**INTRODUCTION**

The Marion West 7.5-minute quadrangle lies in Randolph County, southern North Carolina. The marl gap in the southeastern part of the quadrangle is a result of younger and more recent deposits in the area. The quadrangle is located along a major north-south fault zone, the Linville Fault, which is locally overturned toward the northwest. The Linville Fault separates the profile of the northwestern part of the quadrangle from the profiles of the southeastern part of the quadrangle. The Linville Fault has been interpreted to be a Mesoproterozoic fault, with a dip to the southeast. The fault is locally overturned toward the northwest, as indicated by the orientation of the fault planes and the dip direction of the foliation.

**DESCRIPTION OF MAP UNITS**

**Metamorphic Rocks**

*Pleasantville biotite gneiss* — Intermediate to felsic gneiss with biotite and muscovite as the principal mafic and felsic minerals. The gneiss is medium to coarse grained, foliated, and schistose. The foliation is defined by mineral foliation surfaces and by the alignment of muscovite and biotite grains. The gneiss contains minor amounts of quartz, feldspar, and accessory minerals.

**Mylonites**

*Marion West 7.5-minute Quadrangle* — 66 samples shown on geologic map, State Plane Coordinate System

**EXPLANATION OF MAP SYMBOLS**

- **General Features**
  - Towns and cities
  - Roads
  - Water bodies
- **Geological Features**
  - Faults
  - Sheet faults
  - Lineaments
  - Structural elements

**WHOLE ROCK ICP-MS OF SELECTED SAMPLES**

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**REFERENCES**


**SCHMIDT EQUAL AREA STEREONET DATA**

- Net stereonets on thin section and whole rock sample localities shown on geologic map

**TRAVEL MAP**

- Roads and highways
- Towns and cities
- Water bodies

**Bedrock Geologic Map of the Marion West 7.5-minute Quadrangle, McDowell County, North Carolina**

By: 
Bart L. Coehnau, G. Nicholas Beeghley, and Steve J. Baird