**INTRODUCTION TO THE BEDROCK GEOLOGY OF THE WEST BURLINGTON 7.5’ QUADRANGLE, DES MOINES COUNTY, IOWA**

Bedrock information for the West Burlington 7.5’ Quadrangle was obtained from the Iowa Geological Survey (IGS) through("1971, 1993") and from the Illinois State Geological Survey (ISGS) through("1966, 1968, 1984, 1986") referencing the original township section surveys. The maps provided by the IGS and ISGS were used as the base map, and additional information was gathered from the Iowa Geological Survey (IGS) and the Illinois State Geological Survey (ISGS). New information was added to the maps to update the bedrock geology for the West Burlington 7.5’ Quadrangle.

**MISSISSIPPIAN SUBSYSTEM**

**Biostratigraphy and Stratigraphy**

The Mississippiian Subsystem is divided into lower and upper subsystems, the Mississippian and Pennsylvanian, respectively. As such, it is subdivided into lower and upper Fms.

**MISSISSIPPIAN SUBSYSTEM**

**Lower Mississippian**

The Lower Mississippian includes the Burlington Formation, which is typically between 12 to 18 ft thick and is composed of silty dolomite. The Burlington Formation is characterized by the presence of fossil molds and ammonite fragments. The Burlington Formation is typically found near the southwestern corner of the mapping area. Bedrock information for the West Burlington 7.5’ Quadrangle was obtained from the Iowa Geological Survey (IGS) through("1971, 1993") and from the Illinois State Geological Survey (ISGS) through("1966, 1968, 1984, 1986") referencing the original township section surveys. The maps provided by the IGS and ISGS were used as the base map, and additional information was gathered from the Iowa Geological Survey (IGS) and the Illinois State Geological Survey (ISGS). New information was added to the maps to update the bedrock geology for the West Burlington 7.5’ Quadrangle.

**Pennsylvanian**

The Pennsylvanian includes the Keokuk Formation, which is typically up to 21 m thick and consists of argillaceous dolomite. The Keokuk Formation is characterized by the presence of siltstone and argillaceous dolomite. The Keokuk Formation is typically found near the southwestern corner of the mapping area. Bedrock information for the West Burlington 7.5’ Quadrangle was obtained from the Iowa Geological Survey (IGS) through("1971, 1993") and from the Illinois State Geological Survey (ISGS) through("1966, 1968, 1984, 1986") referencing the original township section surveys. The maps provided by the IGS and ISGS were used as the base map, and additional information was gathered from the Iowa Geological Survey (IGS) and the Illinois State Geological Survey (ISGS). New information was added to the maps to update the bedrock geology for the West Burlington 7.5’ Quadrangle.

**MISSOURIAN SYSTEM**

**Biostratigraphy and Stratigraphy**

The Missourian System is subdivided into lower and upper subsystems, the Mississippian and Pennsylvanian, respectively. As such, it is subdivided into lower and upper Fms.

**QUATERNARY SYSTEM**

**Biostratigraphy and Stratigraphy**

The Quaternary System is subdivided into lower and upper subsystems, the Mississippian and Pennsylvanian, respectively. As such, it is subdivided into lower and upper Fms.

**LEGEND**

**Lithologies**

- Sandstone
- Siltstone
- Claystone
- Coal
- Limestone
- Bentonite
- Coalified shale
- Mudstone
- Marl
- Shale
- Unclassified

**Symbols**

- Bedrock
- Outcrop
- Quarry
- Drill site
- Unpublished drill
- Geologic survey
guidebook
- IGS-Colorado
- IGS-Nebraska
- IGS-Iowa
- IGS-Illinois
- IGS-Missouri
- Illinois State Geological Survey (ISGS)
- U.S. Geological Survey
- U.S. Geological Survey
- U.S. Geological Survey

For detailed information on stratigraphic logging procedures and mapping techniques, please refer to the accompanying summary report.

**REFERENCES**