NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES
NORTH CAROLINA GEOLOGICAL SURVEY
DIVISION OF LAND RESOURCES

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Digital representation by P.A. Carpenter III

Geology mapped 1981-1982.
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BEDROCK GEOLOGIC MAP OF THE ERECT 7.5-MINUTE QUADRANGLE, RANDOLPH COUNTY, NORTH CAROLINA

By

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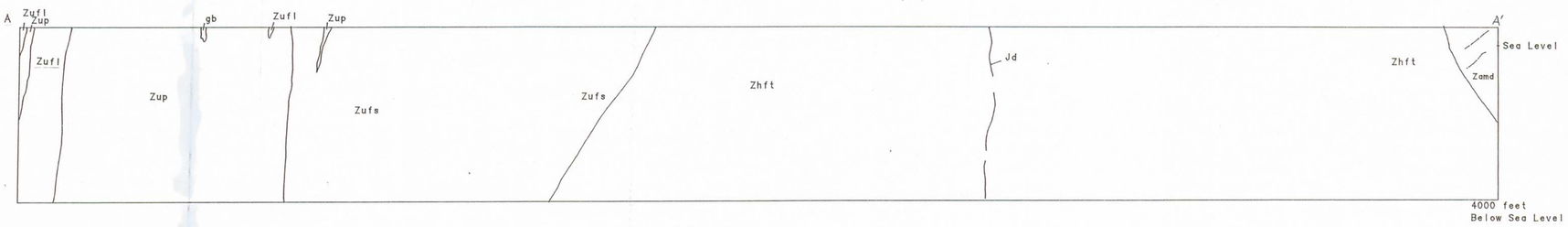
1999



Description of Map Units

UNCONSOLIDATED SEDIMENTARY ROCKS

Quaternary

Qal — Alluvium - White to light-gray, unconsolidated clay, silt, sand, and gravel associated with floodplains.

INTRUSIVE ROCKS

Jurassic

Jd — Diabase - black to greenish-black, fine-grained diabase dikes.

Late Proterozoic to Early Paleozoic

da — Dacite - black to greenish-black, fine-grained dacite dikes. Contains plagioclase, quartz, and magnetite. Has flow texture, locally.

di — Diorite - medium-gray to pink, fine-grained dike. Contains plagioclase and hornblende with minor quartz, chlorite, epidote, and opaque minerals.

an — Andesite - dark-brown to gray to black, prophyritic dike. Composed of euhedral crystals of hornblende and plagioclase in a dense groundmass.

gr — Granodiorite - gray to pink, medium-grained, equigranular rock. Composed of quartz, sericitized plagioclase, chlorite, and myrmekite.

gb — Gabbro - medium- to dark-green, coarse-grained rock. Composed of amphibole, epidote, chlorite, and uralite.

METAVOLCANIC AND METASEDIMENTARY ROCKS

Late Proterozoic

Uwharrie Formation

Zup — Porphyritic felsite - light-gray, dense, rhyodacitic volcanic rock with phenocrysts of quartz and plagioclase, locally flow layered and spherulitic. Includes minor aphanitic felsite and felsic lapilli tuff. (=Zups of Seiders, 1981)

Zufl — Felsic lapilli tuff - light-gray to greenish gray lapilli tuff and tuff breccia; contains clasts of subrounded to subangular, apjanitic, white rock fragments. Includes minor porphyritic felsite, felsite, and felsic crystal tuff. (=Zufc of Seiders, 1981)

Zufs — Felsite - light-gray, aphanitic, rhyodacitic to dacitic tuff; locally flow layered and spherulitic; locally with phenocrysts of plagioclase and quartz. Includes interbeds of felsic crystal tuff and felsic lapilli tuff. (=Zuf of Seiders, 1981)

Aaron Formation

Zamd — Mudstone - tan, light-gray, and greenish-gray, laminated to thin bedded mudstone. Interbedded with fine-grained to coarse-grained, bedded epiclastic and volcaniclastic rock.

Hyco Formation

Zhft Zhdt — Intermediate to felsic crystal tuff and lapilli tuff - white, light-gray or greenish-gray andesitic and dacitic crystal tuff and medium-gray to greenish-gray lapilli tuff containing mostly white, aphanitic rock fragments. Includes interbeds of fine tuff and coarse tuff as well as minor rhyodacitic flow and tuff, tuffaceous mudstone, and porphyritic felsite. Zhdt - small bodies of dacitic crystal tuff.

Zhpt — Phyllitic felsic tuff and lapilli tuff - white, gray, and greenish-gray phyllitic tuff and lapilli tuff. Includes silver-gray, quartzose sericite phyllonite (sheared porphyritic felsite?), sericite phyllite, chlorite phyllite, and phyllitic andesitic crystal tuff and lapilli tuff.

Zhp — Porphyritic felsite - light-gray, dense, rhyodacitic volcanic rock with phenocrysts of quartz and plagioclase, locally flow layered and spherulitic. Includes minor aphanitic felsite and felsic lapilli tuff.

Zhqs — Quartzose Sericite Phyllite - light-gray phyllite; locally contains pyrite; commonly iron oxide-stained where weathered. Pyrophyllite locally present. Probable hydrothermally altered felsic volcanic rock.

Symbols

- Contact - well located
- Contact- approximately located
- Contact- concealed
- 75 Strike and dip of bedding
- 75 Strike and dip of cleavage (primary schistosity)
- 75 Strike and dip of flow layering.
- Strike of vertical bedding.
- Strike of vertical cleavage (primary schistosity)
- 75 Strike and dip of parallel cleavage and bedding.
- Lapilli tuff outcrop or float.
- Outcrop locality
- Metamudstone
- Quartz vein - strike unknown.
- Granitoid float.
- Quartz vein - showing strike
- Porphyritic felsite with lineated quartz grains.
- Sheared porphyritic felsite with lineated quartz grains.
- Quarry prospect
- Sericite phyllite.

SCALE 1:24000

1 1/2 0 1 MILE

Reference Cited

Seiders, V. M., 1981, Geologic map of the Asheboro, North Carolina, and adjacent areas: U. S. Geological Survey Miscellaneous Investigations Map I-1314.