KENTUCKY GEOLOGICAL SURVEY
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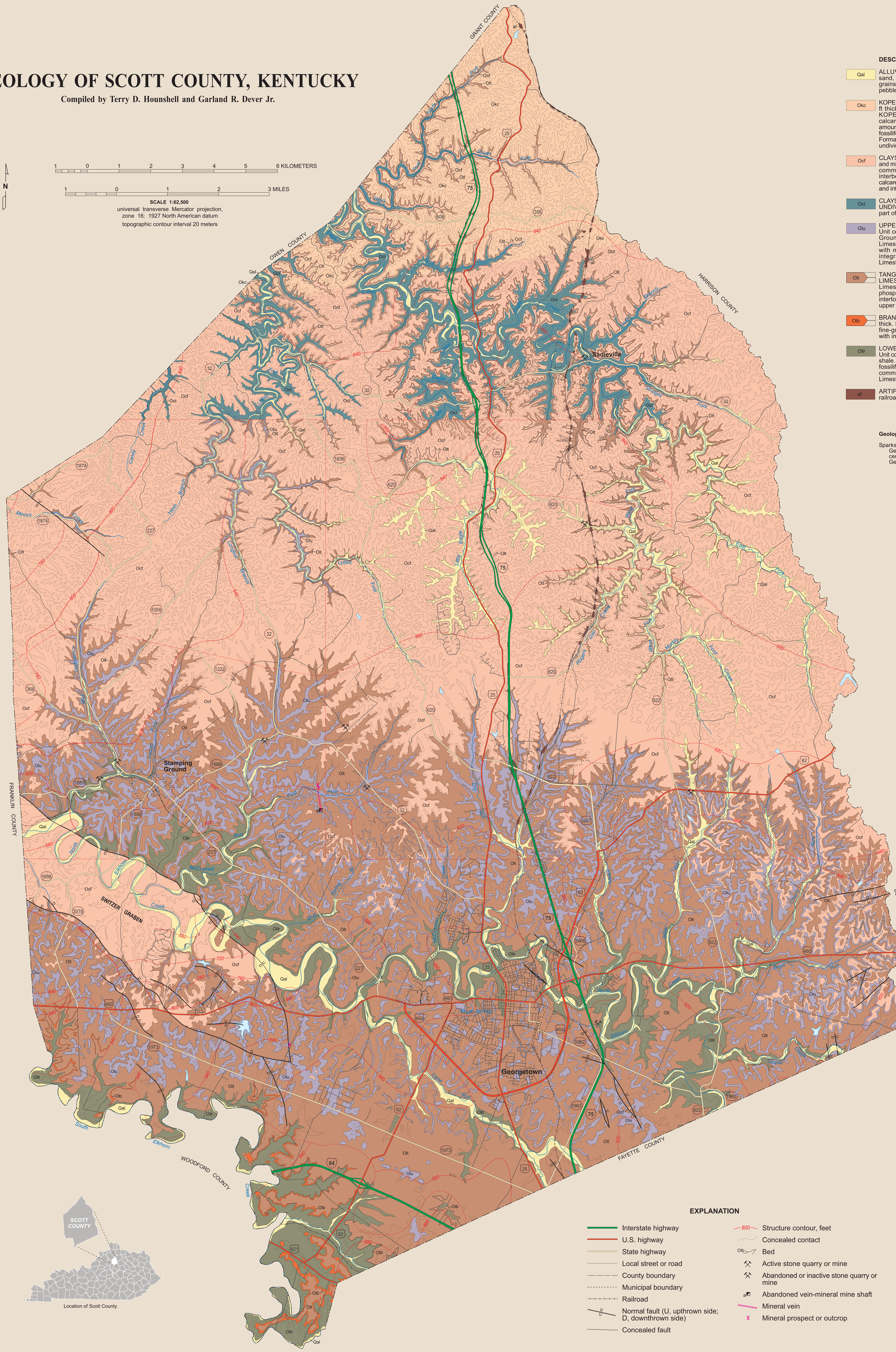
UNIVERSITY OF KENTUCKY, LEXINGTON

GEOLOGIC MAP 6
Series XII, 2003

GEOLOGY OF SCOTT COUNTY, KENTUCKY

Compiled by Terry D. Hounshell and Garland R. Dever Jr.



1 0 1 2 3 4 5 6 KILOMETERS

1 0 1 2 3 MILES

SCALE 1:62,500
universal transverse Mercator projection,
zone 16: 1927 North American datum
topographic contour interval 20 meters

DESCRIPTION OF MAPPED UNITS

Qal ALLUVIUM. 0–20 ft thick. Silt, with lesser amounts of clay, sand, and gravel. Sand composed of limonite and limestone grains. Gravel consists of limestone fragments and limonite pebbles.

Okc KOPE AND CLAYS FERRY FORMATIONS, UNDIVIDED. 180+ ft thick. Combined unit mapped in northern part of county. KOPE FORMATION. Shale and limestone. Shale, silty, calcareous, sparsely fossiliferous; interbedded with lesser amounts of limestone. Limestone, medium- to coarse-grained, fossiliferous. Unit intertongues and intergrades with Clays Ferry Formation. In Scott County, Kope mapped with Clays Ferry as undivided unit.

Ocf CLAYS FERRY FORMATION. 215+ ft thick. Limestone, shale, and minor siltstone. Limestone, micrograined to coarse-grained, commonly bioclastic, sparsely to abundantly fossiliferous; interbedded with about equal amounts of shale. Siltstone, calcareous; mainly in upper part of unit. Clays Ferry intertongues and intergrades with Kope Formation and Lexington Limestone.

Ocl CLAYS FERRY FORMATION AND LEXINGTON LIMESTONE, UNDIVIDED. 80+ ft thick. Combined unit mapped in northern part of county.

Olu UPPER PART OF LEXINGTON LIMESTONE. 10–65 ft thick. Unit consists of two members: in ascending order, Stamping Ground and Millersburg Members. Limestone and shale. Limestone, fine- to coarse-grained, bioclastic, fossiliferous; with matrix and interbeds of shale. Unit intertongues and integrades with Clays Ferry Formation and Tanglewood Limestone Member of Lexington Limestone.

Olt TANGLEWOOD LIMESTONE MEMBER OF LEXINGTON LIMESTONE. 20–125 ft thick. Limestone and minor shale. Limestone, very fine- to very coarse-grained, bioclastic, phosphatic, partly fossiliferous; with minor shale seams. Unit intertongues and intergrades with Clays Ferry Formation and upper and lower parts of Lexington Limestone.

Olb BRANNON MEMBER OF LEXINGTON LIMESTONE. 0–15 ft thick. Limestone and shale. Limestone, micrograined to very fine-grained, argillaceous, partly silty, sparsely fossiliferous; with interbedded shale. Unit pinches out in county.

Ollr LOWER PART OF LEXINGTON LIMESTONE. 80+ ft thick. Unit consists of Grier Limestone Member. Limestone and minor shale. Limestone, micrograined to coarse-grained, bioclastic, fossiliferous; sparsely argillaceous and cherty. Shale partings common. Unit intertongues and intergrades with Tanglewood Limestone Member of Lexington Limestone.

af ARTIFICIAL FILL. Compacted rock debris from highway and railroad construction.

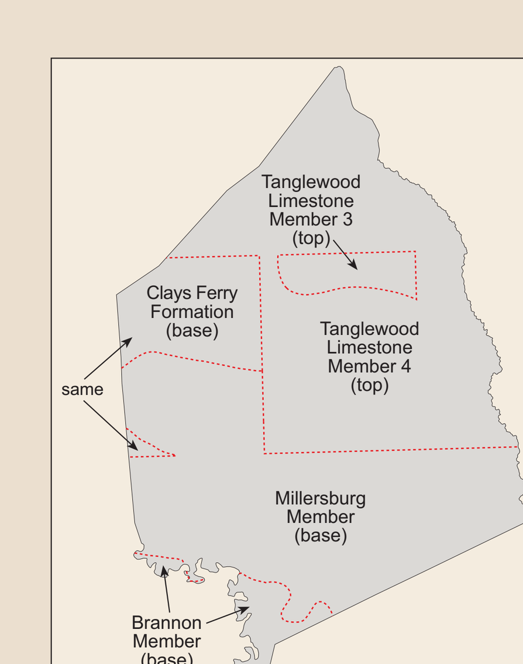
Geology compiled from:

Sparks, T.N., Dever, G.R., Jr., and Anderson, W.H., 2002, Geologic map of the Lexington 30 x 60 minute quadrangle, central Kentucky: Kentucky Geological Survey, ser. 12, Geologic Map 2, scale 1:100,000.

For engineering and environmental geology information about Scott County see:

Carey, D.I., Noger, M.C., and Howell, P., 2002, Generalized geologic map for land-use planning, Scott County, Kentucky: Kentucky Geological Survey, ser. 12, Map and Chart 48, scale 1:48,000.

For detailed geologic and topographic information about Scott County, see the U.S. Geological Survey 1:24,000-scale quadrangle maps. Geologic and topographic quadrangle maps covering Scott County are shown on the index map below, and are available from the Kentucky Geological Survey. The geologic maps include lithologic descriptions, stratigraphic columns, cross sections, and economic-geology summaries.



Location map for structure contours. Index gives name of each mapped horizon. The horizon boundaries are shown on the geologic map as thin red dashed lines. Contour interval is 40 feet.

Location of Scott County

EXPLANATION

- Interstate highway
- U.S. highway
- State highway
- Local street or road
- County boundary
- Municipal boundary
- Railroad
- Normal fault (U, upthrown side; D, downthrown side)
- Concealed fault
- Structure contour, feet
- Concealed contact
- Bed
- Active stone quarry or mine
- Abandoned or inactive stone quarry or mine
- Abandoned vein-mineral mine shaft
- Mineral vein
- Mineral prospect or outcrop

To obtain copies of this map and other Kentucky Geological Survey maps and publications visit or call:

Public Information Center
(859) 257-3896

View the KGS World Wide Web site at
www.uky.edu/kgs