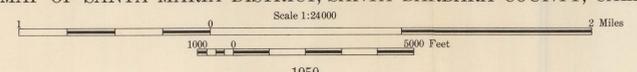


GEOLOGIC MAP OF SANTA MARIA DISTRICT, SANTA BARBARA COUNTY, CALIFORNIA



EXPLANATION

SEDIMENTARY ROCKS

- Dune sand**
 - Qai: Alluvium (Gravel, sand, silt)
 - Qan: Modern dune sand (Actively drifting sand)
 - Qai: Intermediate dune sand (Dune sand more or less anchored by vegetation)
 - Qao: Old dune sand (Dune sand anchored by vegetation)
 - Qt: Terrace deposits younger than Orcutt sand (Sand, gravel, rubble on stream and marine terraces; includes levels marked diplole on marine terraces; at places may include Orcutt sand)
 - Qp: Slightly deflated terrace deposits, sand, gravel
 - Tpr, jh: Paso Robles formation (Sand, gravel, clay limestone, ls)
- Coverage sandstone**
 - Tcg: Graciosa coarse-grained member (Coarse-grained sandstone and sand; conglomerate, gravel)
 - Tcf: Graciosa fine-grained member (Fine-grained sandstone and sand; fossiliferous clay sandstone in Carmelita Hills)
 - Tt: Foxen mudstone (Mudstone, siltstone, sh; fossiliferous sandstone, ls, limestone; Carmelita Hills)
- FOXEN CANYON-SISQUOC RIVER AREA**
 - Ts: Diatomaceous strata (Diatomaceous siltstone, sandstone)
 - Tst: Tunaque sandstone member (Sandstone, siltstone)
- PURISIMA HILLS**
 - Tam: Siquoc formation (Diatomaceous sandstone, clayey sandstone, clayey mudstone)
 - Tad: Siquoc formation (Diatomaceous mudstone, clayey sandstone, differentiated locally; ls; porcellanous or doleritic sandstone; "superior bed"; ls; fossiliferous sandstone, ls; porcellanous shale, ls; greenish porcellanous shale, ls)
- GATO RIDGE AND GRACIOSA RIDGE**
 - Ta: Siquoc formation (Diatomaceous sandstone, clayey sandstone, clayey mudstone)
- CASMALIA HILLS**
 - Tv, Tsd: Diatomaceous strata (Diatomaceous sandstone, clayey sandstone, sub-bedded diatomaceous strata, ls)
 - Tst: Todos Santos claystone member (Sandstone, porcellanous siltstone, thin zone of porcellanous shale)
- Montezuma shale**
 - Tmu: Upper member (Porcellanous shale, fossiliferous sandstone and diatomaceous shale, ls)
 - Tmm: Middle member (Chert, cherty shale, porcellanous shale)
 - Tml: Lower member (Doleritic shale, porcellanous shale, limestone)
- Point Sal formation**
 - Tps: Point Sal formation (Mudstone, siltstone, thin-bedded sandstone)
- Loope formation**
 - Tlu: Upper member (Greenish mudstone, siltstone and uppermost sandstone)
 - Tll: Lower member (Reddish sandstone and conglomerate, ls, ls)
 - Kn: Knoxville formation (Shale, thin-bedded sandstone, conglomerate)

IGNEOUS ROCKS

- Di: Diabase
- Ag: Augite andesite
- If: Undifferentiated igneous rocks of Franciscan formation (Mostly altered basalt and gabbro; minor areas of andesite and serpentinite)

Other symbols:

- Abandoned gas well
- Oil well producing from deep zone
- Shut-in gas well formerly producing from Knoxville formation in Santa Maria Valley field
- Uncompleted idle well. Deep zone tested but not productive. Deep zones same as above
- Dry hole. Deep zone tested, but not productive. Deep zones same as above
- Producing oil well. Deep zone tested but not productive. Deep zones same as above

Geographic grid: SHEET 1, SHEET 2, SHEET 3, SHEET 4, SHEET 5. Coordinates: 120°40', 30', 20', 10', 120°10', 35°00', 34°40'.

Base from airplane photograph mosaic sheets prepared by Fairchild Aerial Surveys

Geology by W. P. Woodring, M. N. Bramlette, R. L. Lohman, and R. P. Bryson. Surveyed in 1938-40