



Map and Section
Geology and Geochemistry of Parts of Bendeleben A-5 and A-6 Quadrangles
Seward Peninsula, Alaska

LEGEND

Quaternary

Tundra without rock exposures

Mixed tundra and frost-riven rubble. Rubble is coarse biotite gneiss and gneissic granite. Fragments range in size from 3" to large boulders

Altered dikes of uncertain age. Calcite, epidote, quartz, biotite, graphite. Light green color.

Rhyolite dikes. Quartz phenocrysts in light colored, glassy groundmass. Dikes limonite stained and show boxwork structure.

Porphyritic quartz diorite dikes and small plugs. Quartz and feldspar phenocrysts in dark glassy groundmass.

Irregular calc-silicate alteration halos surrounding fine grained granite contacts. Light green with calcite, epidote, quartz, graphite.

Granitic intrusive rocks -- Mgg, gneissic granite, age uncertain, possibly Precambrian. Closely associated with coarse biotite gneiss of Kigluauik Group. Fairly coarse grained. Mpd, coarse grained pegmatite dikes with tourmaline. Mfg, fine grained granite to monzonite, alaskite phases and aplite dikes at places.

Dolomitic crystalline limestone of probable Precambrian age. Limited to northeast part of map area where it is thought to be in thrust contact with Kigluauik Group rocks.

Shales of York Region. Black, fine grained, graphitic. Highly contorted with abundant quartz veinlets and stringers.

Name Group schists. pEls, light brown to dark gray quartz, biotite, hornblende schist, rare garnet or actinolite, calcareous at places. Alters to calc-silicate rocks near igneous contacts. pEI, limestone interbeds recrystallized to fine granular calcite, contain disseminated graphite.

Gneiss of Kigluauik Group. pEKF, fine grained, dark gray, quartz-biotite-garnet gneiss, calcareous at places. pEKC, coarse grained, dark, quartz-biotite-garnet gneiss. pEM, dark biotite-pyroxene-mafic rocks, traced by float.

Contact, inferred mainly from float

Fault, dashed where inferred

Inferred thrust fault contact, teeth on upper plate

10
Bedding attitude

55
Attitude of schistosity or layering in gneiss

30
Minor folds showing axial plane

X5
Overturned minor fold

80
Joint attitude

47
Stream sediment sample site

60 O Pb, Cu
Stream sediment sample with threshold value in one or more of elements indicated

59 ● Zn, Pb, Mo
Stream sediment sample anomalous in one or more of elements indicated

▲ 152r
Rock sample location

(Geology and geochemistry by R. R. Asher and Tom Bundtzen, 1969, formal rock unit names from Sainsbury and others, 1969; base from U.S. Geological Survey Bedleben A-5 and A-6 Topographic Quadrangle maps.)

MA
APPROXIMATE MEAN DECLINATION, 1950 QUADRANGLE LOCATION

0	3000	6000
		