GEOLOGIC MAP OF THE EAGLE MOUNTAIN QUADRANGLE, POLK COUNTY, ARKANSAS

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Correlation of Map Units

MISSISSIPPIAN

DEVOIAN

PERMIAN

PALAEOZOIC

Description of Map Units

Stanley Formation (Mississippian) - The Stanley is composed predominantly of greenish-black to brownish-gray shale, with lesser amounts of gray to massive, bedded, fine-grained, gray to brownish-gray sandstone, and gray and black chert. Weathered shale is gray to grayish-black, and the matrix is generally more porphyroclastic. Most of the fossils that have been recovered from this formation are conodonts and plant fossils. The formation was deposited in a deep marine environment.

Arkansas Nuvaculite (Devonian-Carboniferous) - Three division of the nuvaculite are recognized in the state. The Lower Division is white massive novaculite with some interbedded gray shales near its base. The Middle Division is composed of dark gray, shale interbedded with gray to olive-green sandstone, with thin to thick-bedded, and often silicified, siltstone. The formation was deposited in a deep marine environment.

Missouri Mountain Formation (Silurian) - The Missouri Mountain consists of shale interbedded with conglomerate, novaculite and sandstone. Few identifiable fossils have been recovered from this unit. The unit was deposited in a deep marine environment.

Blackrock Formation (Devonian) - The Blackrock consists of thin to gray, fine to medium sandstone interbedded with black fossil shale. Graptolite and trace fossils may be found, but are rare. The unit was deposited in a deep marine environment.

Missouri Mountain Formation (Mississippian) - The Missouri Mountain consists of shale interbedded with conglomerate, sandstone and black chert. Few identifiable fossils have been recovered from this unit. The unit was deposited in a deep marine environment.

Polk Creek Formation (Devonian) - The Polk Creek rocks are black, gray, fossils, shale with minor black chert tines of gray asparite and limonite. Graptolite are common in most of the shales in the formation.

Symbols

\text{-} Contact

\text{-} Thrust Fault

\text{-} Occurrence Thrust Fault

\text{-} Tension Fault

\text{-} Strike and Dip

\text{-} X

\text{-} Abandoned Pit

\text{-} S

\text{-} Abandoned Mine/Quarry

\text{-} R

\text{-} Reclaimed Pit

\text{-} G

\text{-} Reclaimed Mine/Quarry

Mineral Commodities

\text{-} Manganese

\text{-} Sand and Gravel

\text{-} Shale

\text{-} Slates

\text{-} Tarpanite

\text{-} Bottled Water Source

References


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