MISCELLANEOUS FIELD STUDIES MAP MF - 372

SHEET 1 OF 2

/48°

150°

152°

Age assignments of plutonic rocks in the Alaska-Aleutian Range batholith are based on potassium-argon measurements of 115 biotite

(C. V.) test (see Dalrymple and Lanphere, 1969, p. 120). Some rock units of petrology, rock chemistry, and structural setting to be the same as the age of similar units that yield concordant ages.

Cox, Allan, and Dalrymple, G. B., 1967, Statistical analysis of geomegnetic reversal data and the precision of potassium-argon dating: Jour. Geophys. Research, v. 72, p. 2603-2614.

Reed, B. L., and Lanphere, M. A., 1969, Age and chemistry of Mesozoic America Bull., v. 80, p. 23-44.

McGonagall batholith ALASKA ANCHORAGE TKu 113 FAREWEL Talkeetna Mountains 62° Mt. Susitna ANCHORAGE 60° Tup SV Unassigned plutonic rocks Tf Snowcap sequence Granodiorite Granodiorite of Mount Foraker Merrill Pass sequence McKinley sequence Quartz monzonite and granite Tkt Quartz monzonite of Tired Pup Crystal Creek sequence Quartz monzonite and granite Undivided plutonic rocks TKme Hartman sequence Quartz diorite Granodiorite of Mount Estelle ТКу Yentna sequence Quartz diorite and granodiorite TKs1 58° Rocks of Summit Lake Quartz diorite and granodiorite Quartz diorite and granodiorite Sedimentary and volcanic rocks of Paleozoic to Tertiary age in the Alaska and Aleutian **— ---? ---···** Fault Queried where inferred; dotted where concealed Contact
Dashed where approximately located;
queried where inferred; dotted
where concealed SAMPLE LOCATIONS sv Late Cretaceous and early Tertiary Chemical analyses and age date (Solid symbols denote established age, open symbols denote inferred age; numbers refer to samples given in Table 1) Geology mapped by J. C.Reed, 1961, R.L. Detterman and B. L. Reed 1962-1966, B. L.Reed and R. L. Base from Alaska map E , 1954. Elliot, 1969, and B.L. Reed and Marvin Lanphere 1966, 1968, 1970-1971. 100 MILES

DEPARTMENT OF THE INTERIOR

156°

154°

UNITED STATES GEOLOGICAL SURVEY

58

57

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GENERALIZED GEOLOGIC MAP OF THE ALASKA-ALEUTIAN RANGE BATHOLITH SHOWING POTASSIUM-ARGON AGES OF THE PLUTONIC ROCKS by