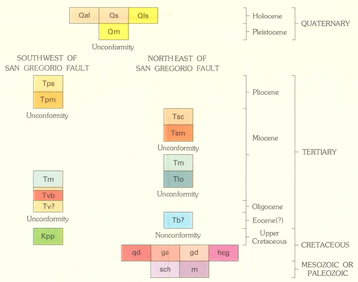
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PROFESSIONAL PAPER 1168
PLATE 1

CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

SURFICIAL SEDIMENTS

- **Qal** ALLUVIUM—Unconsolidated gravel, sand, and silt
- **Qs** SAND DUNES
- **Qls** LANDSLIDE MATERIAL—Half arrows show direction of downslope movement
- **Qm** MARINE TERRACE DEPOSITS—Unconsolidated moderate-yellowish-brown fine sand and granular gravel

SOUTHWEST OF SAN GREGORIO FAULT

PURISIMA FORMATION (Pliocene)

- **Tps** Sandstone member—Thick- to very thick bedded olive-gray fine-grained lithic sandstone with thin interbeds of carbonate concretions
- **Tpm** Mudstone member—Medium- to thick-bedded light-olive-gray nodular mudstone
- **Tm** MONTEREY FORMATION (Miocene)—Thin-bedded and thinly laminated olive-gray to dusky-yellowish-brown siliceous mudstone
- **Tv?** VAQUEROS(?) FORMATION (Oligocene and Miocene)—Dusky-yellowish-brown phosphatic mudstone and fine- to medium-grained glauconite-bearing arkosic sandstone
- **Tvb** Volcanic breccia—Altered andesitic and basaltic blocks at base of exposed section
- **Kpp** PIGEON POINT FORMATION (Upper Cretaceous Shown in cross section only)—Interbedded sequence of brownish-gray fine- to coarse-grained sandstone, dark-gray sandy siltstone, sandy pebble to cobble conglomerate, and pebbly mudstone

NORTHEAST OF SAN GREGORIO FAULT

Upper Miocene to Pliocene sedimentary sequence

- **Tsc** SANTA CRUZ MUDSTONE (upper Miocene)—Medium- to thick-bedded and faintly laminated olive-gray to pale-yellowish-brown blocky siliceous mudstone and nodular sandy siltstone
- **Tsm** SANTA MARGARITA SANDSTONE (upper Miocene)—Very thick bedded to massive light-olive-gray to white medium- to fine-grained calcareous arkosic sandstone; locally calcareous; locally bituminous

Middle Miocene sedimentary sequence

- **Tm** MONTEREY FORMATION—Thin- to medium-bedded olive-gray to medium-gray sandy siltstone and siliceous mudstone. Includes a few very thick medium-grained arkosic sandstone interbeds
- **Tlo** LOMPICO SANDSTONE—Thick- to very thick bedded medium-gray to grayish-orange medium- to fine-grained calcareous arkosic sandstone

Eocene to lower Miocene sedimentary sequence

- **Tb?** BUTANO(?) SANDSTONE (Eocene?)—Very thick bedded yellowish-gray medium-grained arkosic sandstone, commonly grading upward to greenish-gray sandy mudstone. Includes very thick sandy cobble conglomerate interbeds

Crystalline plutonic and metamorphic rocks

- **qd** QUARTZ DIORITE
- **ga** GRANITE AND ADAMELLITE
- **gd** GNEISSIC GRANODIORITE
- **hcg** HORNBLENDE-CUMMINGTONITE GABBRO
- **sch** METASEDIMENTARY ROCKS—Mainly pelitic schist and quartzite
- **m** MARBLE—Locally contains interbedded schist and calc-silicate rocks

Contact, approximately located—Triangle where well exposed; queried where uncertain

Fault—Dashed where approximately located; short dashed where inferred; dotted where concealed. U, relatively upthrown side; D, downthrown side

Anticline—Dashed where approximately located; dotted where concealed

Syncline—Showing direction of plunge; dashed where approximately located; dotted where concealed

Strike and dip of beds
- Inclined
- Vertical
- Horizontal
- Estimated

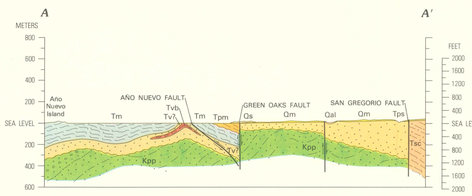
Strike and dip of foliation

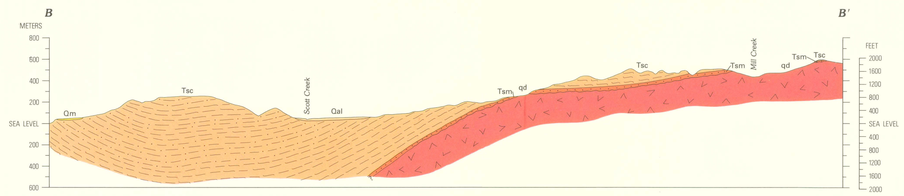
Fossil localities
- M5049 × Megainvertebrate
- V5555 × Vertebrate
- MI3675 × Microfossil

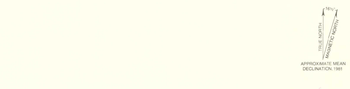
L37 × Lithologic sample locality

Abandoned exploratory oil well

Half arrows show direction of downslope movement







SCALE 1:24 000

1 0 1 MILE

1 .5 0 1 KILOMETER

CONTOUR INTERVALS 20 AND 40 FEET
DASHED LINES REPRESENT 20-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
DEPTH CURVES IN FEET—DATUM IS MEAN LOWER LOW WATER
SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
THE AVERAGE RANGE OF TIDE IS APPROXIMATELY 4 FEET

GEOLOGIC MAP AND SECTIONS OF THE AÑO NUEVO-DAVENPORT AREA, SAN MATEO AND SANTA CRUZ COUNTIES, CALIFORNIA

Base from U.S. Geological Survey
Año Nuevo and Davenport, 1955; Santa Cruz, 1954

Geology mapped 1960–69

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