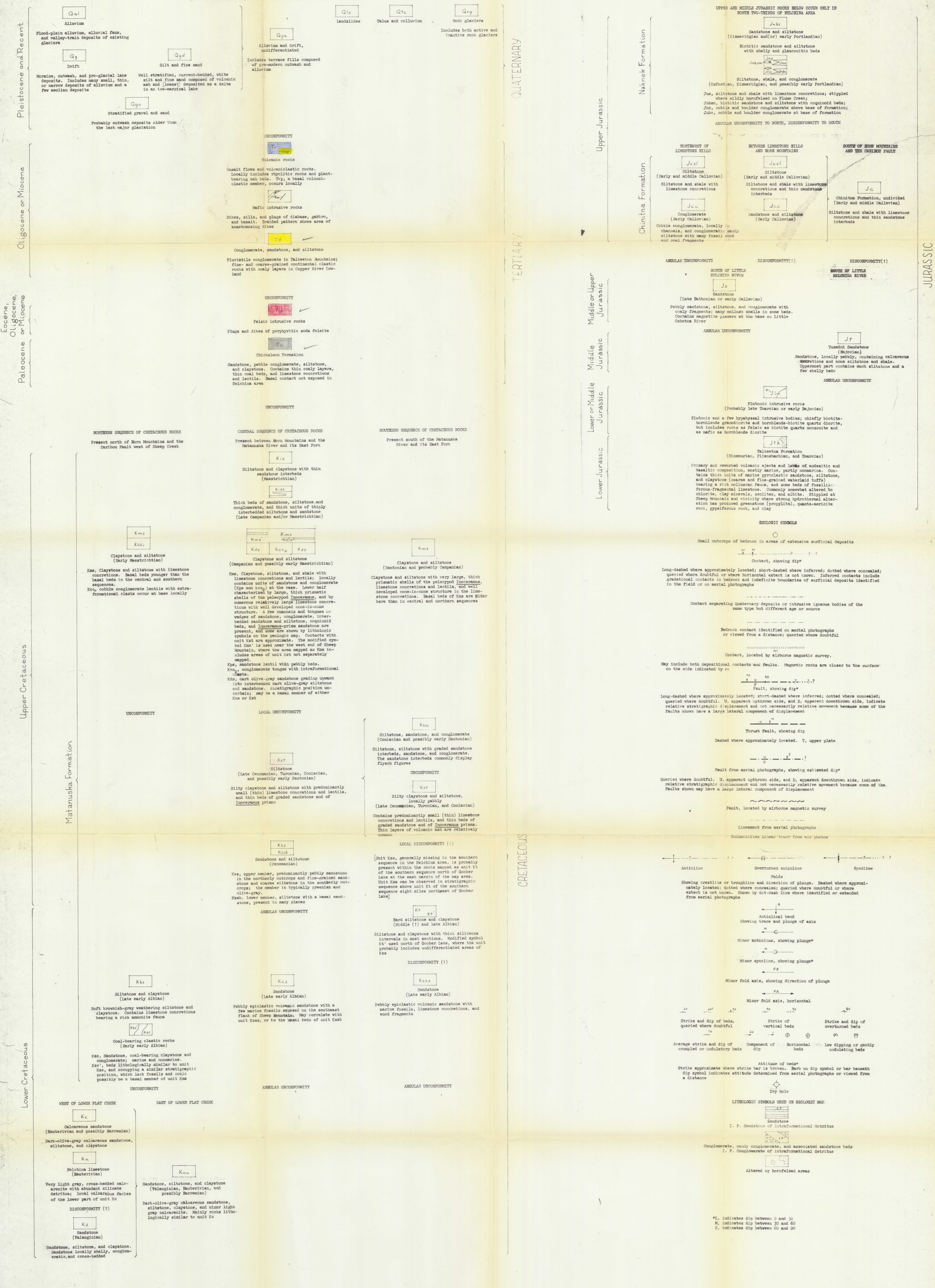


[Letter symbols on the map are underscored (Q_{al}, J₁, etc.) where the corresponding map unit was identified only from aerial photographs or viewed from a distance]

EXPLANATION



Pleistocene and Recent
Quaternary
Tertiary
Upper Jurassic
Middle or Upper Jurassic
Middle Jurassic
Lower or Middle Jurassic
Lower Jurassic
Upper Cretaceous
Matanuska Formation
Lower Cretaceous

QUATERNARY
TERTIARY

Upper Jurassic
Middle or Upper Jurassic
Middle Jurassic
Lower or Middle Jurassic
Lower Jurassic

UPPER AND MIDDLE JURASSIC ROCKS BELOW OCCUR ONLY IN NORTH TWO-THIRDS OF NELCHINA AREA
Naknek Formation
Chinitna Formation
NORTHWEST OF LITTLE NELCHINA HILLS
BETWEEN LITTLE NELCHINA HILLS AND HORN MOUNTAINS
SOUTH OF HORN MOUNTAINS AND THE CARIBOU FAULT
ANGULAR UNCONFORMITY
DISCONFORMITY (?)
NORTH OF LITTLE NELCHINA RIVER
SOUTH OF LITTLE NELCHINA RIVER
ANGULAR UNCONFORMITY
Plutonic intrusive rocks
Tussock Sandstone (Mojocian)
ANGULAR UNCONFORMITY
GEOLOGIC SYMBOLS
Small outcrops of bedrock in areas of extensive surficial deposits
Contact, showing dip
Long-dashed where approximately located; short-dashed where inferred; dotted where concealed; queried where doubtful or where horizontal extent is not known. Inferred contacts include gravitational contacts in bedrock and indistinct boundaries of surficial deposits identified in the field or on aerial photographs
Contact separating Quaternary deposits or intrusive igneous bodies of the same type but different age or source
Bedrock contact identified on aerial photographs or viewed from a distance; queried where doubtful
Contact, located by airborne magnetic survey.
May include both depositional contacts and faults. Magnetic rocks are closer to the surface on the side indicated by m
Fault, showing dip
Long-dashed where approximately located; short-dashed where inferred; dotted where concealed; queried where doubtful. U, apparent upthrown side, and D, apparent downthrown side, indicate relative stratigraphic displacement and not necessarily relative movement because some of the faults shown have a large lateral component of displacement
Fault, located by airborne magnetic survey
Lineament from aerial photographs
Unidentified linear trace from air photos
Anticline
Overturned anticline
Syncline
Folds
Showing crestline or troughline and direction of plunge. Dashed where approximately located; dotted where concealed; queried where doubtful or where extent is not known. Shown by dot-dash line where identified or extended from aerial photographs
Showing trace and plunge of axis
Minor anticline, showing plunge
Minor syncline, showing plunge
Minor fold axis, showing direction of plunge
Minor fold axis, horizontal
Strike and dip of beds, queried where doubtful
Average strike and dip of crumpled or undulatory beds
Component of dip
Horizontal
Low dipping or gently undulating beds
Attitude of beds
Strike approximate where strike bar is broken. Base on dip symbol or bar beneath dip symbol indicates attitude determined from aerial photographs or viewed from a distance
Dry hole
LITHOLOGIC SYMBOLS USED ON GEOLOGIC MAP
I. F. Sandstone of intraformational detritus
Conglomerate, sandy conglomerate, and associated sandstone beds
Z. F. Conglomerate of intraformational detritus
Altered or hornfelsed areas
*L, indicates dip between 0 and 30
M, indicates dip between 30 and 60
D, indicates dip between 60 and 90

GEOLOGIC MAP AND CROSS-SECTIONS OF THE NELCHINA AREA, SOUTH-CENTRAL ALASKA

by
Arthur Grantz
1965

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