

INTRODUCTION

The Humacao quadrangle is underlain by a Lower to Upper Cretaceous volcanic and plutonic complex... The upper Cretaceous San Lorenzo batholith and by smaller stocks and intrusions...

VOLCANIC ROCKS

The Phayao (Kq) and Rio Abajo (Kra) Formations (McGonigle, 1977) south of the Cerro Mula fault zone are considered respectively, with formations K and D of the Cayay quadrangle...

ECONOMIC GEOLOGY

Appreciable quantities of magnetite are present in the quadrangle in deposits in the diorite hornblende complex (Kq) and in the Phayao Formation (K) locally associated with mafic and iron-bearing rocks...

ROCKS OF THE SAN LORENZO BATHOLITH

The San Lorenzo batholith is exposed over an area of about 500 sq km in southeastern Puerto Rico. It includes rocks ranging in composition from quartz monzonite to quartz diorite...

ENGINEERING GEOLOGY

Bearing strength and subsurface drainage characteristics of alluvial deposits can vary considerably over short distances... The Phayao Formation is probably the most important source of sand and gravel...

STOCKS

The exposure of granodiorite centered around the town of Rio Abajo are thought to be part of one stock, as indicated on the map by the dashed contour line... The Rio Abajo stock is a large, irregularly shaped stock...

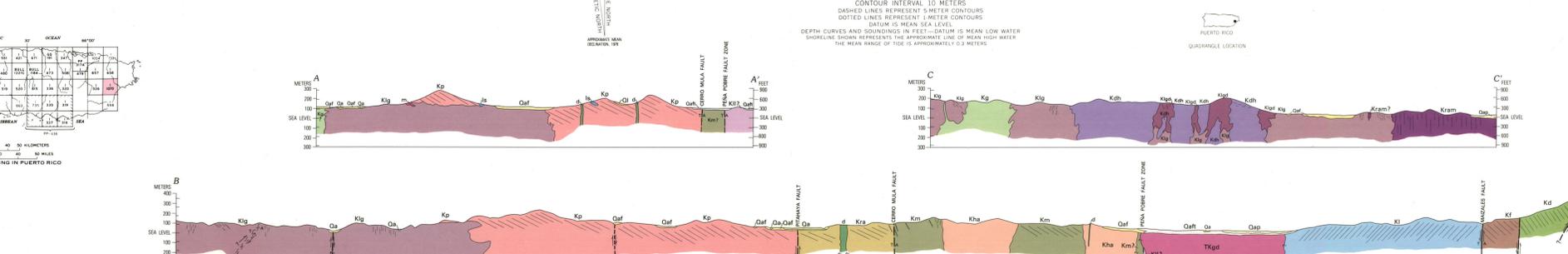
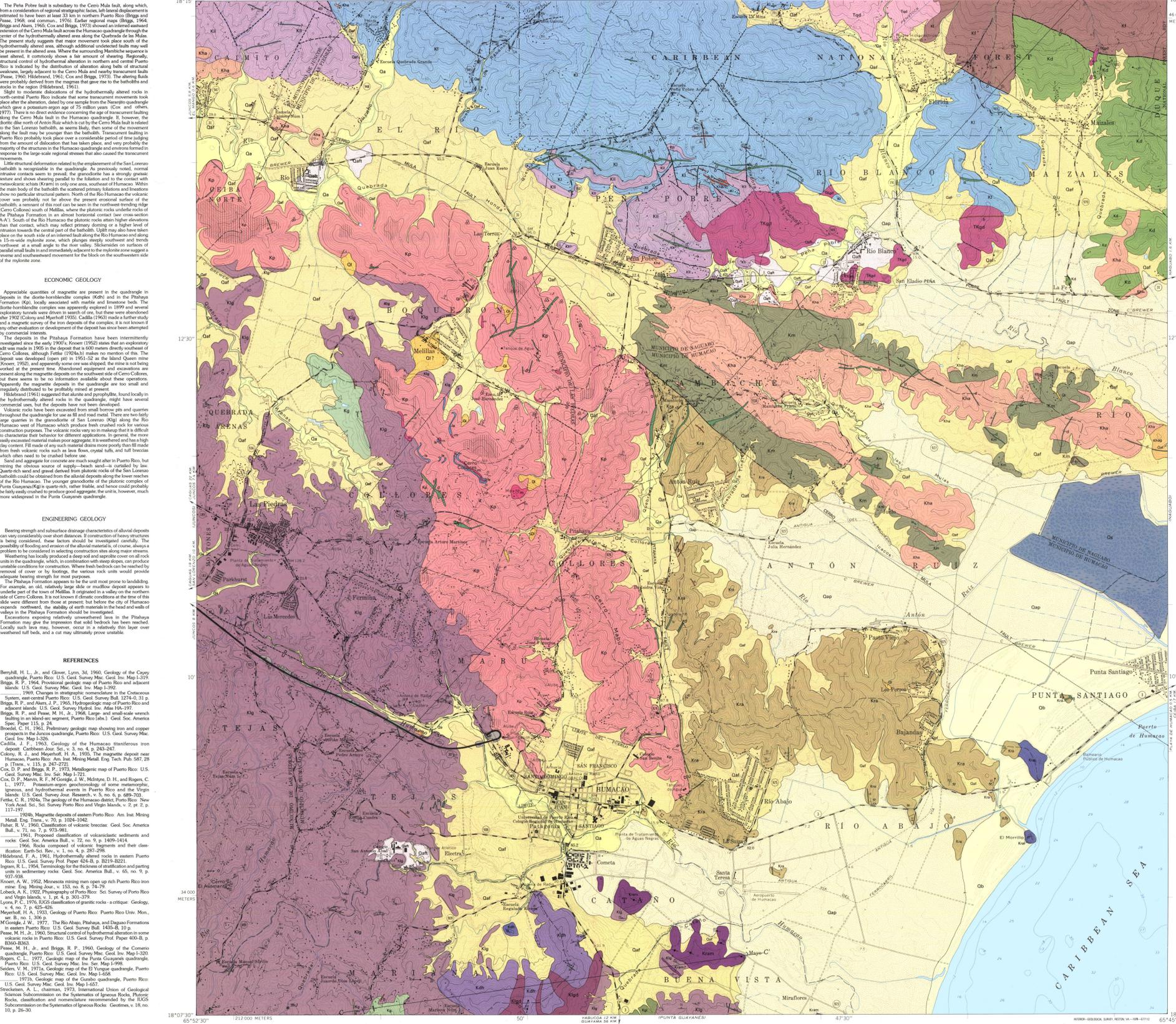
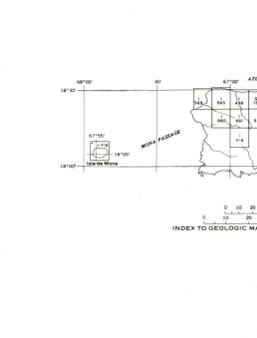
STRUCTURE

In the Humacao quadrangle, as in other parts of eastern Puerto Rico, it is not clear whether the Phayao and the underlying Rio Abajo Formations, the stratigraphic displacement of the Rio Abajo Formation is a result of a fault...

REFERENCES

Berry, H. L., Jr., and Glover, L. M., 1960. Geology of the Cayay quadrangle, Puerto Rico. U.S. Geol. Survey Misc. Geol. Map 1-319.
Cullin, J. F., 1964. Geology of the Humacao quadrangle, Puerto Rico. U.S. Geol. Survey Misc. Geol. Map 1-320.

INDEX TO GEOLOGIC MAPPING IN PUERTO RICO



Correlation of map units, description of map units, and surficial deposits. Includes a table for 'SURFICIAL DEPOSITS' and 'ROCK UNITS NORTH OF CERRO MULA FAULT'. Also includes a legend for 'CORRELATION OF MAP UNITS' and 'DESCRIPTION OF MAP UNITS'.

GEOLOGIC MAP OF THE HUMACAO QUADRANGLE, PUERTO RICO

By John W. McGonigle 1978