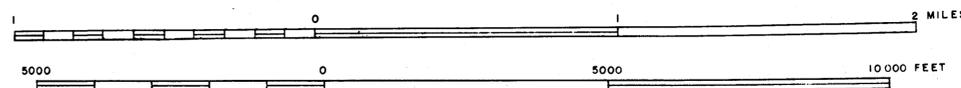


Base from enlarged U.S. Geological Survey maps of Healy D-4 (1952) and Healy D-5 quadrangles, Alaska.



CONTOUR INTERVAL 100 FEET
DOTTED LINES REPRESENT HALF-INTERVAL CONTOURS
Datum is mean sea level

Geology by Clyde Wahrhaftig,
J. H. Birman, and C. A. Hickcox.
Surveyed in 1945 and 1952

EXPLANATION

QUATERNARY

- Qal**
Alluvium
Deposits of sand and gravel on river flood plains or in recently built alluvial cones
- Qtg**
Terrace gravel
Deposits of gravel mantling terraces and pediments along the Nenana River, Lignite Creek, and their tributaries

UNCONFORMITY

- Nenana gravel**
Coarse brown poorly consolidated conglomerate with scattered sand lenses

APPARENT CONFORMITY

- Upper member**
Interbedded buff-colored arkosic sandstone, in part pebbly claystone, and thin coal beds. Granite, volcanic rocks, greenstone, and conglomerate common as pebbles
- Tcm**
Middle member
Interbedded "salt-and-pepper" sandstone, thick coal beds, and claystone. Quartz, chert, quartzite, and argillite make up most of pebble bands
- Lower member**
Interbedded sandstone, conglomerate, claystone, and coal. Coal beds lenticular and discontinuous. Prominent brown-weathering claystone at top

PRE-CAMBRIAN

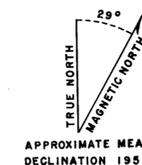
- Birch Creek schist**
Greenish-gray to black quartz-sericite schist

Landslides

CONTACTS AND STRUCTURES

- Contact**
(Dashed where position closely controlled by outcrops)
- Indefinite contact**
- Fault**
(Dashed where approximately located; dotted where concealed by alluvium. U, upthrown side; D, downthrown side)
- Anticline**
(Showing trace of axial plane and direction of plunge. Dashed where approximately located; dotted where concealed)
- Syncline**
(Showing trace of axial plane and direction of plunge. Dashed where approximately located; dotted where concealed)
- Strike and dip of beds**
40
50
65
- Strike of vertical beds**
- Strike and dip of overturned beds**
- Horizontal beds**
- Position of measured section** (See pl. 2)

Coal-bearing formation



GEOLOGIC MAP OF THE VALLEY OF LOWER LIGNITE CREEK, NENANA COAL FIELD, ALASKA