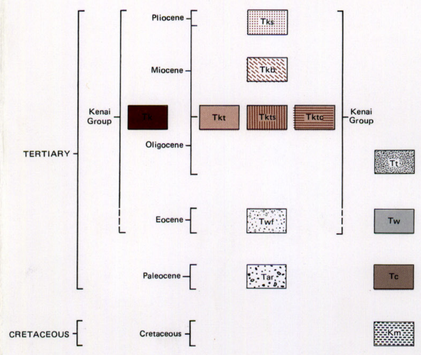
CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS[a]

(Coal-bearing formations and other sedimentary rocks)

- Tk — KENAI GROUP — Undivided.
- Tks — STERLING(?) FORMATION — Sandstone, siltstone, and thin coal beds.
- Tktb — BELUGA FORMATION — Sandstone, siltstone, and coal.
- Tkt — TYONEK FORMATION — Undivided - Sandstone, siltstone, coal, conglomerate, claystone, and shale.
- Tkts — TYONEK(?) FORMATION — Sandstone member - Predominantly sandstone, siltstone, and claystone with minor conglomerate and coal.
- Tktc — TYONEK(?) FORMATION — Conglomerate member - Conglomerate, sandstone, siltstone, claystone, and coal.
- Tt — TSADAKA FORMATION — Conglomerate, sandstone, and siltstone.
- Twf — WEST FORELAND FORMATION — Conglomerate, sandstone, and siltstone.
- Tw — WISHBONE FORMATION — Conglomerate, sandstone, and siltstone.
- Tar — ARKOSE RIDGE FORMATION — Arkose, conglomerate, and shale.
- Tc — CHICKALOON FORMATION — Claystone, siltstone, sandstone, coal, and conglomerate.
- Km — MATANUSKA FORMATION — Siltstone, sandstone, and conglomerate.

[a]See text for more detailed description of units.

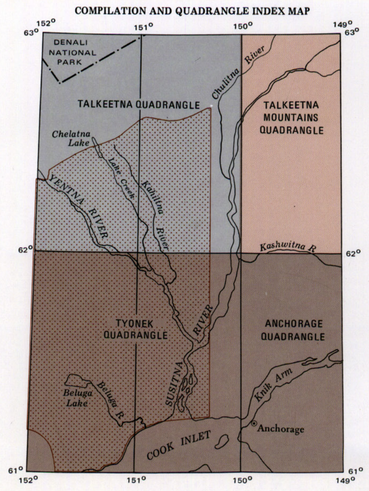
MAP SYMBOLS

- Contact of coal-bearing or other sedimentary unit.
- Fault - Long-dashed where approximately located, short-dashed where inferred, dotted where concealed. U, upthrown side; D, downthrown side. Arrows indicate direction of relative lateral movement.
- Thrust fault - Dashed where inferred, dotted where concealed, queried where probable; sawteeth on upper plate.
- Anticline - Showing axial trace; dashed where approximately located.
- Syncline - Showing axial trace and direction of plunge; dashed where approximately located.

Strike and dip of beds

- Horizontal
- 45 Inclined
- 65 Overturned
- 6 Based on distant observation
- CR5 Coal locale; see appendixes A and B (coal-locality descriptions obtained during 1981 fieldwork by author and assistant, Jonathan Sperber).

COMPILATION AND QUADRANGLE INDEX MAP



COMPILATION SOURCES

- Barnes, F.F., 1966, Geologic map of Beluga-Yentna region, Alaska, *in* Geology and coal resources of the Beluga-Yentna region, Alaska: U.S. Geological Survey Bulletin 1202-C, 54 p., scale 1:250,000.
- Csejtey, Bela, Jr., Nelson, W.H., Jones, D.J., Silberling, N.J., Dean, R.M., Morris, M.S., Lanphere, M.A., Smith, J.G., and Silberman, M.L., 1978, Reconnaissance geologic map and geochronology, Talkeetna Mountains Quadrangle, northern part of Anchorage Quadrangle, and southwest corner of Healy Quadrangle: U.S. Geological Survey Open-file Report 78-558A, scale 1:250,000.
- Magoon, L.B., Adkison, W.L., and Egbert, R.M., 1976, Map showing geology, wildcat wells, Tertiary plant-fossil localities, K-Ar age dates, and petroleum operations, Cook Inlet area, Alaska: U.S. Geological Survey Miscellaneous Investigations Series Map I-1019, scale 1:250,000.
- Reed, B.L., and Nelson, S.W., 1980, Geologic map of the Talkeetna Quadrangle, Alaska: U.S. Geological Survey Miscellaneous Investigations Series Map I-1174, scale 1:250,000.

Base from U.S. Geological Survey, Anchorage (1962, rev. 1979), Talkeetna (1958, rev. 1967), Talkeetna Mountains (1954, rev. 1977), and Tyonek (1958, rev. 1974) Quadrangles, Alaska.

Cartography by K.S. Pearson.

SCALE 1:250,000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

CONTOUR INTERVAL 200 FEET

DATUM IS MEAN SEA LEVEL FOR TALKEETNA, TALKEETNA MOUNTAINS QUADRANGLES; MEAN LOWER LOW WATER FOR TYONEK, ANCHORAGE QUADRANGLES.

TRUE NORTH — MAGNETIC N — 25°

APPROXIMATE MEAN DECLINATION, 1958

COAL-GEOLOGY AND STRUCTURE MAP OF THE SUSITNA LOWLAND, SOUTH-CENTRAL ALASKA

compiled by
R.D. Merritt

1990