Bedrock Geologic Map of Mitchell County, Iowa

LEGEND

STRIATIGRAPHIC COLUMN

GEOLOGIC CROSS-SECTION A-A'

GEOLOGIC CROSS-SECTION B-B'

Introduction to the Bedrock Geologic Map of Mitchell County, Iowa

Mitchell County is a region in northeastern Iowa, USA, known for its diverse geology, featuring a mix of rock formations that provide insight into the geologic history of the area. The geologic map presented here is a detailed representation of the bedrock geology of Mitchell County, Iowa, utilizing a variety of symbols and colors to indicate different rock types and formations. The map is based on a combination of fieldwork, subsurface investigations, and existing geologic data, providing a comprehensive overview of the area's geologic structure.

The map reflects the complex interplay of various geological processes that have shaped the landscape over millions of years. Key features on the map include:

- **Quaternary Deposits**: These deposits are found throughout the county, ranging from 0 to 14 m (0-45 ft) thick, and consist of undifferentiated materials.
- **Devonian System**: This system is characterized by the presence of dolomitic dolomite, limestone, and shale formations, as well as dolomite and limestone rocks.
- **Permian Limestone**: This formation is significant due to its importance in the hydrogeologic setting of the area.
- **Ordovician Sandstone**: The map highlights the presence of sandstone formations, which are crucial for understanding the regional geology.
- **Cretaceous Conglomerate**: This formation is found in several locations, indicating the presence of ancient river systems.

**Geological Cross-Sections**: The cross-sections provided in the map offer a detailed view of the geological layers and their spatial distribution. These sections are essential for understanding the subsurface geology and can be used for further exploration and resource development.

**References**: The map incorporates information from various sources, including geological surveys, research papers, and other relevant literature. Key references include:


This map is a valuable resource for geologists, civil engineers, and planners, providing a comprehensive view of the geologic features and their implications for future development. The map's accuracy and detail are essential for understanding the geologic framework of Mitchell County, guiding future decisions regarding infrastructure, land use, and environmental management.

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For the full text content, please refer to the provided references and other sources.