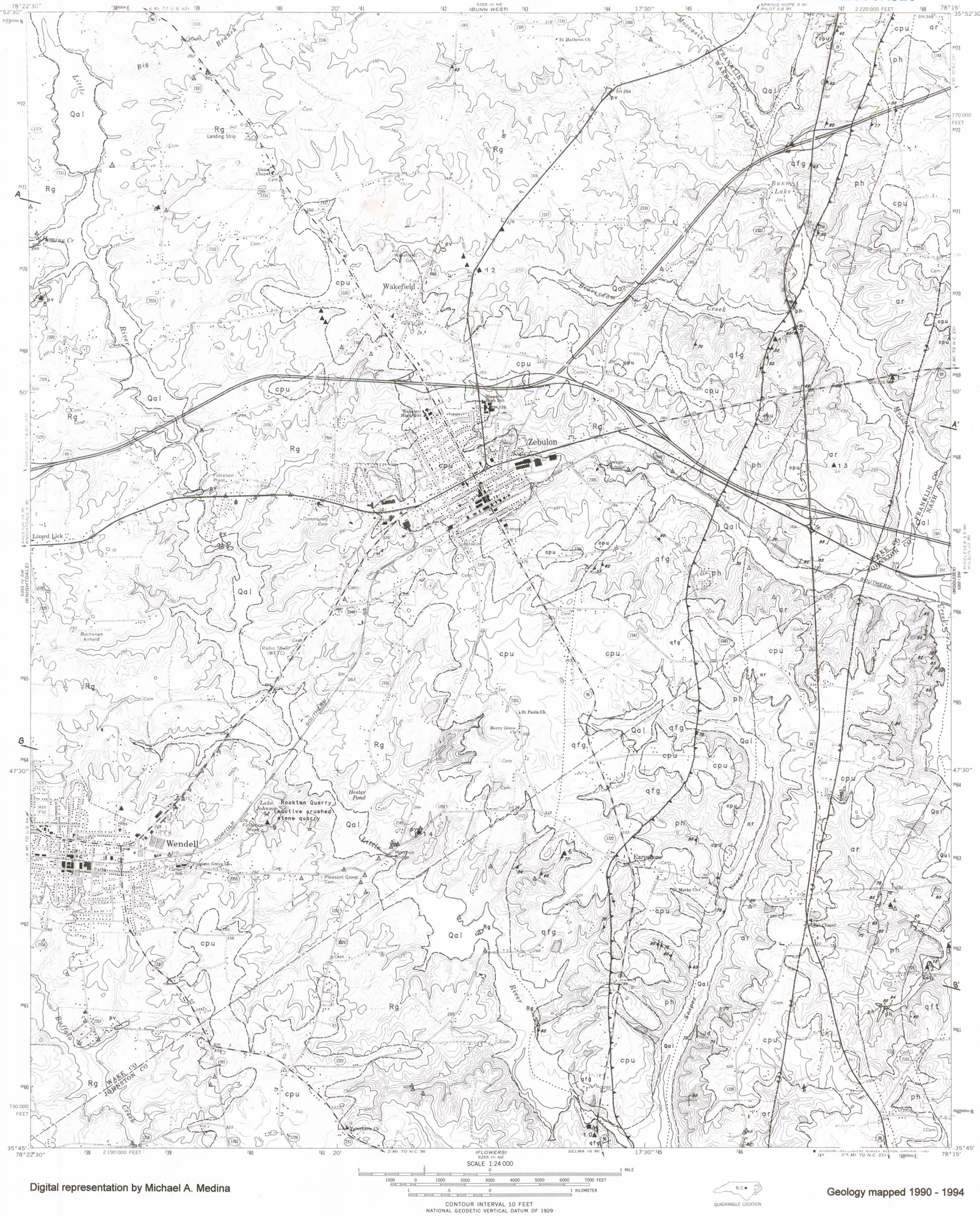
NORTH CAROLINA DEPARTMENT OF ENVIRONMENT,
HEALTH AND NATURAL RESOURCES

NORTH CAROLINA GEOLOGICAL SURVEY
DIVISION OF LAND RESOURCES

OPEN-FILE REPORT 96-2

PLATE 1



Summary of Map Units

UNCONSOLIDATED SEDIMENTARY ROCKS

Quaternary

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

Tertiary to Quaternary

cpu — Coastal Plain Sediment - Unconsolidated to poorly consolidated, fine- to coarse-grained sands and clayey sands, with local gravel and clay beds. Gravel, gravelly sand, and coarse, poorly sorted, angular to subangular sands occur at the base of the Coastal Plain section. Thickness is generally less than 10 meters. The sands are generally present above 290 to 300 feet south of Zebulon, and above 320 feet in the vicinity of Wakefield.

INTRUSIVE ROCKS

Jurassic

Jd — Diabase - fine-grained, dense, black to greenish-black dike rock.

Late Paleozoic

Rg — Rolesville granitoid - medium-to coarse-grained to megacrystic monzogranite, granite, and granodiorite. Pegmatites are common near the border of the granite and in quartzofeldspathic gneiss.

- Archers Lodge granitoid
- mafic granitoid
- Rolesville granitoid
- Wakefield granitoid
- pv- pavement

METAMORPHIC ROCKS

Late Precambrian to Early Paleozoic

ar — Argillite - fine grained, light-gray, locally phyllitic, thinly laminated to massive mudstone.

ph — Muscovite schist and sericite phyllite- fine-grained, white to light gray phyllite or schist. Composed of white mica with minor quartz and garnet. Locally contains tourmaline and abundant opaque minerals. Contains minor layers of chlorite phyllite and mafic volcanic rock east of NC Hwy.39.

qft — Quartz-feldspar crystal tuff - fine-to medium-grained, light gray felsic volcanic rock. Contains crystals of quartz and/or feldspar, locally up to 0.5 cm in size.

qfg — Quartzofeldspathic gneiss - fine- to medium-grained, white to medium gray quartz-feldspar-biotite-muscovite gneiss. Interlayered with minor biotite schist and amphibolite.

Symbols

- Contact - well located
- Contact- concealed
- Contact- approximately located
- 75 Strike and dip of bedding
- 75 Strike and dip of foliation
- 75 Strike and dip of cleavage (primary schistosity)
- 75 Strike and dip of secondary (crenulation) cleavage
- Strike of vertical bedding
- Strike of vertical foliation
- Strike of vertical cleavage (primary schistosity)
- Strike of vertical secondary (crenulation) cleavage
- Observation site in crystalline rocks
- 1 Outcrop locality referred to in text
- Location of water well - crystalline rocks identified in cuttings
- Axial trace of overturned synform (approximate / concealed)

Digital representation by Michael A. Medina

Geology mapped 1990 - 1994

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

QUADRANGLE LOCATION

UTM GRID AND 1981 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

BEDROCK GEOLOGIC MAP OF THE ZEBULON 7.5 - MINUTE QUADRANGLE, NORTH CAROLINA

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