



- CRETACEOUS-JURASSIC SEDIMENTARY-VOLCANIC ROCKS.** Marine and nonmarine sandstone, graywacke, mudstone, conglomerate, shale, and coal measures along south and northwest sides of project region. Includes andesitic volcanics and volcanics on south side of project region.
- JURASSIC-PERMIAN BASALTS.** Pillow basalts, diabase, chert, shale, also includes some serpentinite. Commonly altered to chlorite, epidote, sodic plagioclase assemblage.
- TRIASSIC-MISSISSIPPIAN SEDIMENTS.** Shale, limestone, chert, sandstone, oil shale of the Lisburne Group, Siksikuk and Shublik Formations.
- DEVONIAN AND SILURIAN SEDIMENTS.** Thick-to-thin-bedded recrystallized limestone (marble) and dolomite, phyllite, slate, metaconglomerate and quartzite, quartz-mica schist (often calcareous), quartz-chlorite schist. Metamorphism incipient to lower greenschist facies. Includes Skajit, Hunt Fork, Kanayut, and Noatak formations.
- DEVONIAN(?) OR OLDER METAMORPHIC ROCKS.** Quartz-mica schist, phyllite, greenstone, metarhyolite, marble and dolomite, graphitic schist of the Arctic Schist Belt eugeosynclinal assemblage.
- INTRUSIVE ROCKS**
- CRETACEOUS GRANITIC ROCKS.** Granodiorite, monzonite, granite.
- JURASSIC ULTRAMAFIC-MAFIC ROCKS.** Durite, peridotite, gabbro, diorite, serpentinite. Associated with Jurassic to Permian basaltic rocks, and together form an ophiolite suite.

- Boundary proposed by Department of Interior - February, 1978
- Proposed boundary - 1973
- - - Boundary of study area
- ★ Major Zones of known extensive mineralization.
- Mineral Occurrences or Significant Geochemical anomalies. Location number refers to accompanying table. Major commodity identified.

FIGURE 3.- Rock types in the proposed Gates of the Arctic National Park

Scale: 1:1,000,000