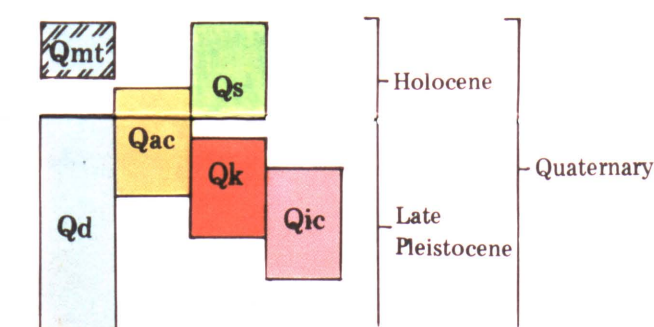


EXPLANATION

APPROXIMATE AGE OF MAP UNITS



DESCRIPTION OF MAP UNITS

A blanket of loess less than 11,500 years old covering nearly all inorganic deposits to depths of 9 to 30 cm is not shown on the map.

**Qac** ABANDONED MELT-WATER CHANNEL ALLUVIUM—Elongate channel fillings of well-sorted pebble-cobble gravel and gravelly medium-coarse sand with rare to occasional boulders laid down by former streams from melting glacial ice; large clasts generally subangular to well rounded; medium to thick bedded, locally cross-bedded; thickness ranges from less than 1 m to over 3 m; surface generally smooth, except for low scarps; permeability excellent to good, except very poor where locally well cemented by iron and manganese oxides.

**Qk** KAME-ESKER DEPOSITS—Complex accumulations of well to poorly sorted gravel, sand, and silt with rare to occasional boulders primarily deposited by meltwater streams in and beneath stagnant glacial ice; large clasts subangular to well rounded; locally contains clastic fragments of Tertiary coal; thin to thick bedded, locally contorted and discontinuous to lenticular; thickness generally over 5 m; surface generally irregular; permeability excellent to fair.

**Qic** UNDIFFERENTIATED ICE-CONTACT DEPOSITS—Complex mixtures of kame-esker deposits, sediments of supraglacial streams, and till generally composed of sandy gravel or gravelly sand with trace to some silt and occasional boulders; large clasts generally subrounded to subangular; generally unbedded; thickness generally more than 5 m; surface generally irregular to slightly irregular; permeability excellent to poor.

**Qd** TILL—Heterogeneous mixture of gravel, sand, and silt deposited directly from glacial ice, may be locally reworked by meltwater streams; commonly very dense; unbedded, except thin to thick bedded where reworked; thickness ranges from 2 m to over 6 m; surface irregular to slightly irregular; permeability fair to poor, except excellent where reworked.

**Qmt** TIDAL FLAT DEPOSITS—Blanket of silt and clay with trace to some fine sand laid down in an intertidal-estuarine environment; finely laminated to thick horizontal bedding; thickness generally greater than 3 m; surface generally smooth, except gullied near major channels; permeability poor.

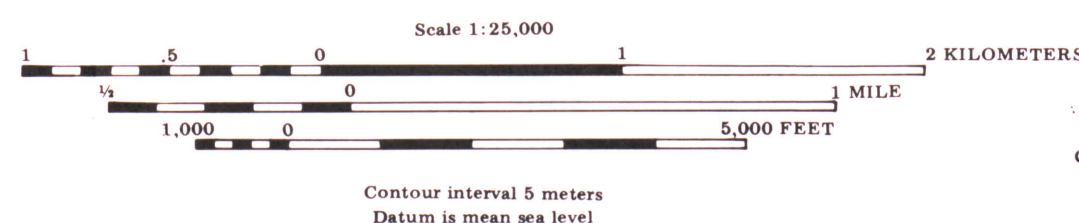
**Qs** SWAMP DEPOSITS—Interlayered woody, *Sphagnum* and sedge peat, organic silt, and sand accumulated in local basins, around the margins of lakes or ponds, and in former drainage channels; locally marly; commonly perennially frozen at depth; thickness ranges from less than 1 m to more than 6 m; surface smooth, hummocky, or pitted; permeability good, except very poor where frozen.

SYMBOLS

- Approximate geologic contact
- Questionable occurrence

\*Estimated percentages of sand and silt, based on field observations, are indicated by the terms "some" and "trace." "Some" implies a general composition of 12% to 30%. "Trace" implies a general composition of 4% to 12%. Estimated percentages less than 4% were not recorded in the field.

Base from 1974 advance print of U.S. Geological Survey orthophoto map prepared from 1:76,000-scale aerial photographs taken August 21, 1974.



Based on field reconnaissance Mar-June 1977 and June-July 1978 and on aerial photograph interpretation, November 1977 through January 1978. Field assistance by R.D. Reger. Reviewed by J.T. Kline and R.D. Reger.

GEOLOGIC MAP OF THE ANCHORAGE C-7 SW QUADRANGLE, ALASKA

By Cheri L. Daniels

1981