



Base from U.S. Geological Survey, 1952
The Carter Coordinate System letters and numbers used to designate five-minute divisions of latitude and longitude are shown along the margins; tick marks indicate one-minute divisions

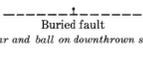
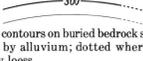
2.9 MI. TO KY. 141
MORGANFIELD 6.3 MI.

SCALE 1:24 000

INTERIOR GEOLOGICAL SURVEY, RESTON, VIRGINIA—1975—272436
Compilation based in part on drill-hole data available as of May 1, 1974, and in part on projection into subsurface of geologic data shown by Johnson and Norris (1974)

EXPLANATION

-  Alluviated area
The alluviated valleys are filled with as much as 110 feet of unconsolidated material. Alluvium and Pennsylvanian rocks described by Johnson and Norris (1974)
-  Area of occurrence of Madisonville Limestone Member of Sturgis Formation. Because the Madisonville includes at least two discontinuous limestone lenses, specific delineation of the subcrop area cannot be interpolated from existing drill hole data and boundaries are only approximately located
-  Non-alluviated area and alluviated area covered by loess
From map by Johnson and Norris (1974)

-  Buried fault
Bar and ball on downthrown side
-  Topographic contours on buried bedrock surface where concealed by alluvium; dotted where alluvium is covered by loess
Datum is mean sea level. Contours above 360 feet not shown. Contour interval 20 feet
-  Ancient stream course

 286
 328
Drill hole from which data used in map compilation were obtained. Subsurface data from logs and records of core holes, auger holes, and oil and gas tests. Figure indicates bedrock elevation in feet above mean sea level; italicized where highly interpretive (includes most rotary-drilled oil and gas test wells)

REFERENCES CITED
Johnson, W. D., Jr., and Norris, R. L., 1974, Geologic map of the Smith Mills quadrangle, Henderson and Union Counties, Kentucky: U.S. Geol. Survey Geol. Quad. Map GQ-1215.
Norris, R. L., 1974, Map showing bedrock topography of parts of the West Franklin, Caborn, and Mount Vernon quadrangles, Henderson and Union Counties, Kentucky: U.S. Geol. Survey Misc. Geol. Inv. Map I-864.

MAP SHOWING BEDROCK TOPOGRAPHY AND AREA OF OCCURRENCE OF MADISONVILLE LIMESTONE MEMBER OF STURGIS FORMATION (UPPER PENNSYLVANIAN) BENEATH ALLUVIAL DEPOSITS OF THE SMITH MILLS QUADRANGLE, HENDERSON AND UNION COUNTIES, KENTUCKY

By
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1975