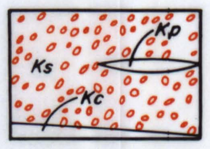
EXPLANATION OF FIGURE 2A

In the descriptions below, colors are those of fresh, unweathered rocks. Grain sizes are as follows: fine, less than 1 mm; medium, 1-5 mm; coarse, more than 5 mm

CRETACEOUS

Early to Late Cretaceous

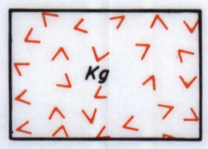


Metaconglomerate and related rocks

Ks, coarse- to fine-grained, light-olive-gray to medium-dark-gray, weakly metamorphosed, sedimentary rocks, undivided; commonly pervasively sheared, with stretched quartz-pebble and quartz-cobble metaconglomerate characteristic, especially west of Kogoluktuk River; metasandstone, phyllite, and slate locally abundant near and east of river
Kp, fine-grained, medium-dark-gray phyllite; mapped only near Wesley Creek to emphasize trend of bedding, but similar rock common elsewhere in unit Ks
Kc, fine- to coarse-grained, grayish-red to grayish-green, slaty metaconglomerate, characterized by extremely stretched and flattened pebbles and cobbles lithologically similar to underlying metavolcanic rocks; matrix and beds of grayish-green, olive-green and grayish-red slate, phyllite, and metasiltstone

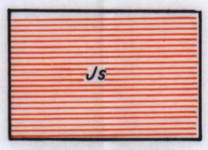
UNCONFORMITY

Early Cretaceous



Granite

Medium- to coarse-grained, very-light-gray, gneissic, albite granite characterized by pinkish-gray microcline phenocrysts or porphyroblasts as much as 1 inch in diameter. Intrudes and contains xenoliths of adjacent schist, Pzs



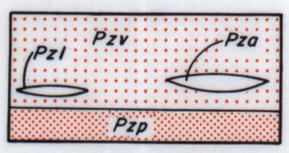
Serpentinite

Fine-grained, bright- to dark-greenish-gray, moderate- to dusky-yellow-green, and grayish-olive-green to greenish-black serpentinite, cut by tiny veinlets of chrysotile

JURASSIC (?) *

PALEOZOIC (?)

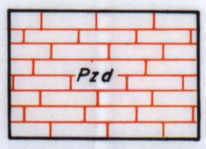
Devonian (?)



Metabasalt and related rocks

Pzv, mainly fine- to medium-grained, greenish-gray metatuff and metabasalt; locally amygdaloidal and agglomeratic in eastern part of R. 10 E. Fine-grained, greenish-gray to medium-dark-gray, thinly bedded, tuffaceous phyllite locally abundant, especially west of Kogoluktuk River. Unit also includes minor unmapped limestone
Pza, medium- to coarse-grained, greenish-gray metamorphosed agglomerate or volcanic conglomerate consisting of fragments of metabasalt as much as 10 inches long set in greenish- to light-olive-gray, tuffaceous to phyllitic-looking matrix; fragments lithologically similar to underlying amygdaloidal metabasalt and much less sheared than fragments in overlying metaconglomerate, Kc
Pzl, fine- to medium-grained, medium-light-gray, thinly bedded limestone; some beds characterized by clastic texture and contain fragments of crinoid stems 1-10 mm in diameter, especially at Ferguson Peak
Pzp, fine-grained, medium-dark-gray phyllite and quartz-rich metasedimentary rocks with interlayered greenish-gray metatuff; includes thinly bedded tuffaceous phyllite lithologically similar to parts of overlying unit, Pzv

Middle Devonian



Dolomitic limestone

Mainly fine-grained, medium-light-gray dolomite and fine- to medium-grained, light- to very-light-gray, thinly bedded limestone. Minor sedimentary breccia consisting of medium-light-gray dolomite fragments as much as 15 mm in diameter set in medium-dark-gray carbonate matrix. Local strong petroliferous odor. Unit may also contain beds of phyllite. Contains copper-bearing reef breccia in adjacent Ambler River quadrangle

Middle Devonian or older

Phyllitic schist and related rocks

Pzs, mainly fine- to coarse-grained, medium-gray to medium-dark-gray pelitic rocks ranging from highly carbonaceous phyllite to muscovite schist, with interbedded metagraywacke or impure quartzite. Metamorphic grade increases toward granite, Kg. Where most metamorphosed, pelitic rocks characterized by red garnet and nearly black, carbonaceous albite porphyroblasts 1-10 mm in diameter. Unit also contains small unmapped bodies of impure crystalline limestone, greenschist and greenstone similar to rocks described below
Pzc, mainly fine- to medium-grained, medium-light-gray crystalline limestone; locally micaceous to amphibole-bearing; includes interlayered medium-grained white marble, especially near west edge of sec. 11, T. 18 N., R. 10 E.
Pzt, mainly fine- to medium-grained, well foliated, greenish-gray, porphyroblastic actinolite schist (metatuff) characterized by numerous white to creamy albite porphyroblasts 1-5 mm in diameter. Map unit generalized. Contains interlayered muscovite- and quartz-rich metasedimentary rocks
Pzg, mainly fine- to medium-grained, tough, slabby to thinly layered greenstone (metatuff or metabasalt). Large body east of Kogoluktuk River contains garnets 1-10 mm in diameter. Unit also contains greenschist similar to Pzt. Large body near California Creek contains minor quartz-muscovite schist. Large body near Harry Creek contains minor impure quartzite, impure crystalline limestone, and tremolite-muscovite schist

*Mapping in the Ambler River quadrangle in 1969 revealed that the serpentinite in the Cosmos Hills intrudes metaconglomerate of Late Cretaceous age. The age of the serpentinite, therefore, is Late Cretaceous or younger.

PALEOZOIC

A

Albite porphyroblast locality

G

Garnet locality

Microscopic crystals in quartzite within greenstone near head of Harry Creek; porphyroblasts at other localities

Contact

Long-dashed where approximately located; short-dashed where inferred

U D — High-angle

T — Low-angle

Faults

Long-dashed where approximately located; short-dashed where inferred. U, upthrown side; D, downthrown side. T, upper side of low-angle overthrust fault

20 — Inclined, showing dip

Horizontal

Bedding

15 — Inclined foliation, showing dip

C — FA 30

Lineation

Mineral lineation or lineation of stretched clastic fragments, unless otherwise designated; C, crenulations; FA, fold axes; number indicates plunge. May be combined with bedding and foliation symbols

80 — Inclined joint, showing dip

15 — Small anticline, showing plunge

FIGURE 2B

GR37-SH2