Late Cretaceous-Cenozoic brittle faulting beneath the western South Carolina Coastal Plain: Reactivation of the Eastern Piedmont Fault System

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DESCRIPTION OF MAP UNITS

- **Augusta terrane**: Canyon Creek, Seminole Creek (slate belt), Laurens thrust stack
- **Orangeburg terrane**: North Edisto River (slate belt), Aiken-Edgefield Tertiary basin

SIGNIFICANT STRUCTURAL FEATURES

- **Crittendon Ford fault**: Cross Anchor fault
- **Davis Pond fault**: Brittle fault system
- **Augusta fault**: Brittle fault system

**Location and number of photographed silicified breccia**

- **Orangeburg scarp**: South Carolina Hwy 1 near the Edgefield county line.
- **Aiken-Edgefield county line**: Near the Edgefield block of silicified breccia.
- **Horse Creek**: Exposure is visible on west bank of McTier Creek.
- **Shaw stream**: Silicified breccia is exposed on west bank of Chicora Creek.
- **Huber Formation**: Silicified breccia just south of Lake Murray dam.
- **Surry scarp**: Silicified breccia just south of Monetta.

**Hydrocarbons**

- **Water**: Generally poor quality, generally red, purple or lavender, and characterized by abundant Carolina bay sediments

**Quaternary alluvium**

- **Fluvial sediments deposited in the Carolina bay sediments**
- **Huber Formation**: Lower part of the formation is characterized by a thin (less than 3 ft) layer of sandstone and siltstone with a well-developed shoreface foresets. This layer is overlain by a thicker (2-4 ft) layer of very fine-grained siltstone and sandstone with a poorly-defined shoreface foreset. The upper part of the formation is characterized by a thin (less than 3 ft) layer of sandstone and siltstone with a well-defined shoreface foreset. This layer is overlain by a thicker (2-4 ft) layer of very fine-grained siltstone and sandstone with a poorly-defined shoreface foreset.

**Pinehurst Formation**

- **Huber Formation**: Deposits of yellow orange (10YR 8/6), well-cemented, fine- to very coarse grained, quartz sand with kaolin balls and locally, discontinuous purple clay laminae extending from the Dry Branch up into the basal lacustrine clay. The formation is generally 3-5 feet thick and is a marker bed in the Tertiary succession. The formation is typically red, purple or lavender, and characterized by abundant Carolina bay sediments.

**Huber Formation**

- **Fluvial sediments deposited in the Carolina bay sediments**: Lower part of the formation is characterized by a thin (less than 3 ft) layer of sandstone and siltstone with a well-developed shoreface foresets. This layer is overlain by a thicker (2-4 ft) layer of very fine-grained siltstone and sandstone with a poorly-defined shoreface foreset. The upper part of the formation is characterized by a thin (less than 3 ft) layer of sandstone and siltstone with a well-defined shoreface foreset. This layer is overlain by a thicker (2-4 ft) layer of very fine-grained siltstone and sandstone with a poorly-defined shoreface foreset.