INTRODUCTION

The geologic map of the Mammoth Cave Quadrangle establishes rock units within the 8 mile by 8 mile area shown in Figure 1. The main political boundary is the northern boundary of the Mammoth Cave National Park. The study area is located on the southern highlands of the Appalachian Mountains where the land surface is generally low and the topography extremely rugged. Geology in the area is relatively complex, with many units of various ages and rock types occurring in close proximity. The study area consists of several major rock units, including the basalts of the Late Cretaceous and the Andesite and Basalt of the Miocene, which are the major rock types in the area. These units are interspersed with sandstone, siltstone, and shale of the Tertiary age, as well as Quaternary deposits.

DESCRIPTION OF MAP UNITS

SEDIMENTARY DEPOSITS

Andesite and Basalt: These rocks are generally dark in color and are composed of plagioclase and pyroxene. The Andesite is a fine-grained rock, while the Basalt is a coarse-grained rock. Both rocks are interbedded with sandstone and siltstone of the Miocene age.

Basalt: This rock is generally dark in color and is composed of plagioclase and pyroxene. The Basalt is a coarse-grained rock, and it is interbedded with sandstone and siltstone of the Miocene age.

Miocene Basalt: This rock is generally dark in color and is composed of plagioclase and pyroxene. The Miocene Basalt is a coarse-grained rock, and it is interbedded with sandstone and siltstone of the Miocene age.

Andesite: This rock is generally dark in color and is composed of plagioclase and pyroxene. The Andesite is a fine-grained rock, and it is interbedded with sandstone and siltstone of the Miocene age.

Rhododendron Basalt: This rock is generally dark in color and is composed of plagioclase and pyroxene. The Rhododendron Basalt is a coarse-grained rock, and it is interbedded with sandstone and siltstone of the Miocene age.

Dacite: This rock is generally light in color and is composed of quartz and feldspar. The Dacite is a fine-grained rock, and it is interbedded with sandstone and siltstone of the Miocene age.

Quaternary Deposits: These deposits are generally light in color and are composed of sand, silt, and clay. The Quaternary Deposits are interbedded with sandstone and siltstone of the Miocene age.

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SYMBOLS

- Contour dashed lines: approximately locates the lake
- White, dashed line: natural streams

REFERENCES