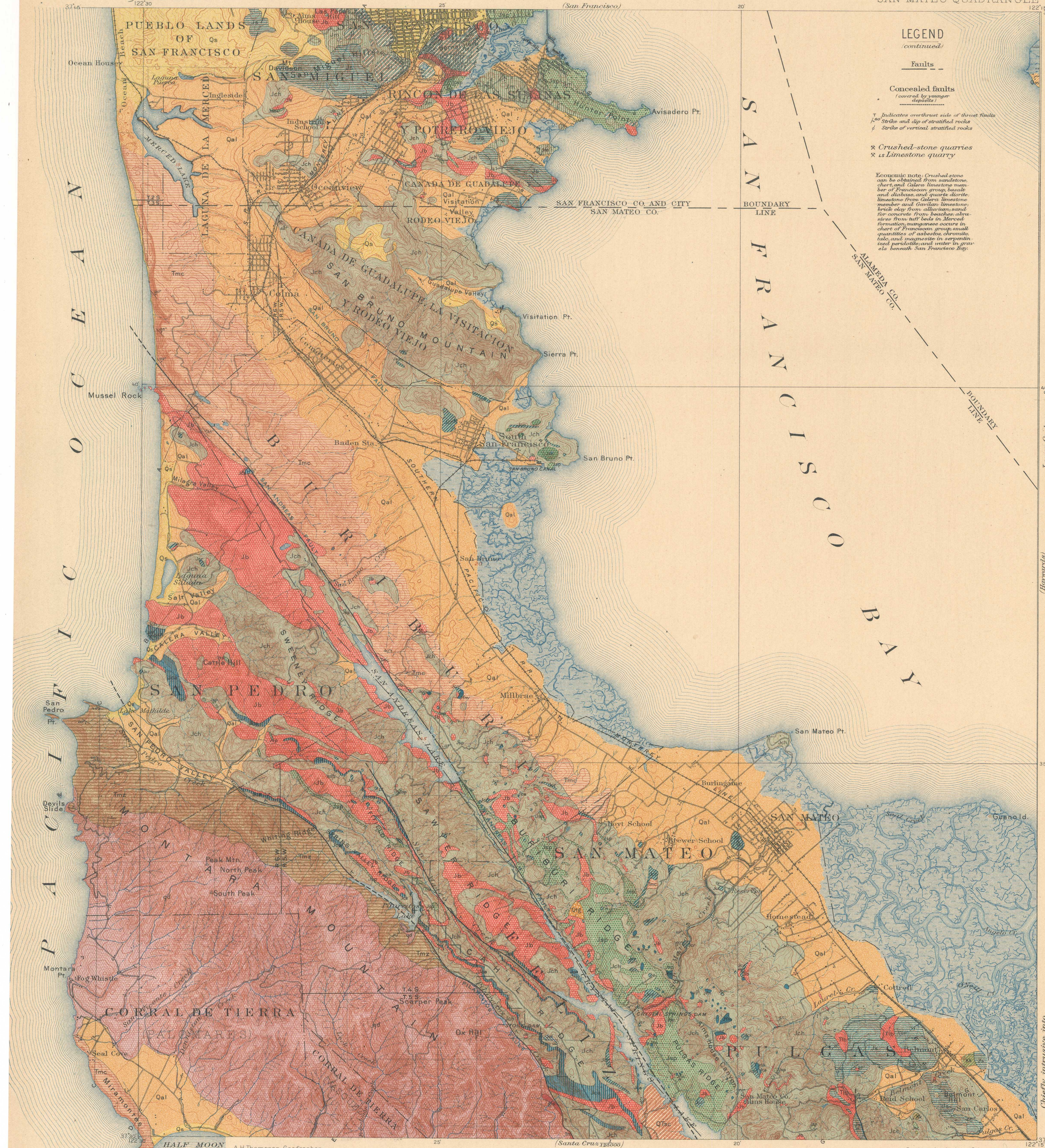
U.S. GEOLOGICAL SURVEY
GEORGE OTIS SMITH, DIRECTOR

AREAL GEOLOGY

CALIFORNIA
SAN MATEO QUADRANGLE



A.H. Thompson, Geographer.
Willard D. Johnson, Topographer in charge.
Triangulation by U.S. Coast and Geodetic Survey.
Topography by R.B. Marshall, R.H. McKee, and U.S.C.&G.S.
Surveyed in 1892.

Scale $\frac{1}{62500}$

1 ½ 0 1 2 3 4 Miles

1 ½ 0 1 2 3 4 5 Kilometers

Contour interval 25 feet.
Datum is mean sea level.
Edition of Oct. 1913.

TRUE NORTH — MAGNETIC NORTH 18½°
APPROXIMATE MEAN DECLINATION 1913.

DIAGRAM OF TOWNSHIP

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

Geology by Andrew C. Lawson, assisted at various times by students of the University of California.
Surveyed in 1893, 1895, 1906, and 1907.

LEGEND

SEDIMENTARY ROCKS

(Areas of subaqueous deposits are shown by patterns of parallel lines, subaerial deposits by patterns of dots and circles)

QUATERNARY

Recent
- Salt marsh deposits *(clay and silt)*
- Qs — Sand dunes and beach sand *(may include alluvium in places)*
- Qal — Alluvium *(probably of same age as Temescal formation; covered in places by dune sand)*

Pleistocene
- Qm — Merritt sand *(marine)*
- Qtg — Terrace gravel *(residual)*

TERTIARY

- QTsc — Santa Clara formation *(alluvium)*

Pliocene
- Tmc — Merced formation *(marine clay, sandstone, shale, and conglomerate; overlain in part by thick Quaternary sand and gravel)*

UNCONFORMITY

Eocene
- Tmz — Martinez ? formation *(conglomerate, coarse and fine arkosic sandstone, dark shale, and thin limestone)*

UNCONFORMITY

CRETACEOUS ?

Lower Cretaceous ? (post-Franciscan)
- Kk — Conglomerate, probably Knoxville formation

UNCONFORMITY

JURASSIC ? (pre-Knoxville)

Franciscan group (Haywards)
- Jbt — Bonita sandstone *(arkosic sandstone)*
- Ji — Ingleside chert *(alternations of thin layers of varicolored radiolarian chert, chiefly red, and thinner earthy shales)*
- Jm — Marin sandstone *(with subordinate amounts of shale)*
- Jfm — Metamorphic schist *(sedimentary and igneous rocks altered by contact metamorphism to amphibole, mica, quartz, and albite schists)*
- Js — Sausalito chert *(alternations of thin layers of varicolored radiolarian chert, chiefly red, and thinner earthy shales)*
- Jch — Cahil sandstone with Calera limestone member, Jca *(includes also lenses of radiolarian chert, Jcr, and of limestone, Jcl; may include some higher sandstone beds and chert lentils)*

UNCONFORMITY

PRE-JURASSIC ?

Pre-Franciscan
- gls — Gavilan limestone *(crystalline limestone masses included in quartz diorite)*

IGNEOUS ROCKS CHIEFLY INTRUSIVE

(Areas of igneous rocks are shown by patterns of triangles and rhombs)

TERTIARY

Miocene ?
- Tlb — Later basalt *(lava flows and intrusive bodies of undetermined age)*

JURASSIC ? (pre-Knoxville)

Chiefly intrusive into Franciscan group
- Jsc — Silica-carbonate rock *(aggregate of silica and various carbonates derived from alteration of serpentine)*
- Jsp — Serpentinized peridotite and associated gabbro and pyroxenite
- Jb — Basalt and diabase *(chiefly intrusive; commonly show spheroidal or ellipsoidal structures; includes some lava flows contemporaneous with Franciscan group)*

PRE-JURASSIC ?

Pre-Franciscan
- qd — Quartz-diorite *(large batholithic mass; "Montara granite")*