

AREAL GEOLOGY

CALIFORNIA
SANTA CRUZ QUADRANGLE

LEGEND



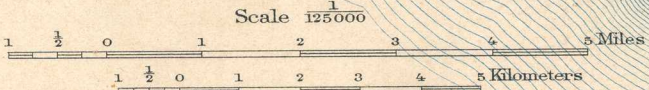
SEDIMENTARY ROCKS
(Areas of analogous deposits are shown by patterns of dots and circles; metamorphism is indicated by hachures combined with the base patterns.)

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|---|--|---|--|---|---|---|---|-----------------------|
| <p>QUATERNARY</p> <p>Qr
Terrace deposits
(marine and dune sand and detrital deposits)</p> <p>Qal
Alluvium
(on flats bordering San Francisco Bay; merges with Santa Clara formation)</p> | <p>UNCONFORMITY</p> <p>Tmc
Merced formation
(marine sandstone and shale; contains fossiliferous layers)</p> <p>Tsc
Santa Clara formation
(gravel, sand, and silt; contains fossiliferous layers; boundary is indefinite)</p> | <p>Miocene</p> <p>Tp
Purisima formation
(conglomerate, sandstone, and shale; is part of the same series as the older strata east of the Calistoga-Castaño divide)</p> <p>Tsm
Santa Margarita formation
(clean white sand, largely unconsolidated; with shale, in the lower part; includes some Purisima near coast)</p> | <p>TERTIARY</p> <p>Tm
Monterey shale
(soft to fine shales; largely micaceous, and massive sandstone; locally bituminous near coast)</p> <p>UNCONFORMITY</p> <p>Tv
Vaqueros sandstone
(heavy-bedded sandstone and conglomerate; locally shaly toward the top, with thin shaly layers)</p> | <p>Oligocene</p> <p>Tsl
San Lorenzo formation
(clayey shale with thin-bedded, calcareous sandstone)</p> <p>Tb
Butano sandstone
(massive brown and buff sandstone)</p> | <p>Eocene</p> <p>Ti
Limestone inclusions in diabase</p> | <p>CRETACEOUS</p> <p>Kc
Chico formation
(heavy-bedded sandstone and conglomerate, with small amount of shale)</p> <p>UNCONFORMITY</p> <p>Kk^o
Knoxville formation
(hard, dark-colored shale, sandstone, and conglomerate)</p> | <p>Jurassic?</p> <p>Jc
Franciscan formation
(sandstone, shale, and some conglomerate; with thin-bedded masses of limestone, basalt, chert, and granite)</p> <p>UNCONFORMITY</p> <p>Ls
Limestone
(white to light-gray crystalline limestone)</p> <p>sch
Schist
(dark-colored micaceous schist, including some quantities of crystalline limestone and thin-bedded quartzite)</p> | <p>PRE-CRETACEOUS</p> |
| <p>IGNEOUS ROCKS
(Areas of igneous rocks are shown by patterns of triangles and rhombs.)</p> <p>db
Diabase and basalt
(intrusive diabase, basalt flows and intrusions, and tuffs)</p> <p>adb
Older diabase
(somewhat altered diabase dikes)</p> <p>sp
Serpentine
(altered intrusive masses and dikes of basic rocks)</p> <p>qd
Quartz diorite
(fine to medium grained)</p> | | <p>TERTIARY</p> | <p>PRE-TERTIARY</p> | <p>PRE-CRETACEOUS</p> | | | | |
| <p>Pre-Franciscan? Post-Franciscan? (Pre-Santa Margarita)</p> <p>fa
Faults</p> <p>cf
Concealed faults
(covered by younger deposits)</p> <p>sd
Strikes and dip of stratified rocks
(directional curve)</p> <p>mq
Mines and quarries</p> | | <p>Pre-Franciscan?</p> | <p>Pre-Franciscan?</p> | <p>Pre-Franciscan?</p> | | | | |

R.U. Goode, Geographer in charge.
Triangulation by U.S. Coast and Geodetic Survey.
Topography by E.C. Barnard, R.B. Marshall,
A.B. Searle, and U.S. Coast and Geodetic Survey.
Surveyed in 1895 and 1899.

DIAGRAM OF TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36



Scale 1:25,000
Miles
Kilometers
Contour interval 100 feet.
Datum is mean sea level.
Edition of Oct. 1908.

Geology by J.C. Branner,
J.F. Newsome, and Ralph Arnold.
Surveyed in 1896-1905.