



U.S. Geological Survey Open-File Report 97-470-K

Map Showing Geology, Oil and Gas Fields, and Geologic Provinces of the Caribbean Region

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Introduction

This map was created as part of a worldwide series of geologic maps for the U.S. Geological Survey's World Energy Project, available on CD-ROM and through the Internet. The goal of the project is to assess the undiscovered, technically recoverable oil and gas resources of the world. For data management purposes, the world was divided into eight energy regions based on political boundaries and corresponding approximately to the economic regions of the world as defined by the U.S. Department of State. Region Six encompasses the Caribbean area, Central America, and South America. Geologic maps were compiled for South America on Open-File Report 97-470-D. Countries listed below are shown whole or in part within the map extent: Anguilla, Antigua and Barbuda, Aruba Bahamas, Barbados, Belize, British Virgin Islands, Cayman Islands, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, El Salvador, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Montserrat, Netherlands Antilles, Nicaragua, Panama, Puerto Rico, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago, Turks and Caicos Islands, United States, Venezuela, and the Virgin Islands. An index map in the lower left-hand corner shows the study area in a world context.

The world was previously divided into geologic provinces for the World Energy Project, of which a subset is shown on the map. Each province has a set of geologic characteristics that distinguish it from surrounding provinces. These characteristics may include dominant lithologies, the age of the strata, structure, or other geologic features. Each province is assigned a unique number and may fall within two or more countries or assessment regions.

Additional information regarding the map compilation and data can be found on the CD-ROM for USGS Open-File Report 97-470-K entitled "Map Showing Geology, Oil and Gas Fields, and Geologic Provinces of the Caribbean Region." In addition, it is available online at: <http://certmapper.cr.usgs.gov/pubs/servlet/PubBroker?issue=of97470k>

Various software packages were used to create this map including: Environmental Systems Research Institute, Inc. (ESRI) ArcGIS 8.3, ArcInfo software, Adobe Photoshop CS, Illustrator CS, and Acrobat 6.0.

Explanation of Map Units and Symbols

Sedimentary Rocks	Volcanic Rocks	Intrusive Rocks	Metamorphic Rocks
Q Quaternary alluvium	Q Quaternary volcanic edifices, flows, and pyroclastic deposits	T Tertiary plutons, mostly intermediate to silicic	T Tertiary metamorphic and metagranitic rocks, low to intermediate metamorphic grade
Qd Quaternary carbonate deposits	Qd Quaternary pyroclastic flows and pyroclastic mantles	Td Tertiary and Oligocene plutons, mostly intermediate to silicic	Td Mesozoic metamorphic and metagranitic rocks, low to intermediate metamorphic grade
QT Quaternary and Tertiary marine limestone, sandstone, and shale	QT Quaternary and Tertiary volcanic edifices, flows, tuff, and pyroclastic and volcanic sedimentary rocks	O Oligocene plutons, mostly intermediate to silicic	O Mesozoic amphibolites and associated metamorphic rocks
Qc Quaternary and Tertiary continental deposits	Qc Quaternary and Tertiary volcanic and continental sedimentary rocks	Pc Paleozoic plutons, mostly intermediate to silicic	Pc Mesozoic metamorphic and associated metasedimentary rocks
Tc Tertiary continental strata	Tc Tertiary volcanic rocks	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Mesozoic and Paleozoic metamorphic and metagranitic rocks
Tm Tertiary marine strata	Pm Pliocene calc-alkaline volcanic rocks	Pm Paleozoic plutons, mostly intermediate to silicic	Pm Paleozoic and Precambrian metamorphic rocks, undivided
Pm Pliocene and Miocene strata	Pm Pliocene and Miocene andesitic flows and associated volcanic rocks	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
O Oligocene strata	O Miocene and Oligocene volcanic rocks	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
E Eocene strata	E Eocene and Paleocene volcanic flows and associated pyroclastic and volcanic sedimentary rocks	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
PE Post-Eocene marine strata	Tc Tertiary and Oligocene volcanic rocks	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
PEC Post-Eocene continental strata	O Oligocene volcanic rocks	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
EP Eocene and Paleocene marine strata	O Oligocene and/or Paleocene volcanic rocks	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
TM Tertiary and Oligocene marine strata	O Lower Oligocene flows, breccias, and tuff, partly of marine deposition	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
TC Tertiary and Oligocene continental strata	O Altered volcanic rocks, mostly andesitic to silicic	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
TCc Tertiary and Oligocene complex of deformed sedimentary rocks	O Mesozoic flows and small plateaus, mostly intermediate to silicic	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
OC Oligocene marine strata	O Mesozoic volcanic and sedimentary rocks	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
OCc Oligocene sedimentary and volcanic rocks	O Paleozoic volcanic rocks	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
UM Upper Oligocene marine strata	Pc Paleozoic volcanic rocks	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
JM Jurassic marine and continental strata	Pc Paleozoic volcanic rocks	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
JMC Jurassic complex of sedimentary, igneous, and metamorphic rocks	Pc Paleozoic volcanic rocks	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
JTC Jurassic and Tertiary marine and continental strata	Pc Paleozoic volcanic rocks	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
JTCc Jurassic and Tertiary sedimentary and volcanic rocks	Pc Paleozoic volcanic rocks	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
MS Mesozoic sedimentary and volcanic rocks	Pc Paleozoic volcanic rocks	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
MSM Mesozoic and Paleozoic marine and continental strata	Pc Paleozoic volcanic rocks	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
P Paleozoic strata	Pc Paleozoic volcanic rocks	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
PS Paleozoic sedimentary and volcanic rocks	Pc Paleozoic volcanic rocks	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided
PC Precambrian igneous and ophiolite sedimentary rocks	Pc Paleozoic volcanic rocks	Pd Paleozoic plutons, mostly intermediate to silicic	Pd Paleozoic and Precambrian metamorphic rocks, undivided

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