

PURPOSE OF MAP

This map shows the distribution of potassium feldspar and fossils in the Mesozoic rocks east of the San Andreas fault zone in Marin and San Francisco Counties, and parts of Alameda, Contra Costa, and Sonoma Counties. The amount of detrital potassium feldspar and age are two of several parameters used in dividing the Mesozoic rocks into the units shown on the companion geologic map (MF-574).

EXPLANATION

GENERALIZED ROCK UNITS

Quaternary and Tertiary rocks
Mesozoic rocks

[See companion geologic map (MF-574) for detailed distributions and descriptions]

POTASSIUM FELDSPAR VALUES (1931 LOCALITIES)

○ = 0% detrital
● = trace to 2% detrital
■ = 3-5% detrital
■ = 6-10% detrital
■ = > 10% detrital
× = detrital present, amount unknown (after Gluskoter, 1962)
+ = authigenic present, amount unknown

[Symbols shown in areas of Quaternary and Tertiary rock represent data from areas of Mesozoic rock too small to be shown on map. Potassium feldspar values determined by the staining method described in Bailey and Irwin (1959). Map shows potassium feldspar data generated during the preparation of the companion map (MF-574), and data from the following published and unpublished sources: Bailey and others (1964); J.O. Berkland, 1972, written commun.; M.G. Bonilla, 1972, written commun.; J.E. Case (1963); H.J. Gluskoter (1962); R.R. Ohrbom (1967); and C.A. Wahrhaftig, 1972, written commun.]

FOSSIL LOCALITIES

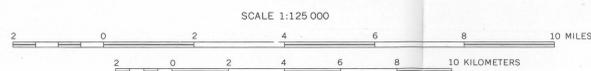
Microfossils
Mega-fossils
(Superscript identifies locality on map and in Table below)

TABLE

Mega-fossils	Age	Source
1 <i>Buchia keyeslingi</i> (Lahusen)	Early Cretaceous (Valanginian)	Dudley (1972)
2 <i>Buchia</i> sp.	Late Jurassic or Early Cretaceous	Bailey and others (1964)
3 <i>Buchia pacifica</i> Jeletsky	Early Cretaceous (Valanginian)	Bailey and others (1964)
4 <i>Buchia pacifica</i> Jeletsky	Early Cretaceous (Valanginian)	Bailey and others (1964)
5 <i>Inoceramus schmidtii</i> Michael	Late Cretaceous (Campanian)	Bailey and others (1964)
6 <i>Inoceramus schmidtii</i> Michael	Late Cretaceous (Campanian)	Bailey and others (1964)
7 <i>Buchia</i> sp.	Late Jurassic or Early Cretaceous	Bailey and others (1964)
8 <i>Inoceramus elliotii</i> Gabb	Late Cretaceous (Cenomanian?)	Bailey and others (1964)
9 <i>Douvilleiceras cf. D. mammillatum</i> (Schlotheim)	Early Cretaceous (Albian)	Schlocker and others (1954)
10 <i>Mantelliceras</i> sp.	Late Cretaceous (Cenomanian)	Hertlein (1956)
11 <i>Acroteuthis</i> sp.	Early Cretaceous (Hauterivian)	Collected by S.J. Rice, identified by D.L. Jones
12 <i>Buchia pacifica</i> Jeletsky	Early Cretaceous (Valanginian)	Collected by S.J. Rice, identified by D.L. Jones
Microfossils		
13 Palynomorphs	Early(?) Cretaceous	Collected by J.O. Berkland, identified by M.R. Eviot
14 Palynomorphs	Early Cretaceous	Collected by M.C. Blake, Jr., identified by M.R. Eviot
15 Palynomorphs	Early Cretaceous	Collected by M.C. Blake, Jr., identified by M.R. Eviot
16 Palynomorphs	Early Cretaceous(?)	Collected by M.C. Blake, Jr., identified by M.R. Eviot
17 Radiolaria	Early Cretaceous(?)	Collected by M.C. Blake, Jr., identified by E.A. Pessagno, Jr.
18 Radiolaria	Late Jurassic to Early Cretaceous (Tithonian to Berriasian)	Collected by R.H. Wright, identified by E.A. Pessagno, Jr.
19 Radiolaria	Late Jurassic to Early Cretaceous (Tithonian to Berriasian)	Collected by M.C. Blake, Jr., identified by E.A. Pessagno, Jr.
20 Radiolaria	Late Jurassic to Early Cretaceous (Tithonian to Berriasian)	Collected by M.C. Blake, Jr., identified by E.A. Pessagno, Jr.
21 Foraminifera	Late Cretaceous (Cenomanian)	Bailey and others (1964)
22 Palynomorphs	mid-Cretaceous (Albian to Cenomanian)	Collected by K. Snetzinger, identified by M.R. Eviot
23 Radiolaria	Late Jurassic (Tithonian)	Collected by R.H. Wright, identified by E.A. Pessagno, Jr.
24 Radiolaria	Late Jurassic (Tithonian)	Collected by R.H. Wright, identified by E.A. Pessagno, Jr.
25 Radiolaria	Late Jurassic to Early Cretaceous (Tithonian to Neocomian)	Collected by R.H. Wright, identified by E.A. Pessagno, Jr.
26 Radiolaria	Late Jurassic (Tithonian)	Collected by R.H. Wright, identified by E.A. Pessagno, Jr.
27 Radiolaria	Late Jurassic (Tithonian)	Collected by R.H. Wright, identified by E.A. Pessagno, Jr.
28 Radiolaria	Late Jurassic to Early Cretaceous (Tithonian to Neocomian)	Collected by R.H. Wright, identified by E.A. Pessagno, Jr.
29 Radiolaria	Late Jurassic to Early Cretaceous (Tithonian to Neocomian)	Collected by R.H. Wright, identified by E.A. Pessagno, Jr.
30 Radiolaria	Late Jurassic (Tithonian)	Collected by C.M. Wentworth, identified by E.A. Pessagno, Jr.
31 Radiolaria	Late Jurassic to Early Cretaceous (Tithonian to Neocomian)	Collected by R.H. Wright, identified by E.A. Pessagno, Jr.
32 Radiolaria	Late Jurassic (Tithonian)	Collected by R.H. Wright, identified by E.A. Pessagno, Jr.
33 Radiolaria	Late Jurassic (Tithonian)	Pessagno (1973)
34 Radiolaria	Late Jurassic (Tithonian)	Pessagno (1973)
35 Radiolaria	Late Jurassic (Tithonian)	Pessagno (1973)
36 Radiolaria	Late Jurassic (Tithonian)	Pessagno (1973)
37 Radiolaria	Late Jurassic (Tithonian)	Pessagno (1973)
38 Radiolaria	Late Jurassic (Tithonian)	Collected and identified by E.A. Pessagno, Jr.
39 Radiolaria	Late Jurassic (Tithonian)	Collected by R.H. Wright, identified by E.A. Pessagno, Jr.
40 Radiolaria	Late Jurassic to Early Cretaceous (Tithonian to Neocomian)	Collected by R.H. Wright, identified by E.A. Pessagno, Jr.
41 Radiolaria	Late Jurassic (Tithonian)	Collected by R.H. Wright, identified by E.A. Pessagno, Jr.



Base from U.S. Geological Survey 1:25,000 San Francisco Bay Region, Sheets 1, 2, and 3, 1970



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MAP SHOWING THE DISTRIBUTION OF POTASSIUM FELDSPAR AND FOSSILS IN MESOZOIC ROCKS OF MARIN AND SAN FRANCISCO COUNTIES, AND PARTS OF ALAMEDA, CONTRA COSTA, AND SONOMA COUNTIES, CALIFORNIA

BY
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