U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY
Charles G. Groat, Director

CIRCUM-PACIFIC MAP SERIES
MAP CP-51
Explanatory pamphlet accompanies the map

CIRCUM-PACIFIC COUNCIL FOR ENERGY AND MINERAL RESOURCES

CIRCUM-PACIFIC COUNCIL FOR ENERGY AND MINERAL RESOURCES
Michel T. Halbouty, Founder

CIRCUM-PACIFIC MAP PROJECT
John A. Reinemund, Director
George Gryc, General Chair

ENERGY-RESOURCES MAP OF THE CIRCUM-PACIFIC REGION

ARCTIC SHEET

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PETROLEUM RESOURCES
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MAP PRODUCTION BY THE U.S. GEOLOGICAL SURVEY
Compilation Coordinated by George Gryc
Cartography by Douglas S. Aitken and Fran R. Mills

SCALE 1:10,000,000

0 250 500 750 1000 1250 1500 KILOMETERS
0 250 500 750 MILES
0 200 400 600 NAUTICAL MILES

Lambert Azimuthal Equal Area Projection
(Map Center Point 70°N, 165° W.)

2000

EXPLANATION

ENERGY RESOURCES

PETROLEUM

- Oil fields
- Gas fields
- Oil sand
- Oil shale

COAL–Map shows extent of coal deposits, parts of which may be too deep in the center or too thin on the edges of coal basins to be of present commercial value

- Anthracite
- Bituminous
- Subbituminous
- Lignite
- Rank unidentified

GEOTHERMAL–Geothermal convection system (estimated mean reservoir temperature

System	Developed	Development in progress	Identified
>150° C Vapor-dominated system	▲		△
>150° C Hot-water hydrothermal convection system	●	○	○
90–150° C Hot-water hydrothermal convection system	●	○	○

Hot spring–Surface temperature >50° C (not evaluated for reservoir temperature)

GEOLOGIC AGE OF MAP UNITS
Ages in million years ago (Ma)

Map Unit	Age				Ma
Q	QUATERNARY				2
Tn / QTs	Pliocene	Neogene	Tertiary	CENOZOIC	5
	Miocene				24
T / Tp / TpK	Oligocene				38
	Eocene	Paleogene			55
	Paleocene				65
K / J	Late Cretaceous			MESOZOIC	96
	Early Cretaceous				138
	Jurassic				205
Rs	Late Triassic				230
	Middle Triassic				240
	Early Triassic				245
Ps / Pz	Permian			PALEOZOIC	290
	Late Carboniferous				330
	Early Carboniferous				360
	Devonian				410
	Silurian				435
	Ordovician				500
	Cambrian				544
PzPz / Pz / Rh / Rs / Rh / Rs / Rh / Rs