UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

OPEN-FILE REPORT 83-11
SHEET 1 OF 2

ALASKA

MOUNT MC KINLEY NATIONAL PARK

DESCRIPTION OF MAP UNITS

OVERLAP UNIT

Qt - Quaternary glacial, fluvial, and colluvial unconsolidated deposits; and Neogene sandstone, shale, conglomerate, and coal

Tv - Cenozoic volcanic rocks south of Denali fault

Tvq - Andesitic volcanic rocks of Mt. Galen

Tvt - Teklanika Formation (Basalt and Rhyolite)

Tc - Cantwell Formation (sandstone, shale, conglomerate)

INTRUSIVE ROCKS

Tif, Ti

g

TECTONOSTRATIGRAPHIC TERRANES

YUKON-TANANA TERRANE

Pzsv - Quartzite, marble, maroon and green phyllite, metarhyolite, metaconglomerate

Msv - Quartz-mica schist, chlorite-actinolite schist and phyllite, and metaplutonic rocks

PINGSTON TERRANE

Trs - Silty limestone, carbonaceous slate and siltstone, minor quartzite, includes minor intrusive gabbro

Pzs - Phyllite, minor chert and limestone, includes abundant intrusive gabbro and diorite

McKINLEY TERRANE

JKs - Slate, graywacke, minor conglomerate, maroon and green siliceous shale, and chert

Trbs - Sandstone, phyllite, tuff, minor chert

Trbg - Pillow basalt, massive basalt, diabase, and gabbro

TrPs - Slate, graywacke, minor limestone, and chert

Pzc - Red Paint subterrane - red, green, gray, and black radiolarian chert and argillite

DILLINGER TERRANE

JKs - Fossiliferous sandstone, siltstone, and chert

Pzd - Micaceous sandstone, slate, limestone

WINDY TERRANE

PMsv - Sandstone, conglomerate, shale, maroon and green tuff, chert, metabasalt

Ls - Limestone blocks

Um - Serpentinite, basalt, minor chert

MYSTIC TERRANE

bv - Pillow basalt and gabbro

Pzfc - Sandstone, argillite, chert, conglomerate

Pd - Massive conglomerate

Dl - Fossiliferous limestone

Sl - Massive limestone

Ocv - Shale, chert, pillow basalt

Um - Ultramafic rocks

CHULITNA TERRANE

Mzsv - Redbeds, basalt, limestone, sandstone, shale, cert

MPs - Chert, conglomerate, limestone

Dum - Serpentinite, pillow basalt, chert, minor gabbro

WEST FORK TERRANE

JTrs - Chert, argillite, sandstone, conglomerate, siliceous argillite and tuff

BROAD PASS TERRANE

Msv - Chert, argillite, tuff, volcanic sandstone

Ls - Blocks of limestone

Mv - Large block of andesitic volcanic rocks of uncertain age and affinity

JACK RIVER TERRANE

Ms

SUSITNA TERRANE

Trv

WRANGELLIA TERRANE

Pzv

Pls

PENINSULAR TERRANE

Jg

Deformed Upper Mesozoic graywacke, siltstone, argillite, and chert - Ks

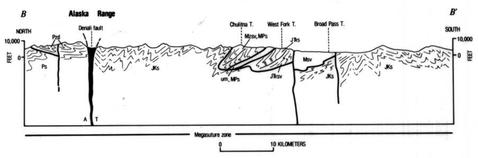
Dl - Devonian limestone, terrane designation uncertain

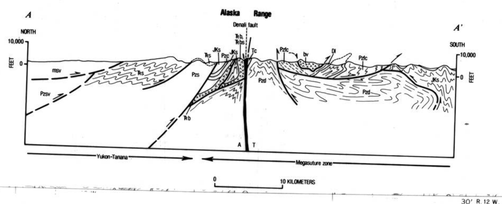
Contact

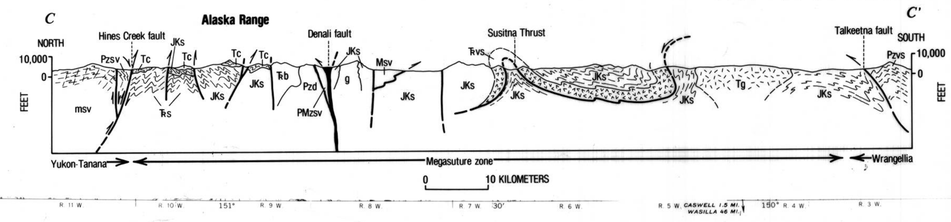
Fault - Dashed where approximate or inferred, dotted where concealed.

Thrust fault - Dashed where approximate or inferred.

Fossil locality







MAPPED, EDITED, AND PUBLISHED BY THE GEOLOGICAL SURVEY

CONTROL BY USGS AND USC&GS

COMPILED IN 1972 FROM U.S. GEOLOGICAL SURVEY 1:250 000-SCALE MAPS, 1952, 1954, 1956 AND 1958. MAP NOT FIELD CHECKED. SUPERSEDES MAP DATED 1952

UNIVERSAL TRANSVERSE MERCATOR PROJECTION. 1927 NORTH AMERICAN DATUM 100,000-FOOT GRIDS BASED ON ALASKA COORDINATE SYSTEM, ZONES 4 AND 5

GRAY LAND LINES REPRESENT UNSURVEYED AND UNMARKED LOCATIONS PREDETERMINED BY THE BUREAU OF LAND MANAGEMENT, FOLIOS S-1, S-2, S-3, SEWARD MERIDIAN AND F-10, F-11 FAIRBANKS MERIDIAN

SWAMPS, AS PORTRAYED, INDICATE ONLY THE WETTER AREAS, USUALLY OF LOW RELIEF, AS INTERPRETED FROM AERIAL PHOTOGRAPHS

LOCATION INDEX

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

CONTOUR INTERVAL 200 FEET
DOTTED LINES REPRESENT 100-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL
1972 MAGNETIC DECLINATION AT SOUTH EDGE OF SHEET VARIES FROM 24° TO 26°30' EAST

QUADRANGLE LOCATION

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

INTERPRETIVE BEDROCK GEOLOGIC MAP OF THE MOUNT MCKINLEY REGION

by

Jones, D. L., N. J. Silberling, W. G. Gilbert, and P. J. Coney