



FIGURE 8-2

# GEOLOGICAL MAP OF **SOUTHEASTERN ALASKA**

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## LEGEND

FORMAT: TERMINOLOGY, UNIT NUMBERS AND COLORS SELECTED TO MATCH GEOLOGICAL SURVEY OF CANADA MAP 932A (SECOND EDITION) AS NEARLY AS POSSIBLE AND MAY NOT AGREE WITH STANDARD U.S.G.S. PRACTICE. SEE NOTES FOR SPECIFIC DIFFERENCES.

### SEDIMENTARY AND VOLCANIC ROCKS

CENOZOIC	UPPER TERTIARY AND QUATERNARY 59, 60 59A, MARINE CLASTIC SEDIMENTARY ROCKS AND MINOR VOLCANIC ROCKS OF MIOCENE (1) AND PLEISTOCENE AGE IN GULF OF ALASKA PROVINCE; 59B, TERTIARY VOLCANICS; RECENT: 60B, PLEISTOCENE AND RECENT.	CRETACEOUS AND TERTIARY UPPER CRETACEOUS AND LOWER TERTIARY SEDIMENTARY AND VOLCANIC ROCKS 55	UPPER PALEOZOIC AND MESOZOIC 46A, SEDIMENTARY AND VOLCANIC ROCKS, NOW SCHIST, AMPHIBOLITE, AND MARBLE; INFERRED AGE DIFFERS FROM THAT OF UNIT 46 ON GSC MAP 932A.
	LOWER TERTIARY 58 CLASTIC SEDIMENTARY ROCKS (KOOTENAHOO FM.) AND VOLCANIC ROCKS (ADMIRALTY ISLAND VOLCANICS) OF PALEOCENE THROUGH MIOCENE AGE.	TRIASSIC OR JURASSIC SEDIMENTARY CLASTIC AND CALCAREOUS, AND VOLCANIC ROCKS (HELP BAY GP.) 47	
MESOZOIC	JURASSIC AND CRETACEOUS 50 UPPER JURASSIC AND LOWER CRETACEOUS 50B, MARINE CLASTIC SEDIMENTARY ROCKS (SITKA GRAYWACKE, SETOUR CANAL FM., BERNERS FM., OF ANOFF (1911) SHELTER FM., TREADWELL FM.) AND VOLCANIC ROCKS (DOUGLAS ISLAND VOLCANICS, BROTHERS VOLCANICS).	TRIASSIC (UNDIVIDED) SEDIMENTARY AND VOLCANIC ROCKS. 42	
	TRIASSIC UPPER TRIASSIC MARINE SEDIMENTARY CLASTIC AND CALCAREOUS, AND VOLCANIC ROCKS (WFO FM.) 44		
PALEOZOIC	MISSISSIPPIAN, PENNSYLVANIAN, AND PERMIAN 38 38A, MARINE SEDIMENTARY CLASTIC ROCKS (CANNERY FM.) LOWER PERMIAN CALCAREOUS ROCKS (PYBUS DOCOMITE, NODOKEN FM.); AGE SPAN GREATER THAN THAT OF UNIT 38 ON GSC MAP 932A.		
	DEVONIAN MIDDLE AND UPPER DEVONIAN 37 37A, SEDIMENTARY CLASTIC ROCKS (CEDAR COVE FM., HOOD BAY FM., RETREAT GP., VALLENAR FM.) AND CALCAREOUS ROCKS (BLACK CAP LIMESTONE, AND VOLCANIC ROCKS (GAMBER BAY FM., FRESH WATER BAY FM.); AGE SPAN GREATER THAN THAT OF UNIT 32 ON GSC MAP 932A.		PALEOZOIC (UNDIVIDED) SEDIMENTARY AND VOLCANIC ROCKS, NOW SCHIST, AMPHIBOLITE, AND MARBLE (WALS GP.) 28
	SILURIAN AND DEVONIAN SEDIMENTARY CLASTIC ROCKS (TIDAL FM., BENDU FM.) AND CALCAREOUS ROCKS (PYRAMID PEAK LIMESTONE, WILLOUGHBY LIME STONE, KENNEL CREEK LIMESTONE), AND VOLCANIC ROCKS, IN CLUSTERS OF KNOWN LATE SILURIAN AGE AND OF SILURIAN AND DEVONIAN AGE. 29		
	ORDOVICIAN AND SILURIAN UPPER ORDOVICIAN, LOWER AND MIDDLE SILURIAN SEDIMENTARY CLASTIC ROCKS AND VOLCANIC ROCKS. 27		

### INTRUSIVE ROCKS

(INCLUDING SOME GRANITIC ROCKS OF METAMORPHIC ORIGIN)

CENOZOIC	TERTIARY 4 4A, ACIDIC AND INTERMEDIATE ROCKS, MAINLY GRANODIORITE, QUARTZ DIORITE, AND TRONDHJEMITE; 4B, BASIC ROCKS, MAINLY GABBRO, HORTITE, AND DIORITE; ALL OF INFERRED EARLY AND/OR MIDDLE TERTIARY AGE.	MESOZOIC AND LOWER TERTIARY (chiefly Jurassic or Cretaceous) 5, 6 5A, ACIDIC AND INTERMEDIATE ROCKS, MAINLY QUARTZ DIORITE, GRANODIORITE, DIORITE, GRANITE, GABBRO, AND GNEISS; 5B, TRASSIC; 6, BASIC ROCKS, MAINLY GABBRO AND DIORITE.	CRETACEOUS 7 7A, ULTRABASIC ROCKS, SERPENTINITE, PERIDOTITE, PYROXENITE, DUNITE, AND GABBRO; AGE SPAN DIFFERENT THAN THAT OF UNIT 7 ON GSC MAP 932A.
	JURASSIC (AND/OR) CRETACEOUS UPPER JURASSIC (AND/OR) CRETACEOUS 3 3A, ACIDIC AND INTERMEDIATE ROCKS, MAINLY QUARTZ DIORITE, GRANODIORITE, AND DIORITE; 3B, BASIC ROCKS, MAINLY GABBRO.		
PALEOZOIC	PRE-PERMIAN 1 1A, ACIDIC ROCKS, MAINLY GRANODIORITE, QUARTZ DIORITE, QUARTZ MONZONITE, AND DIORITE; 1B, NEPHELINE SYENITE AND RELATED ROCKS.		

ROCK UNIT DOMINANTLY OR ENTIRELY OF VOLCANIC ORIGIN

ROCK UNIT DOMINANTLY CALCAREOUS OR DOLOMITIC

AREAS OF INTENSE METAMORPHISM

FAULT (DEFINED, ASSUMED)

In the legend dominant rock type in each rock-unit is given where possible. Where a rock-unit is described as sedimentary, minor volcanic material may be present. Where a rock-unit is described as sedimentary and volcanic, it is dominantly sedimentary if unpatterned, and is mainly or entirely volcanic if patterned. Where a rock-unit is named in the legend, formation is abbreviated to FM., series to S., and group to GP. The rock-unit so named is not represented wherever the corresponding number appears; for example nearly all sedimentary and volcanic rocks of Silurian and Devonian age are indicated by number 29, but by no means are all so designated correlations of the Tidal Formation. Rock-units named in the legend are those appearing on maps used in the compilation. Where new formations have been described by revision of measured sections the new names are not used because the formational boundaries have not been traced out. For want of space formational names that appear within groups are omitted from the legend. Where possible highly metamorphosed rocks (mainly migmatites) have been so indicated, but in many granitic areas, such rocks have been included with granitic rocks.

GEOLOGY COMPILED BY D. A. BREW  
FROM SOURCES SHOWN ON FIGURE 8-1  
BASE MAP PROVIDED BY GEOLOGICAL SURVEY OF CANADA

QF  
621  
59  
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