



EXPLANATION

SEDIMENTARY ROCKS

- Quaternary (Q)**
 - Qal: Alluvium, Green sand, sil.
 - Qem: Modern dune sand, Active dune sand
 - Qiu: Intermediate dune sand, Dune sand more or less anchored by vegetation
 - Qio: Old dune sand, Dune sand anchored by vegetation
 - Qr: Orcutt sand, Slightly deformed terrace deposits sand, gravel
 - Tor, Ja: Terrace deposits younger than Orcutt sand, Sand, gravel, rubble in stream and marine terraces, Includes locally marine deposits on marine terraces of dunes may include Orcutt sand
 - Tor, Ja: Pano Robles formation, Sand, gravel, clay, limestone, ls.
 - Tcc, G: Graciosa coarse-grained member, Coarse-grained sandstone and sand, conglomerate, gravel
 - Tcc, F: Graciosa fine-grained member, Fine-grained sandstone and sand, ls., fossiliferous sandstone corresponding approximately to base of Graciosa coarse-grained member
 - Tm: Paxon mudstone, Mudstone, siltstone, fine-grained sandstone, ls., limestone in Casmalia hills
- Cretaceous (C)**
 - Ts: Tertiary sandstone member, Sandstone, siltstone
 - Tsd: Tertiary sandstone member, Sandstone, siltstone, clay shale, limestone
 - Tss: Tertiary sandstone member, Shale, siltstone, clay shale, limestone

- Upper Miocene to middle Pliocene**
 - Ts: Diatomaceous strata, Diatomaceous siltstone, sandstone
 - Tsd: Tertiary sandstone member, Sandstone, siltstone
 - Tss: Tertiary sandstone member, Shale, siltstone, clay shale, limestone
- Upper Miocene**
 - Tm: Purisima Hills, Diatomaceous sandstone, clay shale, sandstone, siltstone, limestone
 - Tm: Gato Ridge and Graciosa Ridge, Shale, siltstone, clay shale, limestone
 - Tm: Casmalia Hills, Diatomaceous strata, Diatomaceous sandstone, clay shale, sandstone, light-colored diatomaceous strata, ls.
- Middle Miocene**
 - Tm: Upper member, Perforous shale, laminated diatomite and diatomaceous shale, ls.
 - Tm: Middle member, Chert, cherty shale, porcellanous shale
 - Tm: Lower member, Phosphate shale, porcellanous shale, limestone
- Lower Miocene (?)**
 - Tm: Point Sal formation, Mudstone, siltstone, fine-bedded sandstone
 - Tm: Upper member, Greenish sandstone, siltstone, and porphyritic mudstone
 - Tm: Lower member, Reddish sandstone and conglomerate, ls., ls.
 - Tm: Knoxville formation, Shale, thin-bedded sandstone, conglomerate
- Miocene (?)**
 - Tm: Undifferentiated Lompoc formation, Reddish and greenish conglomerate, sandstone, siltstone and mudstone, ls., ls.

- IGNEOUS ROCKS**
 - Diabase
 - Augite andesite
 - Jf: Undifferentiated igneous rocks of Franciscan formation, Mostly altered basalt and andesite, minor areas of porphyritic and peridotite
- Well Symbols**
 - Abandoned gas well
 - Oil well producing from deep zone, Franciscan formation in Santa Maria Valley field, Lompoc formation or Point Sal formation in Casmalia field, Monterey shale in West Cat Canyon field
 - 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
 - Shut-in oil well
 - Abandoned oil well
 - Producing gas well
 - Shut-in gas well

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

