Introduction

This map shows the geologic units of the Garfield Quadrangle, Benton County, Arkansas. The map is based on field observations and existing geologic maps. The map units are colored and labeled to indicate their location and relationship to other units. The map also includes symbols to indicate structural features such as faults, fractures, and folds. The map is useful for understanding the geologic history and structure of the area.

Description of Map Units

- **Quaternary:** Post-glacial deposits, including alluvium, fluvioglacial, and lacustrine sediments.
- **Miocene:** Volcanic and sedimentary rocks, including tuffs, breccias, and sandstones.
- **Devonian:** Sedimentary rocks, including sandstones, siltstones, and shales.
- **Cambrian:** Sedimentary rocks, including sandstones and siltstones.
- **Ordovician:** Sedimentary rocks, including sandstones and shales.
- **Silurian:** Sedimentary rocks, including sandstones and siltstones.
- **Devonian:** Sedimentary rocks, including sandstones and siltstones.
- **Cambrian:** Sedimentary rocks, including sandstones and siltstones.

Symbols

- **Contact:** Boundaries between geologic units.
- **Fault:** Discontinuities in the geologic strata.
- **Lineament:** Linear features such as fractures and faults.
- **Beds:** Discontinuities in the geologic strata.
- **Monocline:** Folds in the geologic strata.
- **Local and minor structures:** Features not visible on the map.
- **Quarry:** Sites of mineral extraction.
- **Limestone:** Sedimentary rocks composed of calcium carbonate.
- **Shale:** Sedimentary rocks composed of clay minerals.

Joint Diagram

The joint diagram shows the orientation of joints and fractures in the geologic strata. The diagram helps to understand the geologic structure and orientation of the area.

Stratigraphic Column

The stratigraphic column shows the sequence of geologic strata in the area. The column includes the major geologic units and their thicknesses. The column helps to understand the geologic history and sequence of deposition.

References


For information on obtaining copies of this map and other publications, please contact the U.S. Geological Survey.