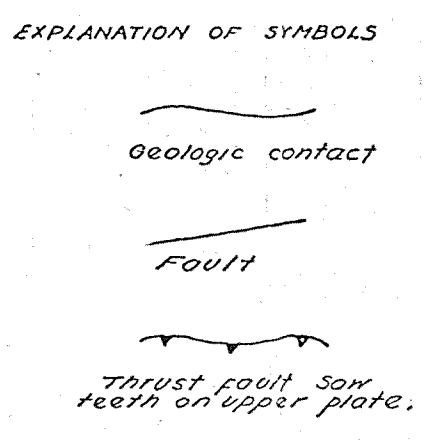
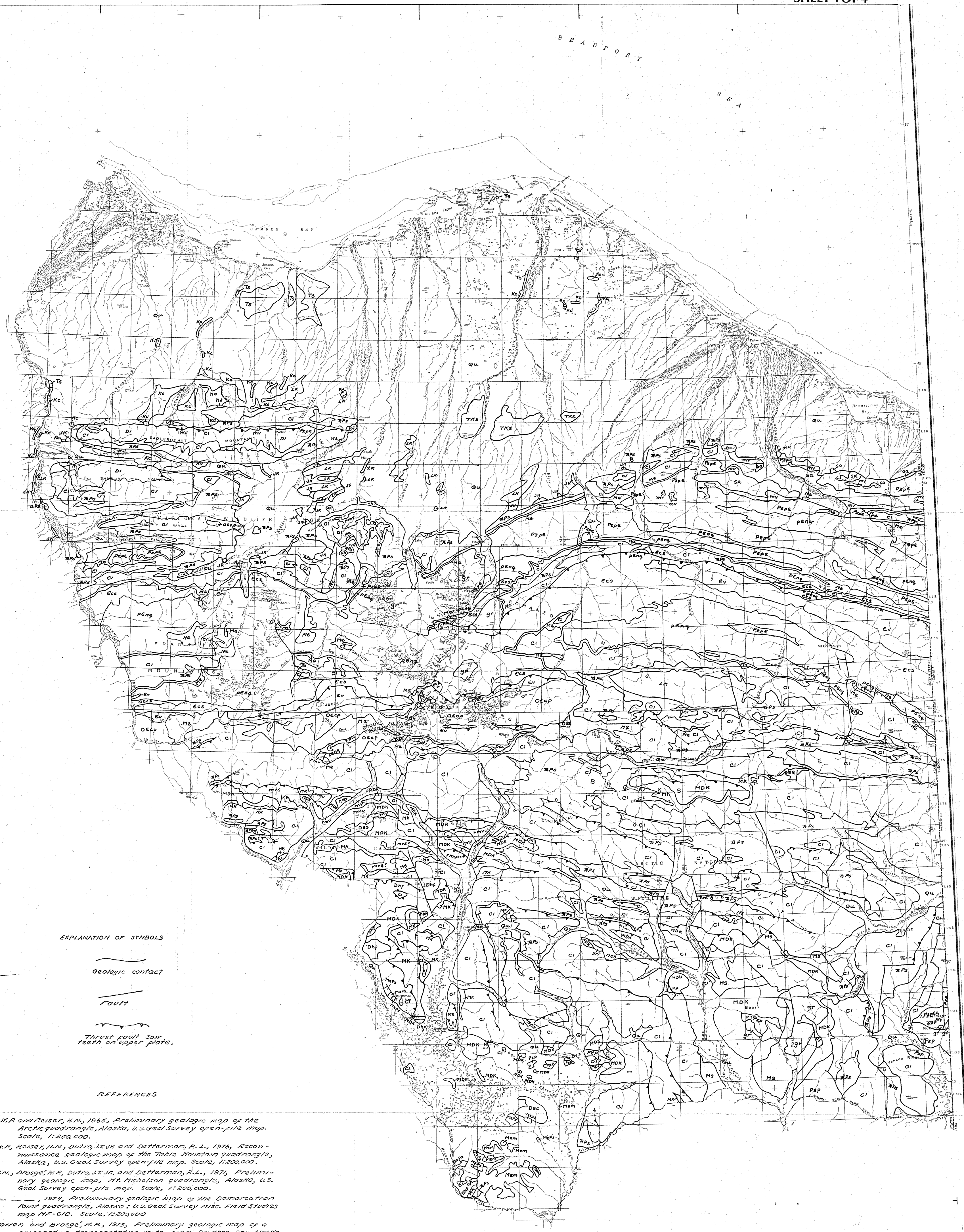
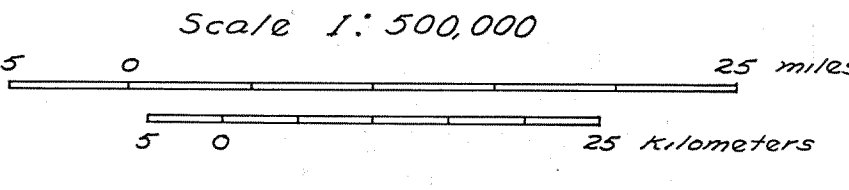


- DESCRIPTION OF MAP UNITS**
- Qu UNDIFFERENTIATED SURFICIAL DEPOSITS
 - T3 SILTSTONE, SHALE AND CLAYSTONE--Marine and nonmarine
 - T2 SHALE, SANDSTONE AND CONGLOMERATE--Marine and nonmarine
 - Kc COLVILLE GROUP (Upper Cretaceous)--Sandstone, siltstone, shale, tuff and bentonite. Marine and nonmarine
 - Lk LOWER CRETACEOUS SEDIMENTARY ROCKS--Sandstone, graywacke, conglomerate, shale, manganeseiferous shale. Marine and nonmarine. Includes Hanushuk Group, Bathub Graywacke, Kongakut Formation
 - KJ LOWER CRETACEOUS SEDIMENTARY ROCKS AND KINGAK SHALE, UNDIFFERENTIATED
 - JK KINGAK SHALE (Jurassic)--Dark-gray shale and siltstone. Marine
 - JPs MAFFIC ROCKS, CHERT AND SHALE--Sedimentary rocks. Marine
 - Pp PHYLLITE AND QUARTZITE--Marine
 - Ms SHUBLIK AND TISHAK FORMATIONS (Triassic) and ECHOHA FORMATION (Permian)--Sandstone, siltstone, shale, calcareous siltstone and limestone. Marine and nonmarine
 - Me LISBURNIE GROUP (Mississippian and Pennsylvanian)--Limestone and dolomite. Marine
 - Df BLACK SILTSTONE AND CHERT--Marine
 - Dsc KAYAK SHALE (Mississippian)--Black shale, ferruginous limestone, minor coal. Marine and nonmarine
 - Ocp ENDICOTT GROUP (Mississippian part only)--Kayak Shale (Kc) and Kekiktuk Conglomerate (nonmarine) undivided. Too thin to map in northwest part of area. Rests with angular unconformity on units Dss, Df, Ocp, Ev, Ecs, Pcp, Pcs, mv, mw, and with probable nonconformity on part of granite gr
 - Cv KEKIKTUK CONGLOMERATE (Mississippian) AND KANAVUT CONGLOMERATE (Devonian) UNDIFFERENTIATED--Includes typical Kanavut Conglomerate, which rests conformably on Hunt Fork Shale (Df), and conglomerate of uncertain identity which is thicker than typical Kekiktuk Conglomerate, but like it rests unconformably on units mv, mw, ms and possibly on Pcp
 - Ecs HUNT FORK SHALE (Devonian)--Dark gray shale, red shale locally at top. Marine
 - Pcp SLATE AND CONGLOMERATE--Red, green slate; hematitic, partly calcareous conglomerate
 - Ev NANOOK LIMESTONE AND KATAKTURUK DOLOMITE (Devonian) UNDIVIDED--Includes limestone of probable Devonian age in southwest part of area
 - Ecs SANDSTONE--Brown sandstone and shale. Rests unconformably on unit Ocp and with possible unconformity on units mv and mw
 - Pcp CHERT AND PHYLLITE MEMBER OF NERODUKUP FORMATION (Cambrian and Ordovician?)--Varicolored chert and phyllite and mafic intrusive rocks
 - Ev VOLCANIC AND CARBONATE MEMBER OF NERODUKUP FORMATION (Cambrian)--Mafic volcanic, volcanoclastic rocks; limestone
 - Pcp CALCAREOUS SANDSTONE--Black phyllite underlain by brown calcareous sandstone and siltstone
 - Pcp QUARTZITE AND SEMISCHIST MEMBER OF NERODUKUP FORMATION (Precambrian)
 - Pcp PHYLLITE--Gray phyllite, schist and minor greenstone. Underlies units C1, MDK and D1(?)
 - Pcp LIMESTONE AND PHYLLITE--Sequence of: limestone, chert and varicolored argillite; black sandy limestone; gray phyllite, and a correlative sequence of sandy limestone and calcareous sandstone and siltstone. Underlies unit Pcp, but contact may be a fault
 - Pcp QUARTZITE AND SCHIST--Underlies units C1 and Pcp
 - mv MAFFIC VOLCANIC ROCKS--Extrusive and intrusive mafic rocks, volcanic wacke, gray slate, possibly of several different ages
 - mw RHYOLITE AND MAFFIC VOLCANIC ROCKS--Rhyolite minor in northern part of area where unit underlies unit Df. Large bodies of rhyolite and some green slate in southern part where unit underlies units Dss and MDK
 - ms MAFFIC VOLCANIC ROCKS AND SLATE--Varicolored slate, minor mafic rocks, associated with unit mv
 - sa SLATE AND ARGILLITE--Varicolored slate, argillite and chert
 - gr GRANITIC ROCKS--Quartz monzonite, granite and rhyolite intrusives rocks. Probably includes rocks of different ages, Silurian to post-Mississippian or Cretaceous



- REFERENCES**
- Brosge, M.A. and Reiser, H.N., 1965, Preliminary geologic map of the Arctic quadrangle, Alaska, U.S. Geol. Survey open-file map, scale, 1:200,000.
 - Brosge, M.A., Reiser, H.N., Dutro, J.W. and Datterman, R.L., 1974, Reconnaissance geologic map of the Table Mountain quadrangle, Alaska, U.S. Geol. Survey open-file map, scale, 1:200,000.
 - Reiser, H.N., Brosge, M.A., Dutro, J.W. and Datterman, R.L., 1974, Preliminary geologic map, Table Mountain quadrangle, Alaska, U.S. Geol. Survey open-file map, scale, 1:200,000.
 - , 1974, Preliminary geologic map of the Demarcation Point quadrangle, Alaska, U.S. Geol. Survey misc. field studies map MF-610, scale, 1:200,000.
 - Yeend, Warren and Brosge, M.A., 1973, Preliminary geologic map of a prospective transportation route from Prudhoe Bay, Alaska to Concho Bay, Alaska, Part III, Arctic quadrangle (including Alaska, and Part II, Arctic and Table Mtn. quadrangles, U.S. Geol. Survey misc. field studies maps, MF-501 and MF-522, scale, 1:250,000.

Base from USGS 1:250,000 Topo Series:
BARTER ISLAND, 1959; FLAXMAN ISLAND, 1955;
DEMARCATION POINT, 1955; MT MICHAELSON, 1956;
ARCTIC, 1956; TABLE MOUNTAIN, 1956; CHRISTIAN,
1956; COLEEN, 1956, ALASKA.



Geology compiled from Reiser and others, 1971, 1974; Brosge and Reiser, 1965; Brosge and others, 1976; Yeend and Brosge, 1973, and unpublished geology in Arctic quadrangle by W.P. Brosge, H.N. Reiser and J.T. Dutro Jr., 1972. Much of the geology south of latitude 68°00' N. is based on interpretation of aerial photographs.

This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey standards and nomenclature.

Preliminary Geologic and Mineral Resource Maps,
(excluding petroleum)
Arctic National Wildlife Range, Alaska
by W.P. Brosge and H.N. Reiser, 1976
Sheet 1 Generalized geologic map