INTRODUCTION

The Mooresville East 7.5-minute quadrangle is a portion of northeastern Morgan County, Indiana. The quadrangle contains portions of the southeastern sector of the White River Basin and extends from the West Fork White River valley to the Wabash River valley. The quadrangle includes the town of Mooresville and the surrounding area.

The map depicts the Quaternary geology of the Mooresville East 7.5-minute quadrangle, Indiana, and includes information on the following units:

- Martinsville Formation (Holocene)
- Madison Formation (Pleistocene)
- Atterberg Formation (Mississippian Episode)
- Fortville Formation (Mississippian Episode)
- Pentacrest Formation (Devonian)
- Lawrenceville Formation (Ordovician)
- Indiana Quartzite (Cambrian)
- Martinsville Quartzite (Cambrian)
- Martinsville Chert (Cambrian)

DESCRIPTION OF MAP UNITS

Martinsville Formation (Holocene):

- A Holocene alluvial plain is present in the area.
- Deposits include sand, silt, clay, and gravel.
- The formation is typically less than 200 feet thick.

Madison Formation (Pleistocene):

- The Madison Formation is a sequence of glacial deposits.
- Deposits include till, outwash, and fluvioglacial deposits.
- The formation is typically less than 200 feet thick.

Atterberg Formation (Mississippian Episode):

- The Atterberg Formation is a sequence of sand and gravel deposits.
- Deposits include glacial drift and fluvioglacial deposits.
- The formation is typically less than 200 feet thick.

Fortville Formation (Mississippian Episode):

- The Fortville Formation is a sequence of sand and gravel deposits.
- Deposits include glacial drift and fluvioglacial deposits.
- The formation is typically less than 200 feet thick.

Pentacrest Formation (Devonian):

- The Pentacrest Formation is a sequence of sandstone and shale deposits.
- Deposits include fluvial and lacustrine deposits.

Lawrenceville Formation (Ordovician):

- The Lawrenceville Formation is a sequence of sandstone and shale deposits.
- Deposits include fluvial and lacustrine deposits.

Indiana Quartzite (Cambrian):

- The Indiana Quartzite is a sequence of sandstone and shale deposits.
- Deposits include fluvial and lacustrine deposits.

Martinsville Quartzite (Cambrian):

- The Martinsville Quartzite is a sequence of sandstone and shale deposits.
- Deposits include fluvial and lacustrine deposits.

Martinsville Chert (Cambrian):

- The Martinsville Chert is a sequence of chert deposits.
- Deposits include fluvial and lacustrine deposits.

ACKNOWLEDGMENTS AND DISCLAIMER

This preliminary geologic map is an interim geologic map product that documents progress in mapping the Quaternary geology of the southeastern sector of the quadrangle. For much of this area, bedrock controls the topography, and the map reflects this control.

REFERENCES