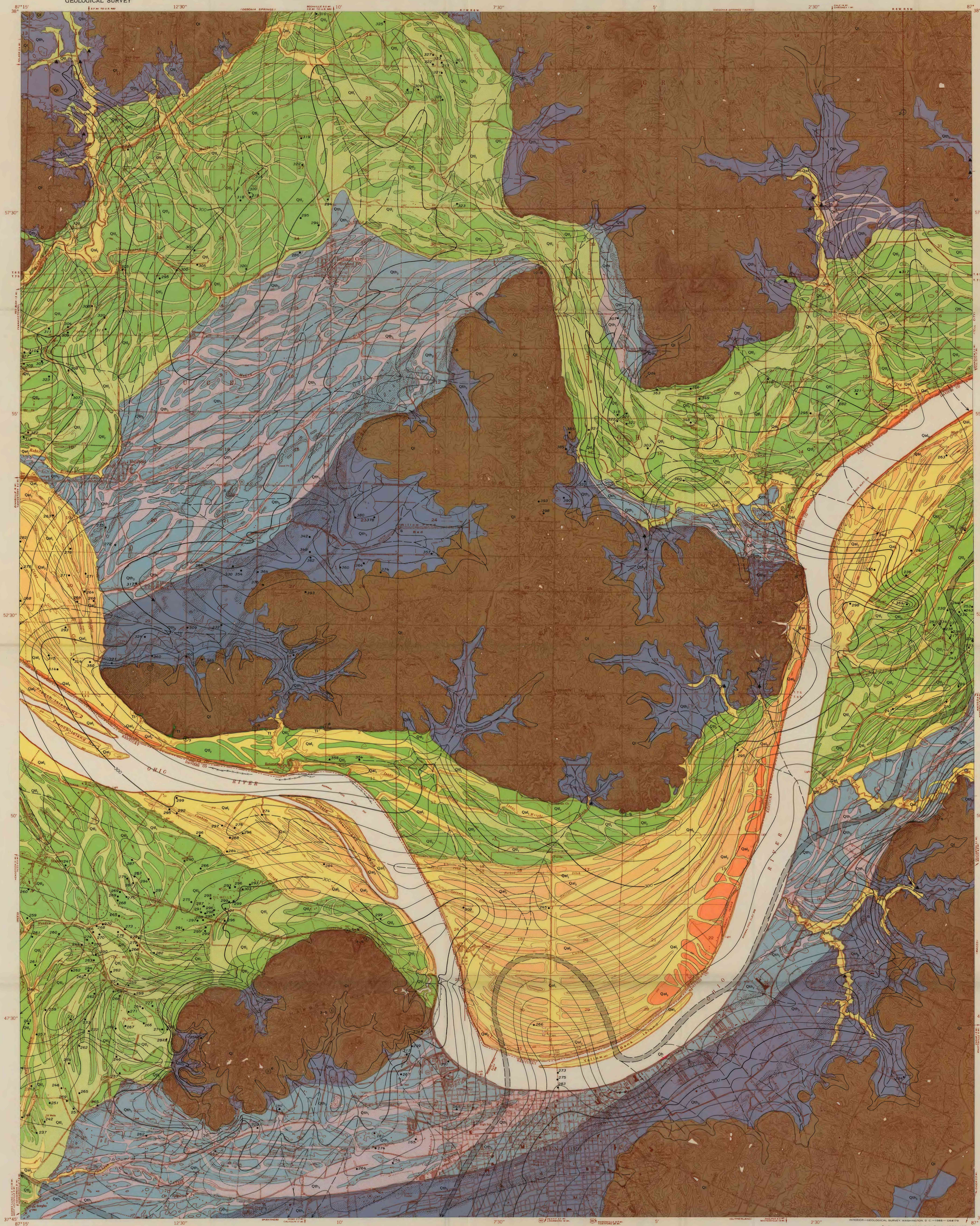
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PROFESSIONAL PAPER 488
PLATE 1



EXPLANATION

Post-Cary

Alluvium

Sandy to clayey silt and scattered lenses and stringers of fine gravel; some humic clay. Overlies sand and gravel. Covered by flood waters on an average of every 1 to 2 years

Qal_1, *clayey silt in swales, sloughs, and channels on flood plain and along larger creeks; humic clay in boggy areas*

Qal_2, *sandy silt on swells of river flood plain, especially on point bars*

Qal_3, *sand and silt of natural levees*

Cary

Valley-train deposits of low terrace and backwater clayey silt

Sandy to clayey silts overlying fine gravel, sand, and silty clay. Frequently covered in whole or in part by flood waters

Qtl_1, *clayey silt in shallow swales; some humic clay in flood-scour channels*

Qtl_2, *sandy silt of low swells; natural drainage better than in swales*

Tazewell

Valley-train deposits of high terrace and related lacustrine clayey silt

Sandy and clayey silts overlying fine to coarse sand and gravel. Not subject to flooding except where surface is reduced by erosion

Qth_1, *clayey to fine-sandy silt in shallow swales*

Qth_2, *sandy well-drained silt of low swells*

Qth_3, *clayey, fossiliferous, lacustrine clayey silt; humic in Willow Pond bed. Generally leached to depth near 5 feet; secondary calcareous nodules commonly abundant below depth of leaching*

Ods

Dune sand

Loess-mantled ridges and low dunes of fine calcareous sand, in places leached in upper part; rarely fossiliferous

Pre-Tazewell

Qh

Beds at Hubert Court

Fine silty sand overlain by clayey, humic, fossiliferous silts and silty clay

Illinoian and Wisconsin

Ql

Loess undifferentiated

Clayey silt up to 30 feet or more thick; mantles hill lands of bedrock of Pennsylvanian age and dunes; fossiliferous where unleached. Normally consists of Tazewell Loess overlying Farmdale Loess; some sections include deeply weathered Loveland Loess at base

Pliocene

Tl

Luce Gravel

Cherty bronzed gravel with some vein quartz and jasper; in places cemented by iron oxides. Generally subrounded to well-rounded and bedded. White, orange, and red sand containing stringers and scattered gravel lenses

QUATERNARY

TERTIARY

Contact

300

Subsurface contour lines on bedrock
Datum is mean sea level. Contour interval 20 feet

Numbered loess sections described in text
Those with symbol include Loveland Loess at base

S
Sampled localities

Outcrops of calcareous nodules in lacustrine clayey silt

Outcrops of bedrock of Pennsylvanian age along riverbanks beneath alluvial valley fill

Ancient stream courses

220
Control points for depth to bedrock, based on well logs

QUADRANGLE LOCATION

APPROXIMATE MEAN DECLINATION, 1965

Base from U.S. Geological Survey topographic quadrangles: Richland, 1954; Rockport, 1952; Owensboro East, 1951–56; Owensboro West, 1951–56

Geology mapped by Louis L. Ray in 1952–1954

GEOLOGIC MAP OF THE OWENSBORO QUADRANGLE, INDIANA AND KENTUCKY

SCALE 1:31 680

1 ½ 0 1 MILE

1 5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

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