



**EXPLANATION**

- Prospect or mine with no known production
  - Mine with known production—Where labeled number and commodity refer to table 1
- Commodities
- Au Gold
  - Ag Silver
  - Ba Barium (barite)
  - Cu Copper
  - Mo Molybdenum
  - Pb Lead
  - REE Rare-earth elements
  - U Uranium
  - Zn Zinc
- Fault

**INTRODUCTION**

This oblique map illustrates the geographic relation of the many sites of principally gold or silver production (excluding placer principally in the Skagway and Yakutat quadrangles) and of other mines and prospects to the general terrain of southeastern Alaska. Locations of mines and prospects for lead, gold, and other resources are from the quadrangle maps of Brew, Drew, and others (1991). The following summary of the geology and resources of this area is highly abbreviated from sources cited.

**GEOLOGY**

The geology of southeastern Alaska has been studied since the early 1900s, in early years principally by the U.S. Geological Survey (for example, Lathram and Chapin, 1929). This part of the then Territory of Alaska was only known in crudest of reconnaissance mapping until modern geologic mapping began for large areas of southeastern Alaska in late 1950s by the U.S. Geological Survey (for example, Lathram and others, 1965 and Loney and others, 1975). More detailed work by many investigators soon extended throughout the region and is summarized by Brew, Karl, and others (1991). Southeastern Alaska and adjoining Canada form the northwestern part of North America's lengthy Cordilleran orogenic belt that extends from Alaska through Mexico. Many aspects of the long and complex geological record of southeastern Alaska, from early Paleozoic to older, are shared with the overall Cordilleran belt.

**MINERAL DEPOSITS**

A comprehensive compilation of prospects and mines of southeastern Alaska, past production of mines, and an assessment of undiscovered resources on prospectable lands indicates that an estimated \$2.5 billion of mineral resources, by present dollar values, were produced from this region in the past 100 years (Brew, Drew, and others, 1991). Detailed descriptions and history of mining of the lode deposits are given by Nokleberg and others (1987). Mining districts of southeastern Alaska include the Admiralty, Chichagof, Hyder, Juneau, Ketchikan, Kuparuk, Petersburg, and Yakutat districts (sheet 1, fig. 1). The Juneau, Chichagof, and Hyder districts are particularly well known for many highly productive bodies. The most productive properties from each quadrangle are listed in table 1 and identified on sheet 2. The Quartz Hill molybdenum prospect (KC-3) near Ketchikan has not been mined but is shown because of its unusually large reserves. The Greens Creek Mine (JU-2) is a major deposit that started production of silver, gold, and zinc ore in 1989 but has as of this time ceased production; exploration of the body is continuing. Many prospects and unidentified mines of smaller production are also shown on sheet 2.

**UNDISCOVERED RESOURCES**

The report of Brew, Drew, and others (1991) provides an estimate of undiscovered mineral resources of the entire map region and specifically for lands presently open to exploration and development. Their report points to numerous mineral-endowed tracts of a wide variety in southeastern Alaska and suggests a likelihood that mineral discoveries could be forthcoming in further prospecting of this region. Oil, gas, geothermal, and other energy resources, in contrast, seem to have little potential for development in this part of Alaska.

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Map No.	Quadrangle	Principal mine(s) <sup>1</sup>	Chief commodities	Production (in thousands of U.S. dollars)
				Mine
				Quadrangle total <sup>2</sup>
—	Admiralty	(No mines or prospects)	—	—
BC-1	Bradfield Canal	Riverside	Gold, silver	2,833
BC-2	Bradfield Canal	Marista	Gold	160
—	Chichagof	—	—	2,996
CR-1	Craig	Mamie Mount Andrew	Copper, gold	15,606
CR-2	Craig	Salt Chuck, Lebrant	Copper, gold, palladium	14,485
CR-3	Craig	Junco	Copper, silver, gold	13,625
—	Dixon Entrance	—	—	60,480
DE-1	Dixon Entrance	Ross-Adams	Uranium	39,960
—	Juneau	—	—	39,960
JU-1	Juneau	Alaska-Juneau	Gold, silver, lead	1,634,783
JU-2	Juneau	Greens Creek	Silver, zinc, gold, lead	98,398
JU-3	Juneau	Treadwell Creek	Gold, silver, copper, lead	67,500
JU-4	Juneau	Julian	Gold	22,080
—	Ketchikan	—	—	1,892,101
KC-1	Ketchikan	Gold Stream	Gold	2,008
KC-2	Ketchikan	Gold Standard	Gold	1,369
KC-3 <sup>3</sup>	Ketchikan	Quartz Hill	Molybdenum	—
—	Ketchikan	—	—	3,779
MF-1	Mount Fairweather	Leroy	Gold	1,304
MF-2	Mount Fairweather	Willoughby Island, W end	Gold	1,114
—	Mount Fairweather	—	—	7,508
PA-1	Port Alexander	Catche	Gold	114
PA-2	Port Alexander	Lucky Chance	Gold	114
—	Port Alexander	—	—	228
PE-1	Petersburg	Castle Island	Barite	29,250
—	Petersburg	—	—	29,251
PR-1	Prince Rupert	Nelson and Tift	Gold	114
—	Prince Rupert	—	—	114
SD-1	Sundum	Sundum Chief	Gold, silver	11,232
SD-2	Sundum	Mildred	Gold	1,369
—	Sundum	—	—	14,792
SI-1	Sitka	Chichagof	Gold, silver	321,817
SI-2	Sitka	Hove-Chichagof	Gold, silver	40,388
SI-3	Sitka	Apes-El Nido	Gold, silver	22,905
—	Sitka	—	—	385,799
SK-1	Skagway	Inspiration Point (mostly placer)	Gold	114
—	Skagway	—	—	27,979
TR-1	Taku River	Enterprise	Gold	46
—	Taku River	—	—	46
—	Yakutat	(only placers)	Gold	—
—	Yakutat	—	—	114
<b>Total value all quadrangles</b>				<b>2,465,468</b>

<sup>1</sup> Where mines or prospects are in proximity with others, map symbol may indicate clusters of properties.

<sup>2</sup> Placer deposits not shown.

<sup>3</sup> Includes placer production.

<sup>4</sup> No present production. Quartz Hill prospect given due to unusually high reserves of molybdenum [1.5 billion tons; Brew, Drew and others, (1991)].

**OBLIQUE MAPS OF SOUTHEASTERN ALASKA, SHOWING MAJOR MINERAL LOCALITIES**

By  
Tau Rho Alpha and Arthur B. Ford