



EXPLANATION

- Qgg
Glacial and alluvial deposits
- QTV
Basalt and andesite lava and pyroclastic rocks
- Tc
Nonmarine sedimentary rocks
Kenai formation in most of area; Chickilnoo, Washbone and Tondino formations in Washbone Hill district; gravels of post-Kenai age in Kahlina district
- Ks
Sedimentary rocks
Marine sedimentary rocks of the Matanuska formation, and nonmarine sedimentary rocks of the Arvike Ridge formation
- Kji
Plutonic rocks
Predominantly diorite and quartz diorite, includes granite in the foothills of the Alaska Range
- Js
Marine sedimentary rocks
Naknek, Chisina, and Tuzedni formations
- Kjug
Slaty argillite and graywacke
Equivalent in part to Ks and Js sedimentary rocks. Identification doubtful in northwest corner of area.
- Jv
Marine volcanic rocks
Intermediate and mafic pyroclastic rocks and lava and interbedded marine sedimentary rocks. Includes Talkeetna formation
- Trc
Limestone and chert
- Trs
Limestone and schist
Crystalline limestone and siliceous schist that may be Upper Triassic limestone and chert metamorphosed in a fault zone
- Rps
Basalt and diabase, altered to greenstone
- Rpsca
Metamorphic rocks
Schist, gneiss, quartzite, crystalline limestone, slate and chert

- Generalized contact
Includes inferred, indefinite, approximate, and gradual contacts. Some faults are mapped as contacts. Dotted where concealed.
- Fault
Dashed where approximately located; dotted where concealed. U, upthrown side; D, downthrown side
- Reverse fault
Dotted where concealed; queried where doubtful. U, upthrown side; D, downthrown side
- Limit of geologic information
2,582 2,384 15,047
- Dry hole Oil well Gas well
Test wells drilled for oil and gas, showing depth in feet
- Reliable
Estimated
Aeromagnetic flight line, showing map location points and path of aircraft
Solid where reliable, dashed where estimated
- Aeromagnetic trend line or contact
Dashed where projected or where an alternative path is chosen, queried where doubtful
- Area of aeromagnetic anomaly
- Location of aeromagnetic feature observed on one flight line

Aeromagnetic profiles and anomalies observed along the flight lines are shown on plates 19, 20, and 21

GENERALIZED GEOLOGIC MAP OF THE COOK INLET AREA, ALASKA, SHOWING POSITION OF AEROMAGNETIC FLIGHT LINES AND MAGNETIC TRENDS

Base map compiled from U. S. Geological Survey Alaska Reconnaissance Topographic Series quadrangles, 1944-52

Interior Geological Survey, Washington, D. C. 20515
Geology compiled and generalized by Arthur Grant, 1959; primarily from the U. S. Geological Survey reports on Alaskan geology listed in the "Selected references"

SCALE 1:500,000

