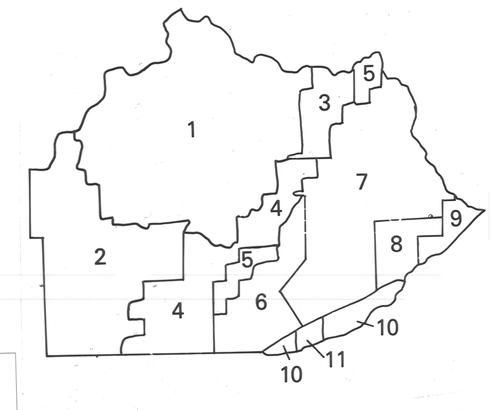
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

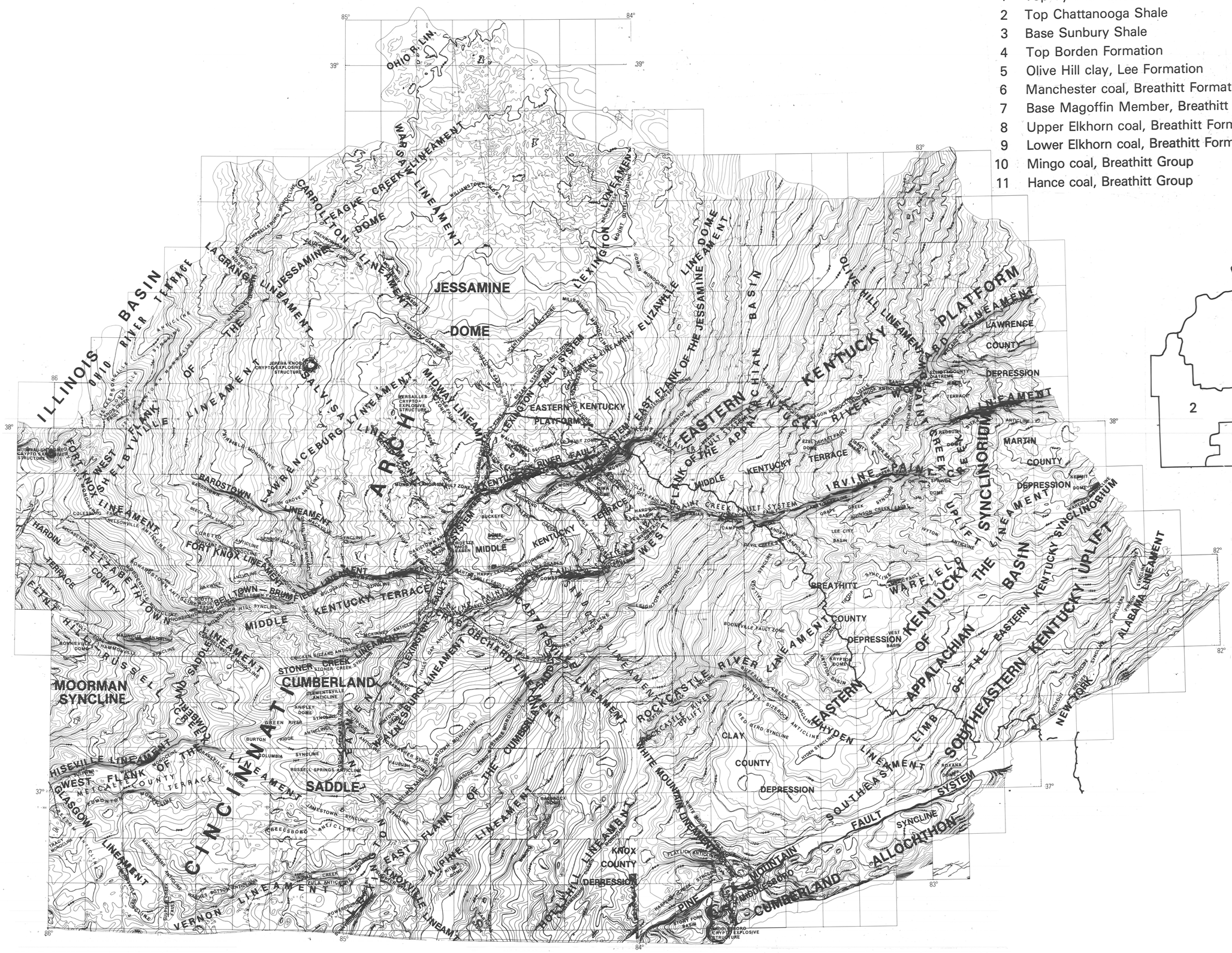
PREPARED IN COOPERATION WITH THE KENTUCKY GEOLOGICAL SURVEY

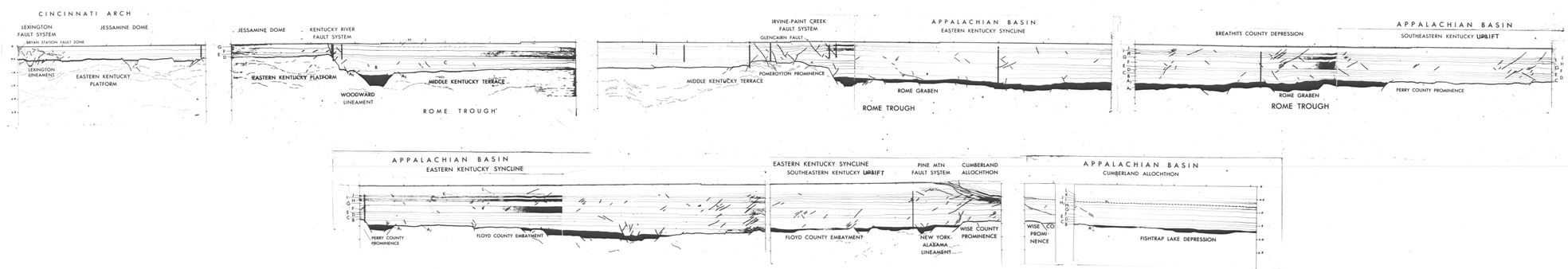
OPEN-FILE REPORT 89-106
PLATE 4 OF 12

EXPLANATION

Sector	Extrapolated Contour Horizon	Age
1	Top Tyrone Limestone	Ordovician
2	Top Chattanooga Shale	Devonian
3	Base Sunbury Shale	Mississippian
4	Top Borden Formation	Mississippian
5	Olive Hill clay, Lee Formation	Pennsylvanian
6	Manchester coal, Breathitt Formation	Pennsylvanian
7	Base Magoffin Member, Breathitt Formation	Pennsylvanian
8	Upper Elkhorn coal, Breathitt Formation	Pennsylvanian
9	Lower Elkhorn coal, Breathitt Formation	Pennsylvanian
10	Mingo coal, Breathitt Group	Pennsylvanian
11	Hance coal, Breathitt Group	Pennsylvanian







This report is preliminary and has not been reveiwed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature.

TECTONIC EVOLUTION IN CENTRAL AND EASTERN KENTUCKY

BY DOUGLAS F.B. BLACK

1989

Plate 4. Tectonic map and seismic section across the study area. Structural detail is depicted by form contours drawn at intervals of 20 and 40 feet on stratigraphic contacts listed in Table 1. Index contours are extrapolated to key horizons identified on the inset map. Extrapolation was based on measured sections, on the projected attitudes of strata contoured on adjacent quadrangles, and on drilled intervals at localities keyed to county areas on Plates 11 and 12. Earlier nomenclature has been preserved where available, but many of the features are newly named. Lineaments are drawn where the surficial structures are alined with magnetic gradients known or inferred to reflect basement faults (Plate 3).