



Base from U. S. Geological Survey, 1963

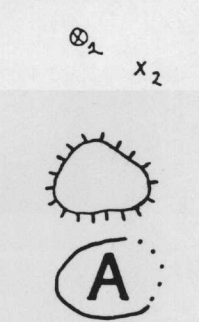
Geology from Detterman and others (1979) with additions from Fields (1977)

GEOLOGY AND MINERAL RESOURCES

- GEOLOGIC MAP SYMBOLS**
- Contact--Dotted where concealed
  - Fault--Dashed where approximately located, dotted where concealed, quartered where probable. U, upthrown side; D, downthrown side. Arrows indicate relative lateral movement
  - Thrust or high-angle reverse fault--Dotted where concealed; sawtooth on upper plate
  - Folds--Showing trace of axial plane; dashed where approximately located; dotted where concealed. Arrow indicates direction of plunge
  - Anticline
  - Syncline
  - Volcanic crater
  - Volcanic vent or cinder cone
  - Hornfels
  - Alteration--Mainly disseminated iron sulfides that weather to produce areas of iron-stained rocks (color anomalies)
  - Dikes and sills
  - Exploratory drill hole
  - Hot spring
  - Native Corporation boundary

MAP UNIT	DESCRIPTION (See Detterman and others, 1979)
Qs	Surficial deposits
Qv	Lavas and tuffs
Qd	Lavas and tuffs
Tg	Intrusive igneous rocks mainly of Tertiary age but including rocks of Quaternary age near Black Peak
Tv	Lavas and tuffs
Tsh	Mainly non-marine Tertiary sedimentary rocks. Some marine sedimentary deposits
Tbc	Mainly non-marine Tertiary sedimentary rocks. Some marine sedimentary deposits
Ksh	Marine sandstone, limestone, and shale

EXPLANATION	MINERAL DEPOSITS EXPECTED OR SPECULATED
Quaternary alluvial-glacial	Alluvial
Quaternary volcanic	None
Tertiary and Quaternary plutonic-volcanic	Porphyry Cu, Mo, porphyry Ni, Ni-Cu, Ag, Au, Pt, Zn, Pb, Ag, Au
Cretaceous and Tertiary tuffaceous sedimentary	Ball-front U
Jurassic and Cretaceous sedimentary	None



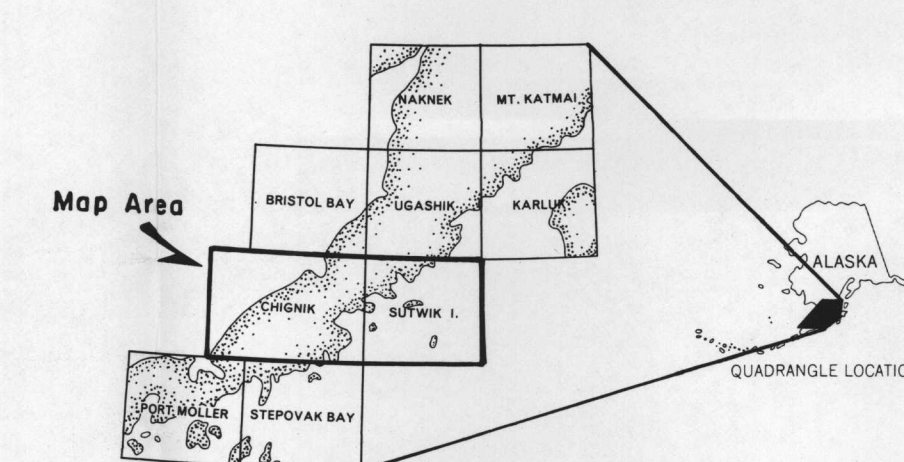
**MINERAL RESOURCE SYMBOLS**

Mineral prospects, O, and occurrences, X--Number refers to description in table 2. Prospects are occurrences whose subsurface extensions have been explored.

Centers of mineralization defined by anomalous stream sediment Cu, Ni, U values in drainage basins surrounded or flanked by basins containing anomalous Cu, Pb, Zn, Ag, Au, Pt, and Ni.

Generalized from sheet 2.

Mineral resource areas--Boundary dotted where covered by water. Letter refers to description in table 2.



MINERAL RESOURCE MAPS OF THE CHIGNIK AND SUTWIK ISLAND QUADRANGLES, ALASKA

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