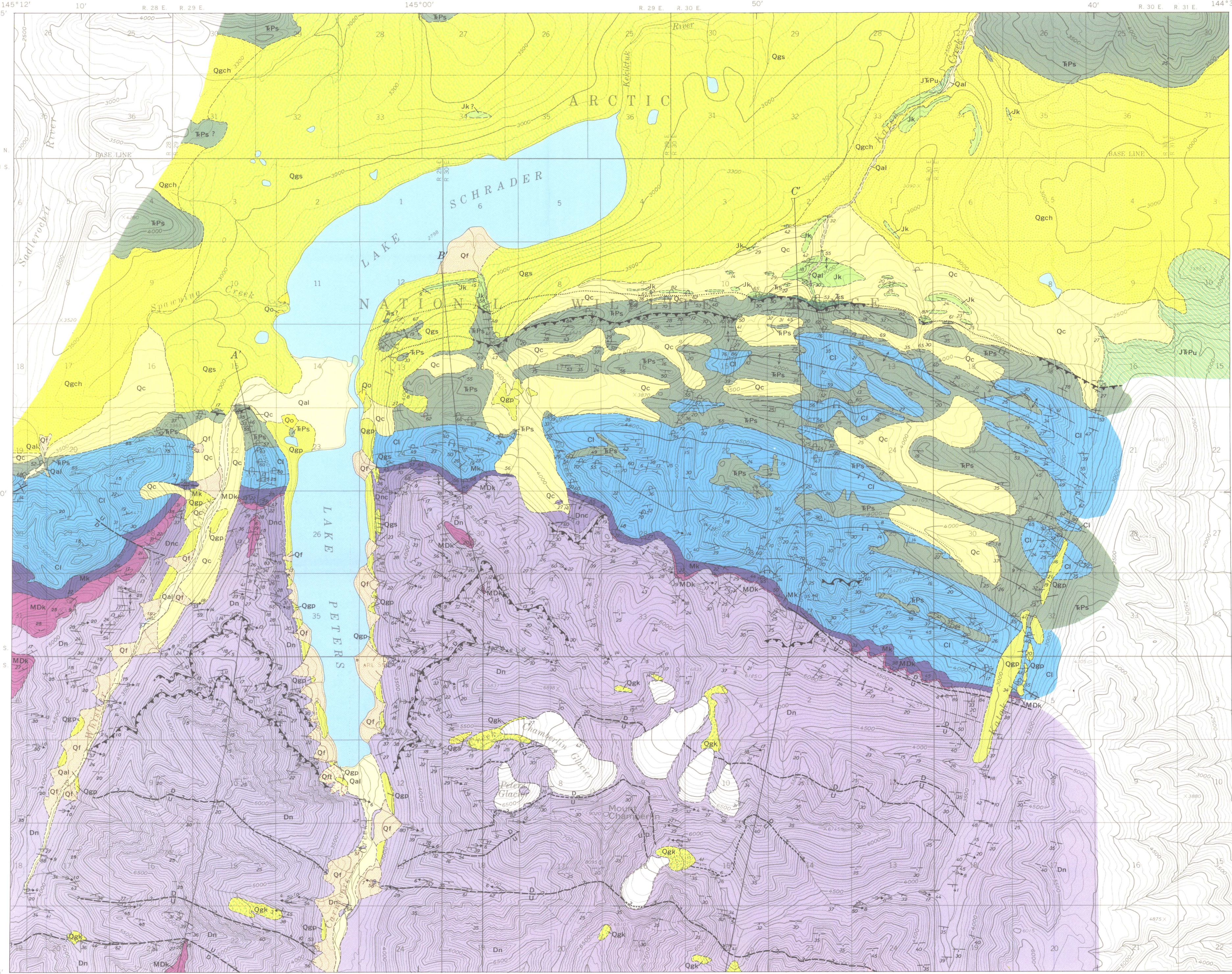
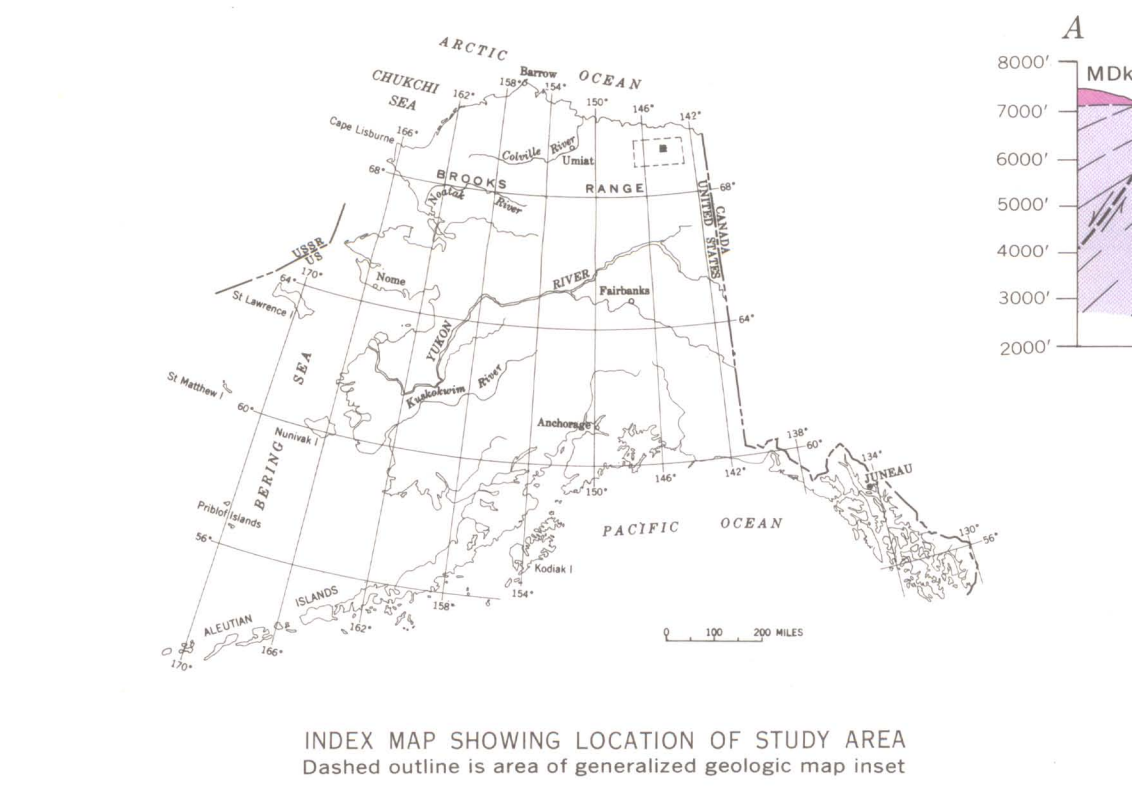
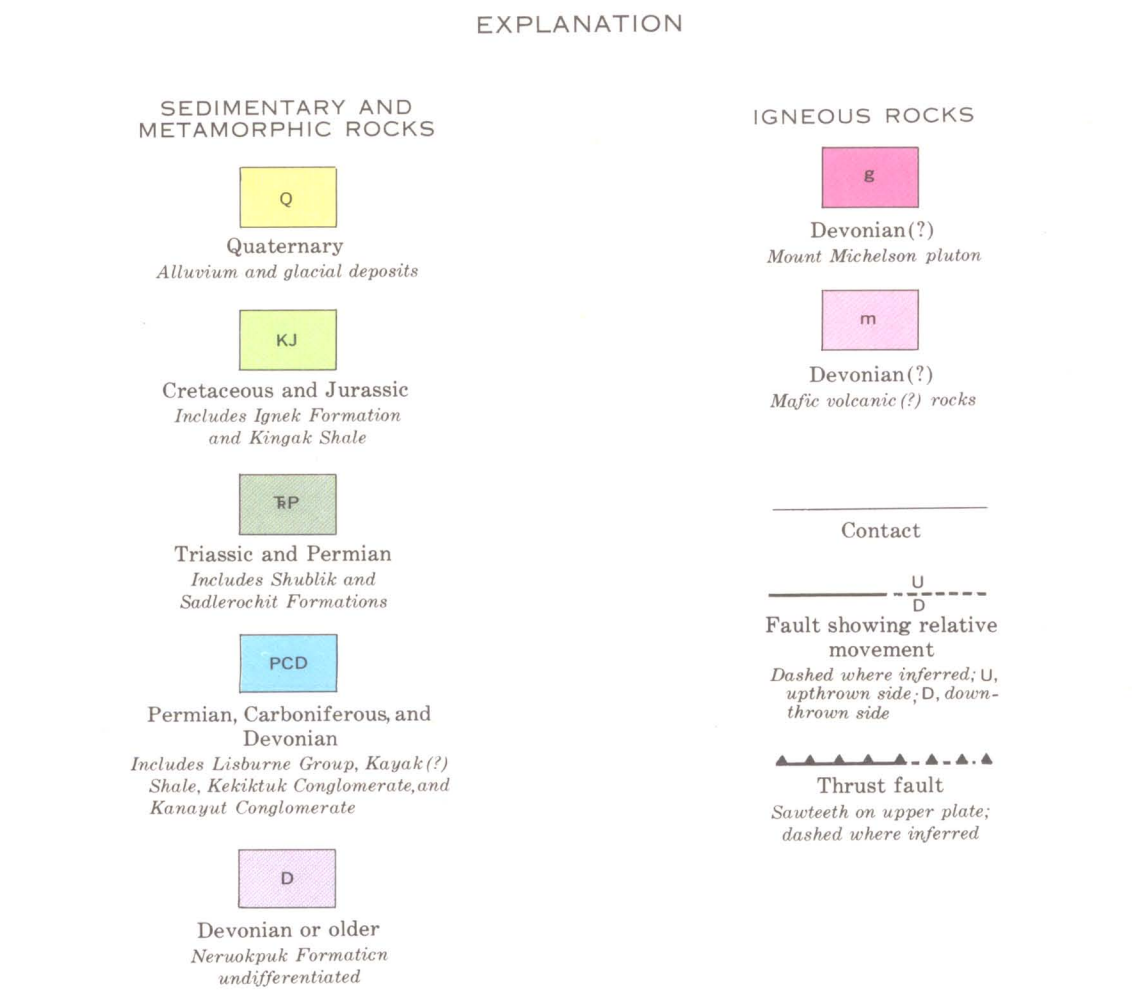
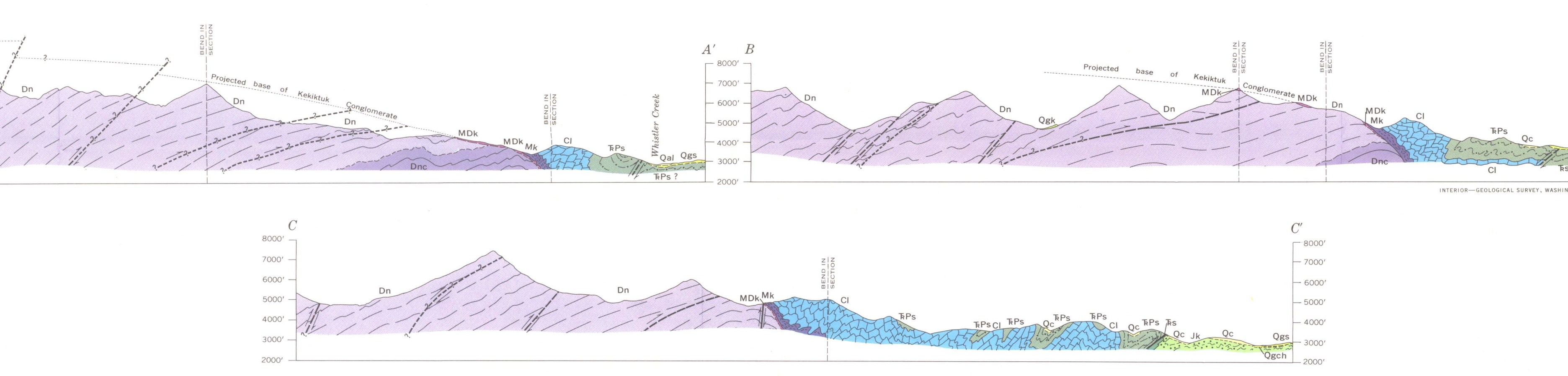


B. GENERALIZED GEOLOGIC MAP OF PART OF NORTHEASTERN BROOKS RANGE



Base from U.S. Geological Survey  
Mt. Michelton B-2, 1956



Katak Glaciation	Qgk
Alapah Mountain Glaciation	Qga
Peters Glaciation	Qgp
Schrader Glaciation	Qgs
Chamberlin Glaciation	Qch

Glacial deposits

Qgk, small, fresh, barren moraines restricted to the fronts of glaciers and recently evacuated cirques; as much as one-half mile in front of present glaciers.  
Qga, fresh, lichen covered moraine. Mapped only along Chamberlin Creek.  
Qgp, boulders and somewhat hummocky moraine, breached by tributaries and encroached by alluvial fans. Lateral moraines well developed 160-210 feet above the surface of Lake Peters. Confined to larger valleys.  
Qgs, partly dissected relatively fresh moraine that extends as much as 8 miles north of mountain front. Front features and active earth flows common; silt and peat locally present. Well-developed lobate moraine around and north of Lake Schrader.  
Qch, widespread, smooth appearing drift well modified by stream erosion and mass wasting. Extends 11-12 miles north of mountain front.

EXPLANATION

Surficial deposits  
Qal, flood-plain alluvium, poorly-sorted to well-sorted silt, sand, pebbles, cobbles, and boulders; restricted to narrow flood plains and low terraces of streams, but includes outwash from Whistler Creek between Lake Peters and Lake Schrader.  
Qt, alluvial fans and cones, fine to coarse, poorly sorted, poorly stratified gravel; locally includes glacial outwash. Commonly frozen at shallow depths. Local frost features. Includes talus cones (QT) at south end of Lake Peters.

Outwash deposits  
Generally well-sorted silt, sand, and gravel in terraces and outwash fans.

Glacial deposits

Qgk, small, fresh, barren moraines restricted to the fronts of glaciers and recently evacuated cirques; as much as one-half mile in front of present glaciers.  
Qga, fresh, lichen covered moraine. Mapped only along Chamberlin Creek.  
Qgp, boulders and somewhat hummocky moraine, breached by tributaries and encroached by alluvial fans. Lateral moraines well developed 160-210 feet above the surface of Lake Peters. Confined to larger valleys.  
Qgs, partly dissected relatively fresh moraine that extends as much as 8 miles north of mountain front. Front features and active earth flows common; silt and peat locally present. Well-developed lobate moraine around and north of Lake Schrader.  
Qch, widespread, smooth appearing drift well modified by stream erosion and mass wasting. Extends 11-12 miles north of mountain front.

REGIONAL UNCONFORMITY

Kingak Shale  
Shale, slaty shale, siltstone, sandstone; basal quartzitic siltstone containing phosphatic nodules.

Shublik Formation  
Dark-gray phosphatic limestone and calcareous shale.

Sadlerochit Formation  
Lower siliceous sandstone-siliceous siltstone, minor chert unit; middle siltstone, shale, minor sandstone unit; upper interbedded siltstone-sandstone unit.

Lisburne Group  
Carbonate rocks; fine- to coarse-grained limestone, dolomitic limestone, dolomite; chert nodules and lenses common; lower part silty and shaly.

Kayak(?) Shale  
Argillite, siltstone, chert, quartzite. Chert and limestone in upper part.

Kekikuk Conglomerate  
Quartzite; pebble to cobble conglomerate; minor siltstone.

Neroukpuk Formation  
Dn, Neroukpuk Formation undivided; quartz wacke, quartz semichert, phyllite; minor metachert and quartzite; locally includes Dnc.

Dnc, calcareous sandstone member; dolomitic and calcareous quartz wacke; lesser amounts of phyllite, metachert, and metaconglomerate.

ANGULAR UNCONFORMITY

Dn, Neroukpuk Formation undivided; quartz wacke, quartz semichert, phyllite; minor metachert and quartzite; locally includes Dnc.

Dnc, calcareous sandstone member; dolomitic and calcareous quartz wacke; lesser amounts of phyllite, metachert, and metaconglomerate.

ANGULAR UNCONFORMITY

Dn, Neroukpuk Formation undivided; quartz wacke, quartz semichert, phyllite; minor metachert and quartzite; locally includes Dnc.

Dnc, calcareous sandstone member; dolomitic and calcareous quartz wacke; lesser amounts of phyllite, metachert, and metaconglomerate.

ANGULAR UNCONFORMITY

Dn, Neroukpuk Formation undivided; quartz wacke, quartz semichert, phyllite; minor metachert and quartzite; locally includes Dnc.

Dnc, calcareous sandstone member; dolomitic and calcareous quartz wacke; lesser amounts of phyllite, metachert, and metaconglomerate.

ANGULAR UNCONFORMITY

Dn, Neroukpuk Formation undivided; quartz wacke, quartz semichert, phyllite; minor metachert and quartzite; locally includes Dnc.

Dnc, calcareous sandstone member; dolomitic and calcareous quartz wacke; lesser amounts of phyllite, metachert, and metaconglomerate.

ANGULAR UNCONFORMITY

Dn, Neroukpuk Formation undivided; quartz wacke, quartz semichert, phyllite; minor metachert and quartzite; locally includes Dnc.

Dnc, calcareous sandstone member; dolomitic and calcareous quartz wacke; lesser amounts of phyllite, metachert, and metaconglomerate.

Surficial deposits  
Qal, flood-plain alluvium, poorly-sorted to well-sorted silt, sand, pebbles, cobbles, and boulders; restricted to narrow flood plains and low terraces of streams, but includes outwash from Whistler Creek between Lake Peters and Lake Schrader.  
Qt, alluvial fans and cones, fine to coarse, poorly sorted, poorly stratified gravel; locally includes glacial outwash. Commonly frozen at shallow depths. Local frost features. Includes talus cones (QT) at south end of Lake Peters.

Outwash deposits  
Generally well-sorted silt, sand, and gravel in terraces and outwash fans.

Glacial deposits

Qgk, small, fresh, barren moraines restricted to the fronts of glaciers and recently evacuated cirques; as much as one-half mile in front of present glaciers.  
Qga, fresh, lichen covered moraine. Mapped only along Chamberlin Creek.  
Qgp, boulders and somewhat hummocky moraine, breached by tributaries and encroached by alluvial fans. Lateral moraines well developed 160-210 feet above the surface of Lake Peters. Confined to larger valleys.  
Qgs, partly dissected relatively fresh moraine that extends as much as 8 miles north of mountain front. Front features and active earth flows common; silt and peat locally present. Well-developed lobate moraine around and north of Lake Schrader.  
Qch, widespread, smooth appearing drift well modified by stream erosion and mass wasting. Extends 11-12 miles north of mountain front.

REGIONAL UNCONFORMITY

Kingak Shale  
Shale, slaty shale, siltstone, sandstone; basal quartzitic siltstone containing phosphatic nodules.

Shublik Formation  
Dark-gray phosphatic limestone and calcareous shale.

Sadlerochit Formation  
Lower siliceous sandstone-siliceous siltstone, minor chert unit; middle siltstone, shale, minor sandstone unit; upper interbedded siltstone-sandstone unit.

Lisburne Group  
Carbonate rocks; fine- to coarse-grained limestone, dolomitic limestone, dolomite; chert nodules and lenses common; lower part silty and shaly.

Kayak(?) Shale  
Argillite, siltstone, chert, quartzite. Chert and limestone in upper part.

Kekikuk Conglomerate  
Quartzite; pebble to cobble conglomerate; minor siltstone.

Neroukpuk Formation  
Dn, Neroukpuk Formation undivided; quartz wacke, quartz semichert, phyllite; minor metachert and quartzite; locally includes Dnc.

Dnc, calcareous sandstone member; dolomitic and calcareous quartz wacke; lesser amounts of phyllite, metachert, and metaconglomerate.

ANGULAR UNCONFORMITY

Dn, Neroukpuk Formation undivided; quartz wacke, quartz semichert, phyllite; minor metachert and quartzite; locally includes Dnc.

Dnc, calcareous sandstone member; dolomitic and calcareous quartz wacke; lesser amounts of phyllite, metachert, and metaconglomerate.

ANGULAR UNCONFORMITY

Dn, Neroukpuk Formation undivided; quartz wacke, quartz semichert, phyllite; minor metachert and quartzite; locally includes Dnc.

Dnc, calcareous sandstone member; dolomitic and calcareous quartz wacke; lesser amounts of phyllite, metachert, and metaconglomerate.

ANGULAR UNCONFORMITY

Dn, Neroukpuk Formation undivided; quartz wacke, quartz semichert, phyllite; minor metachert and quartzite; locally includes Dnc.

Dnc, calcareous sandstone member; dolomitic and calcareous quartz wacke; lesser amounts of phyllite, metachert, and metaconglomerate.

ANGULAR UNCONFORMITY

Dn, Neroukpuk Formation undivided; quartz wacke, quartz semichert, phyllite; minor metachert and quartzite; locally includes Dnc.

Dnc, calcareous sandstone member; dolomitic and calcareous quartz wacke; lesser amounts of phyllite, metachert, and metaconglomerate.

ANGULAR UNCONFORMITY

Dn, Neroukpuk Formation undivided; quartz wacke, quartz semichert, phyllite; minor metachert and quartzite; locally includes Dnc.

Dnc, calcareous sandstone member; dolomitic and calcareous quartz wacke; lesser amounts of phyllite, metachert, and metaconglomerate.

QUATERNARY

JURASSIC

TRIASSIC

PERMIAN

MISSISSIPPIAN

DEVONIAN

DEVONIAN OR OLDER

ANGULAR UNCONFORMITY

ANGULAR UNCONFORMITY

ANGULAR UNCONFORMITY

ANGULAR UNCONFORMITY

ANGULAR UNCONFORMITY

ANGULAR UNCONFORMITY

ANGULAR UNCONFORMITY

ANGULAR UNCONFORMITY

ANGULAR UNCONFORMITY

ANGULAR UNCONFORMITY

ANGULAR UNCONFORMITY

ANGULAR UNCONFORMITY