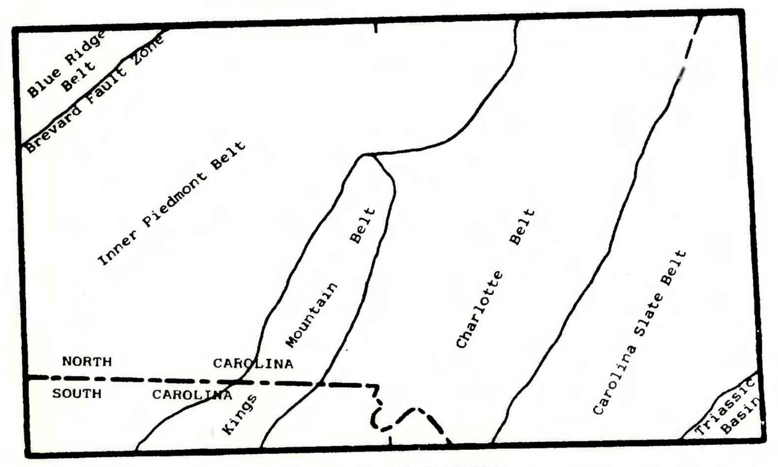
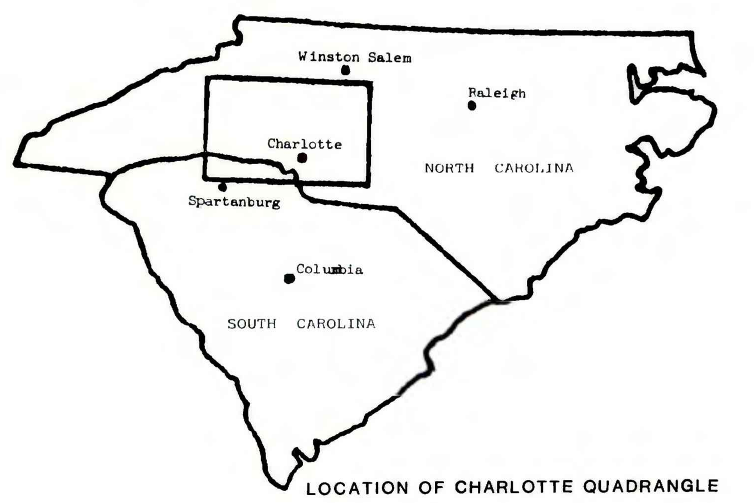
DEPARTMENT OF THE INTERIOR
U. S. GEOLOGICAL SURVEY

OPEN-FILE REPORT 84-843-H
PLATE 1



GEOLOGIC PROVINCES



LOCATION OF CHARLOTTE QUADRANGLE

EXPLANATION

Niobium content (ppm) of M.5 fraction of concentrate:

- + Less than 50
- ▲ 50-150
- △ 200-700
- ✳ Greater than or equal to 1000

Niobium content (ppm) of minus 100-mesh stream sediment samples (from Ferguson, 1979):

- Less than 5
- 5-39
- Greater than or equal to 40

- **Brown Mountain pluton**
- **Salisbury pluton**
- **Cherryville pluton**
- **Spodumene-bearing pegmatite**
- ○ **Beryl in coarse muscovite pegmatite**

Base from U.S. Geological Survey
Charlotte AMS, 1953-74

This map is preliminary and has not been edited or reviewed for conformity with U.S. Geological Survey editorial standards

Scale 1:250,000

5 0 5 10 15 20 Statute Miles

5 0 5 10 15 20 25 30 Kilometres

5 0 5 10 Nautical Miles

CONTOUR INTERVAL 100 FEET WITH SUPPLEMENTARY CONTOURS AT 50 FOOT INTERVALS

TRANSVERSE MERCATOR PROJECTION

BLACK NUMBERED LINES INDICATE THE 10,000 METRE UNIVERSAL TRANSVERSE MERCATOR GRID, ZONE 17

1970 MAGNETIC DECLINATION FROM TRUE NORTH VARIES FROM 2° (40 MILS) WESTERLY FOR THE CENTER OF THE WEST EDGE TO 4° (70 MILS) WESTERLY FOR THE CENTER OF THE EAST EDGE

DISTRIBUTION OF NIOBIUM IN HEAVY-MINERAL-CONCENTRATE SAMPLES FROM THE CHARLOTTE 1° X 2° QUADRANGLE, NORTH CAROLINA AND SOUTH CAROLINA

By

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1985