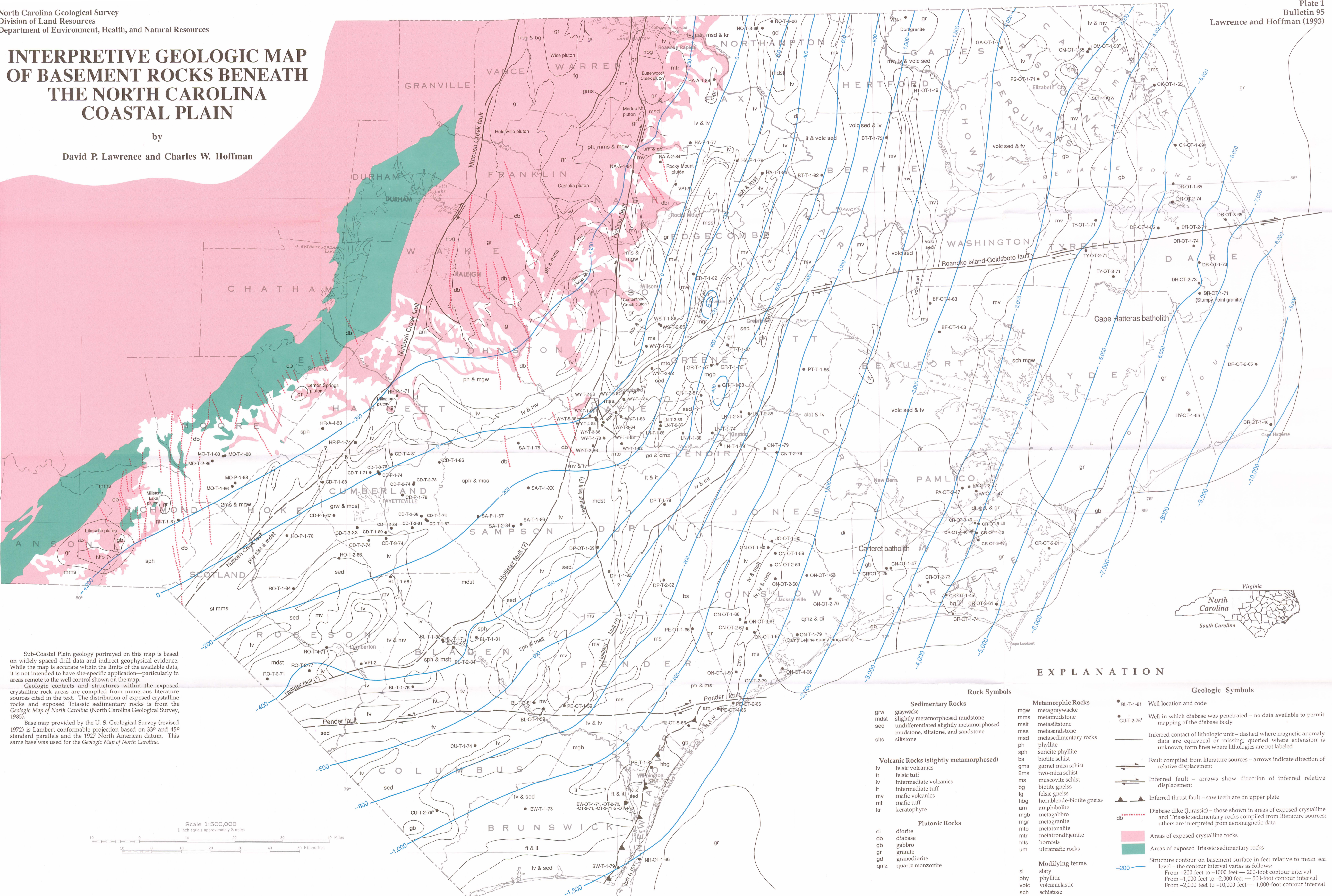


North Carolina Geological Survey
 Division of Land Resources
 Department of Environment, Health, and Natural Resources

INTERPRETIVE GEOLOGIC MAP OF BASEMENT ROCKS BENEATH THE NORTH CAROLINA COASTAL PLAIN

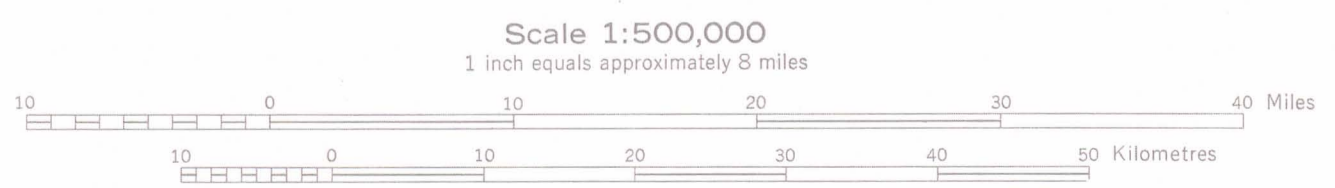
by
 David P. Lawrence and Charles W. Hoffman



Sub-Coastal Plain geology portrayed on this map is based on widely spaced drill data and indirect geophysical evidence. While the map is accurate within the limits of the available data, it is not intended to have site-specific application—particularly in areas remote to the well control shown on the map. Geologic contacts and structures within the exposed crystalline rock areas are compiled from numerous literature sources cited in the text. The distribution of exposed crystalline rocks and exposed Triassic sedimentary rocks is from the *Geologic Map of North Carolina* (North Carolina Geological Survey, 1985).
 Base map provided by the U. S. Geological Survey (revised 1972) is Lambert conformable projection based on 33° and 45° standard parallels and the 1927 North American datum. This same base was used for the *Geologic Map of North Carolina*.

EXPLANATION

- | | |
|--|--|
| <p>Rock Symbols</p> <p>Sedimentary Rocks</p> <ul style="list-style-type: none"> grw graywacke mdst slightly metamorphosed mudstone sed undifferentiated slightly metamorphosed mudstone, siltstone, and sandstone silt siltstone <p>Volcanic Rocks (slightly metamorphosed)</p> <ul style="list-style-type: none"> fv felsic volcanics ft felsic tuff iv intermediate volcanics it intermediate tuff mv mafic volcanics mt mafic tuff kr keratophyre <p>Plutonic Rocks</p> <ul style="list-style-type: none"> di diorite db diabase gb gabbro gr granite gd granodiorite qmz quartz monzonite | <p>Geologic Symbols</p> <ul style="list-style-type: none"> ● BL-T-181 Well location and code ○ CU-T-276* Well in which diabase was penetrated – no data available to permit mapping of the diabase body --- Inferred contact of lithologic unit – dashed where magnetic anomaly data are equivocal or missing; queried where extension is unknown; form lines where lithologies are not labeled == Fault compiled from literature sources – arrows indicate direction of relative displacement --- Inferred fault – arrows show direction of inferred relative displacement ▲▲ Inferred thrust fault – saw teeth are on upper plate --- Diabase dike (Jurassic) – those shown in areas of exposed crystalline and Triassic sedimentary rocks compiled from literature sources; others are interpreted from aeromagnetic data db Areas of exposed crystalline rocks ■ Areas of exposed Triassic sedimentary rocks -200 Structure contour on basement surface in feet relative to mean sea level – the contour interval varies as follows:
 From +200 feet to -1000 feet – 200-foot contour interval
 From -1,000 feet to -2,000 feet – 500-foot contour interval
 From -2,000 feet to -10,000 feet – 1,000-foot contour interval |
|--|--|



Modifying terms

- sl slaty
- phy phyllitic
- volc volcanoclastic
- sch schistose