

EXPLANATION

Contours on basement surface
Drawn on Precambrian and crystalline rocks of several ages. Dashed where inferred and based on topographic data or wells reaching basement and stratigraphic data. Contour interval normal. In completed areas values are in thousands of feet. See level datum.

Fault or fault zone
Dashed where inferred

Zone of abrupt dislocation of basement

Well penetrating basement
Map represent several wells where wells are closely spaced

Area of closely spaced basement wells
Wells not shown individually

AGE OF BASEMENT ROCKS
Basement includes all Precambrian rocks and igneous rocks of several ages. In central and western Appalachians, metamorphic rocks of Mesozoic age below known occurrence of Ordovician are not shown as basement.

PT
Pre-Tertiary
Locally includes large bodies of Tertiary volcanic rocks

pm
Pre-Mesozoic
Includes Upper Jurassic and Lower Cretaceous rocks in California; includes Precambrian rocks in western United States, eastern Canada and northeastern Mexico

pc
Precambrian
Includes Canadian rocks in northern Oklahoma

GROSS LITHOLOGY OF EXPOSED BASEMENT ROCKS
Patterns are interpreted on color-shading age of rocks. Basement rocks, undivided are without pattern.

Basement rocks, undivided
Data lacking; lithology assumed, or outcrop too limited to pattern.

Acid and intermediate plutonic rocks
Includes granite

Basic and ultrabasic plutonic rocks
Includes gabbro, anorthosite, peridotite, and amphibolite of igneous derivation

Metamorphic rocks
Includes metamorphosed igneous and sedimentary rocks

Slate and phyllite
Completely metamorphosed low-grade metamorphic rocks

Volcanic rocks
Includes mixed sedimentary and volcanic sequences with more than 25 percent of volcanic material

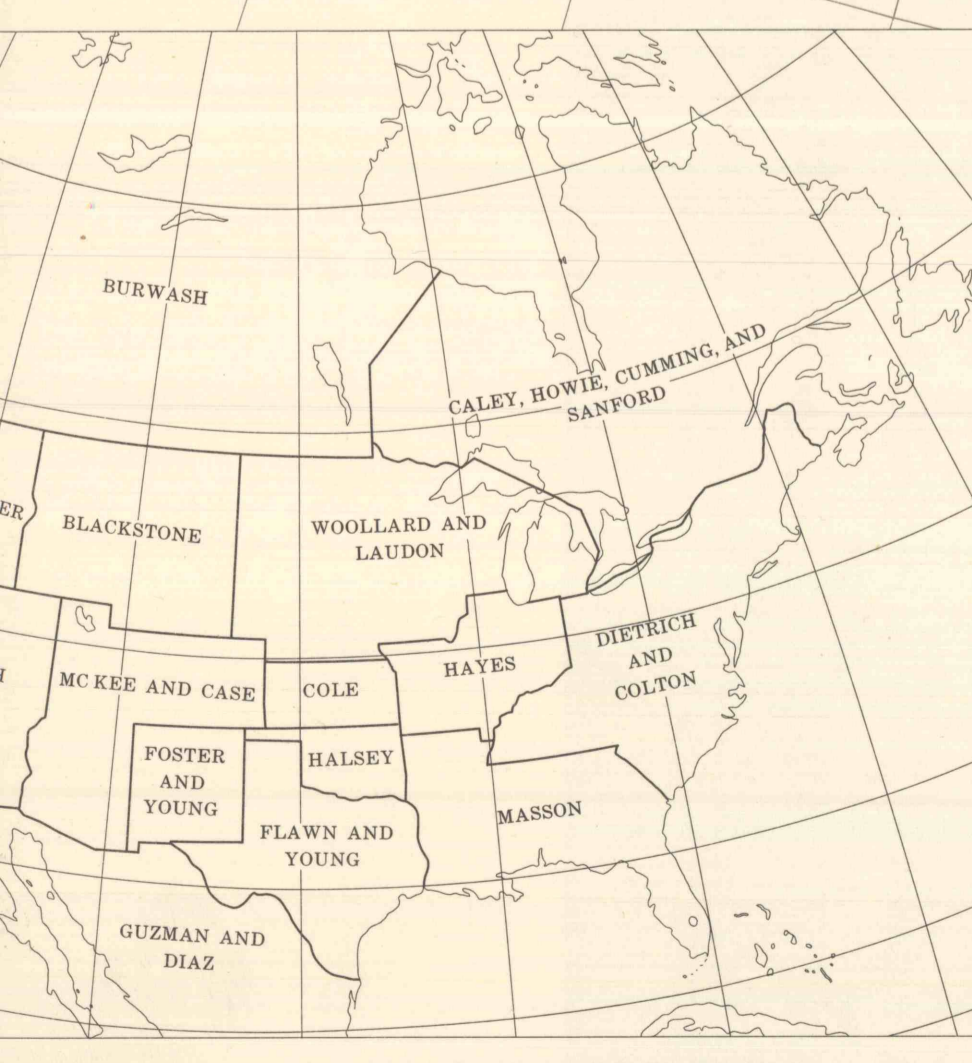
Sedimentary rocks
Includes evaporite material and very locally metamorphosed rocks below siliceous grade (metasiltstone, metaconglomerate, clay slate, and argillite)

BASEMENT MAP OF NORTH AMERICA
Between Latitudes 24° and 60° N

BY
THE AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS
AND THE
UNITED STATES GEOLOGICAL SURVEY
Prepared by the Basement Rock Project Committee

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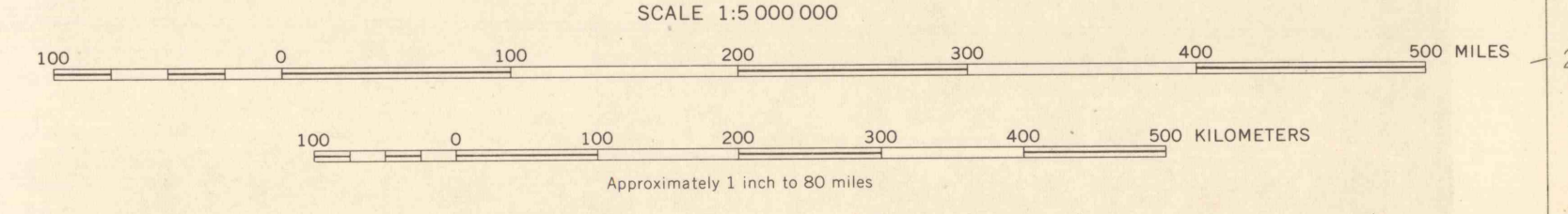
1967



SHOWING AREAS OF RESPONSIBILITY OF COMMITTEE MEMBERS AND ASSOCIATED CONTRIBUTORS

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From "Geologic Map of North America," 1965, U.S. Geological Survey, prepared by the Geological Society of America and the American Association of Petroleum Geologists. The map is a revision of the "Geologic Map of North America," 1957, U.S. Geological Survey, prepared by the American Association of Petroleum Geologists. The map is a revision of the "Geologic Map of North America," 1957, U.S. Geological Survey, prepared by the American Association of Petroleum Geologists. The map is a revision of the "Geologic Map of North America," 1957, U.S. Geological Survey, prepared by the American Association of Petroleum Geologists.



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