Introduction

This map depicts the stratigraphic and geological features of the study area in southern Madison County, Arkansas, at a scale of 1:24,000. The map was produced by the United States Geological Survey and the Arkansas Geological Survey. The study area is located within the Boston Mountains and the Japton quadrangle, which are part of the Boston Mountain Province. The map provides a comprehensive view of the geological formations and features within the study area, including the Prairie Grove Limestone, the Brentwood Limestone, and the Dye Shale.

Description of Map Units

The map units are color-coded for easy identification. The key to the map units includes:

- Pink: Prairie Grove Limestone
- Blue: Brentwood Limestone
- Yellow: Dye Shale
- Green: Alluvium and terrace deposits
- Brown: Oxolino formation
- Gray: Hydronius formation
- Blue: Parthenon sandstone
- Pink: Brentwood limestone
- Yellow: Dye Shale
- Green: Alluvium and terrace deposits
- Brown: Oxolino formation
- Gray: Hydronius formation
- Pink: Brentwood limestone
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Symbols

- Pink: Prairie Grove Limestone
- Blue: Brentwood Limestone
- Yellow: Dye Shale
- Green: Alluvium and terrace deposits
- Brown: Oxolino formation
- Gray: Hydronius formation
- Black: Petrologic units

Joint Frequency

The joint frequency diagram shows the frequency of joints across the study area. The diagram is circular with a total of 360 degrees, and each degree represents a different joint direction. The diagram is divided into 10 equal parts, and the frequency of joints in each direction is indicated.

References


Acknowledgments

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Limitations

This map is not intended to be used for engineering or construction purposes. The accuracy of the map is limited by the available data and the scale of the map. The map is not appropriate for precise location determination or navigation. The map is provided as an educational tool and should be used with caution in the field.