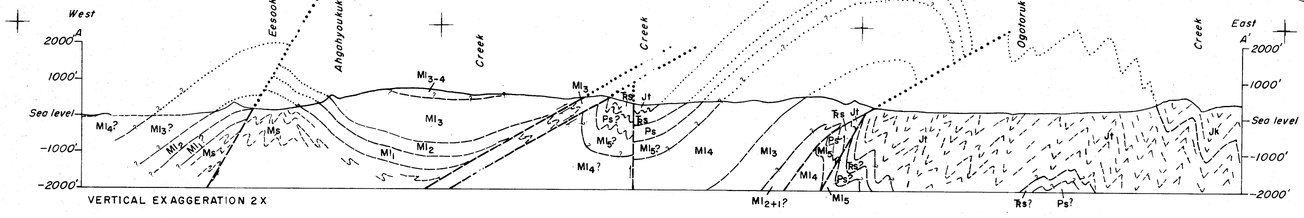
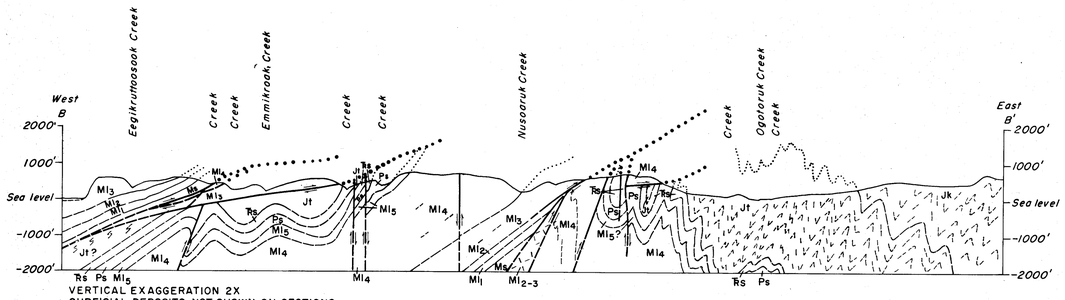
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

POINT HOPE (A-2) QUADRANGLE
ALASKA-SECOND JUDICIAL DIVISION
1:63 360 SERIES (TOPOGRAPHIC)



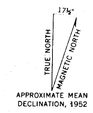
DIAGRAMMATIC STRUCTURE SECTION ALONG LINE A-A'



DIAGRAMMATIC STRUCTURE SECTION ALONG LINE B-B'

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D.C.—1958
NR 2262

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



APPROXIMATE MEAN DECLINATION, 1952

QUADRANGLE LOCATION

PRELIMINARY GEOLOGIC MAP AND DIAGRAMMATIC STRUCTURE SECTIONS OF PART OF THE POINT HOPE A-2 QUADRANGLE, NORTHWESTERN ALASKA

By

R. H. Campbell

0 1 2 3 4 Miles

Contour interval 50 feet
Dashed lines represent 25 foot contours
Datum is mean sea level

EXPLANATION

Unconsolidated deposits

QUATERNARY

Qb — Modern beach deposits
Chiefly rounded gravel with minor sand. Narrow beaches below sea cliffs not shown

Qft — Flood plain deposits of Ogotoruk Creek. Chiefly stream-deposited gravel and sand

Qls — Lake and swamp deposits
Chiefly in poorly drained areas containing small lakes

Qco — Colluvium
Chiefly angular gravel mixed with silt and sand. Largely products of mass-wasting, moved and deposited chiefly by solifluction. Locally includes talus, generally minor amounts of stream terrace gravel and sand, and flood plain deposits of small streams. Locally overlain by thin deposits of Qss not shown on map

Qss | Qsp — Qss, wind-deposited silt and fine sand; Qsp, areas of Qss containing ice wedge polygons

Qbs — Old beach gravels
Above level of modern surf deposits. Largely covered with vegetation

Qg — Gravel and sand
Stratified deposits of rounded gravel and sand found at high altitudes. Origin uncertain

Sedimentary Rocks 1/

JURASSIC(?) AND CRETACEOUS

Kj — Undifferentiated Cretaceous and Jurassic(?) rocks

JURASSIC(?)

Jt — Tiglukpuk(?) formation

TRIASSIC

Ts — Shublik formation

PERMIAN

Ps — Siksikpuk formation

MISSISSIPPIAN

Lisburne group

Ml5, **Ml4**, **Ml3**, **Ml2**, **Ml1**

Ms — Sandstone-shale unit
Noncalcareous clastic sedimentary rocks. Include mudstone, siltstone, sandstone, and shale

Heterogeneous calcareous and noncalcareous sedimentary rocks. Include chert, argillite, limestone, and shale

Calcareous sedimentary r
Include calcitic and
mitic limestone with
erally minor chert an
shale

Contact
Dashed where approximately located or indefinite. Includes gradational contacts, inferred contacts, and indefinite boundaries of surficial deposits; dotted where concealed

Fault
Dashed where approximately located, dotted where concealed; questioned where doubtful or probable

Thrust or low angle reverse fault
T, upper plate; dashed where approximately located, dotted where concealed; questioned where doubtful or probable

Anticline
Showing trace of axial plane. Dashed where approximatey located

Syncline
Showing trace of axial plane. Dashed where approximately located

30
Strike and dip of beds

40
Strike and dip of overturned beds

90
Strike of vertical beds

1/ Most of the bedrock outcrops shown are covered with from 1 to 6 feet of rock rubble derived from the subjacent bedrock by frost action

Pattern shows distribution of sedimentary rocks only. In areas of unconsolidated deposits, pattern indicates type of underlying bedrock

Areas shown as Ml_{3-4} indicate possible lowermost Ml_4 in areas where Ml_3 predominates

Area shown as Ml_{2-3} is highly contorted faulted zone containing chiefly rocks of Ml_2 and Ml_3

Areas with questioned symbols (e.g., Ml_1?) indicate uncertain correlation of units