





GEOLOGIC AND TOPOGRAPHIC MAP  
OF THE

COAST ROUTE

From Los Angeles, California, to San Francisco, California

Base compiled from United States Geological Survey Atlas Sheets, from railroad alignments and profiles supplied by the Southern Pacific Company and from additional information collected with the assistance of this company

UNITED STATES GEOLOGICAL SURVEY

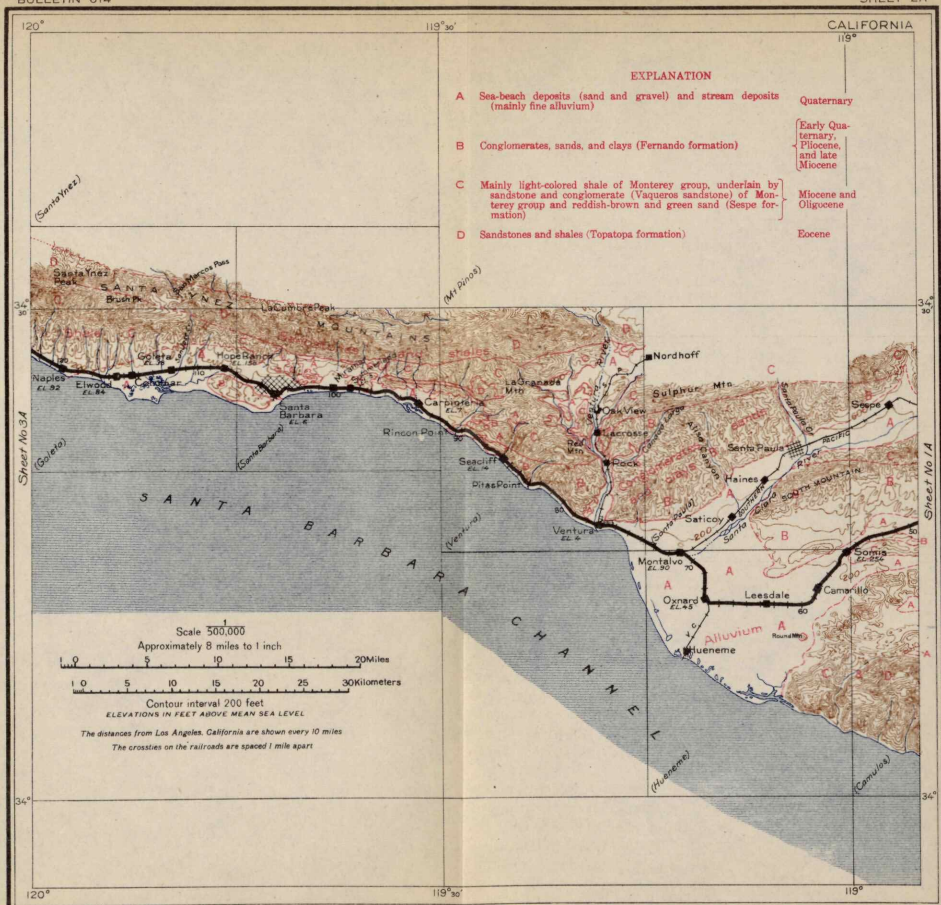
GEORGE OTIS SMITH, DIRECTOR

David White, Chief Geologist

R. B. Marshall, Chief Geographer

1915

Each quadrangle shown on the map with a name in parenthesis in the lower left corner is mapped in detail on the U. S. G. S. Topographic Sheet of that name.



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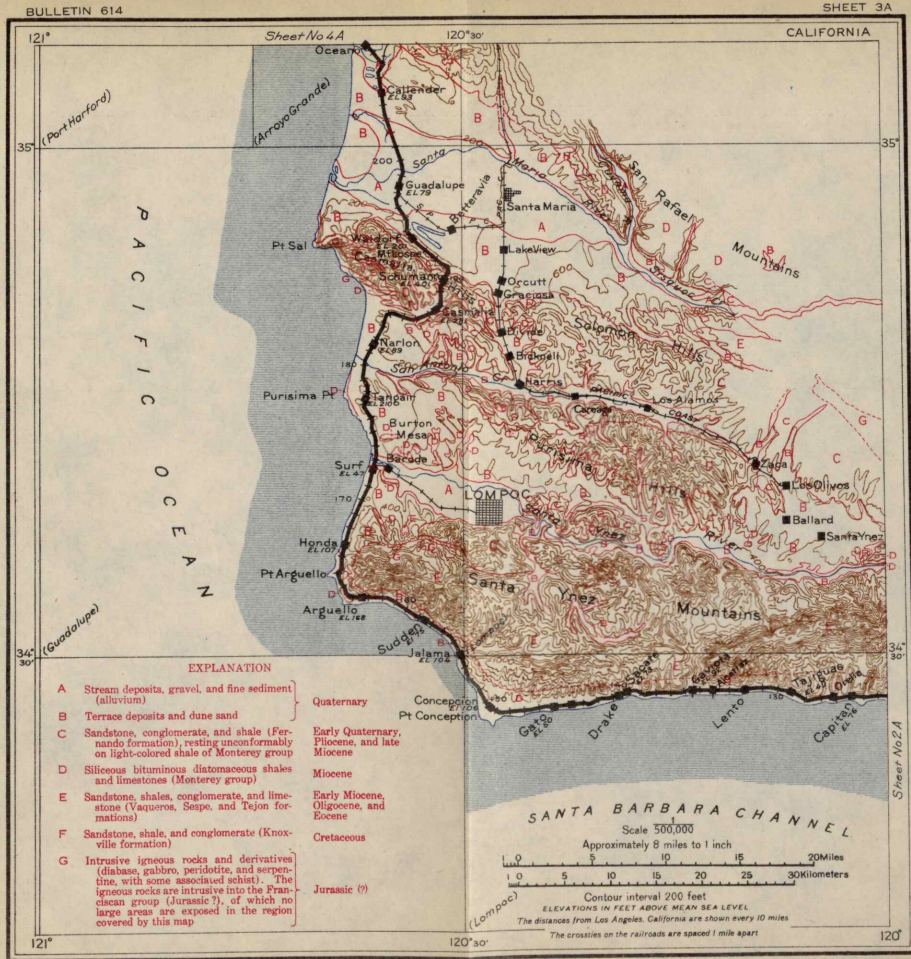
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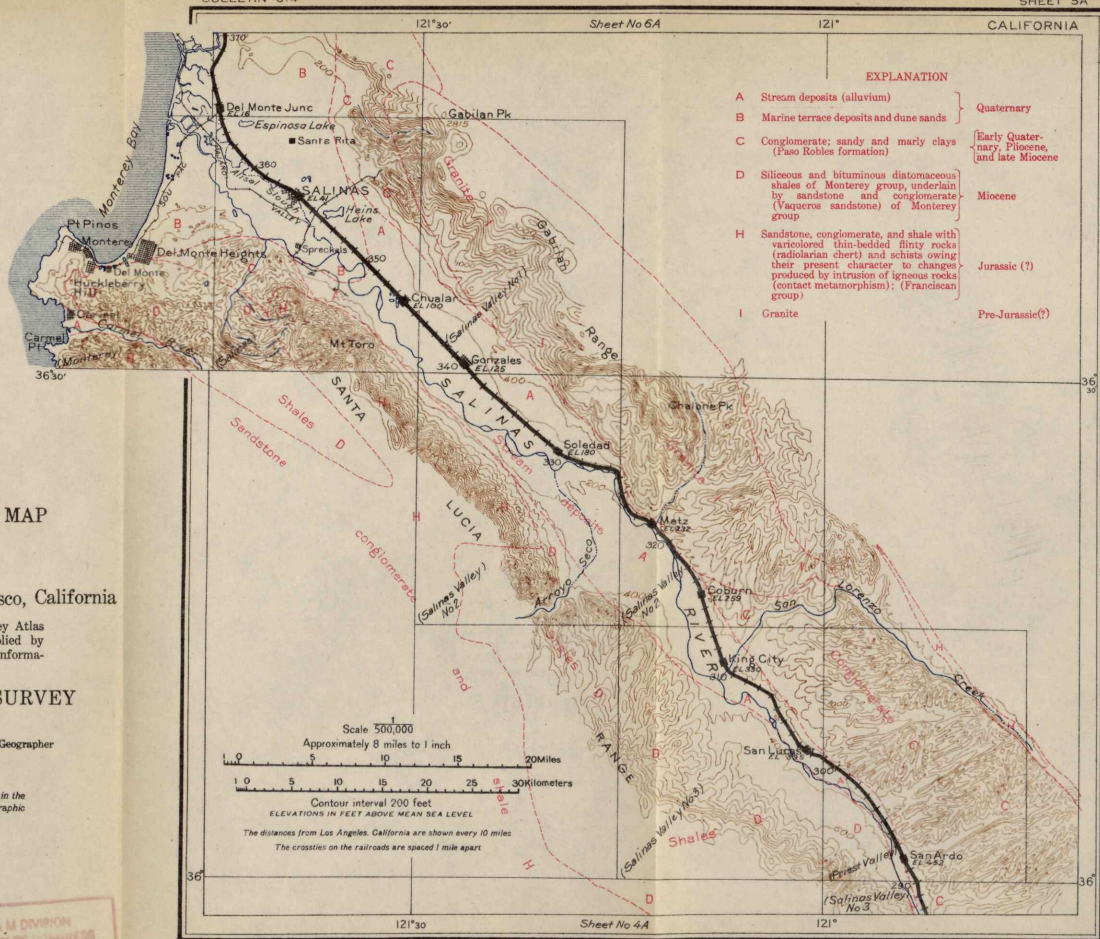
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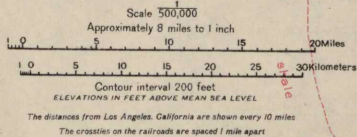
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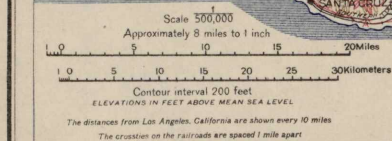
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### EXPLANATION

- |   |   |                               |
|---|---|-------------------------------|
| A | Stream deposits (alluvium), sand dunes, and beach sands   | Quaternary                    |
| B | Fresh-water gravels, sands, and clays (Santa Clara formation); marine clay, sandstone, and conglomerate (Merced formation)  | Early Quaternary and Pliocene |
| C | Conglomerate, sandstone, and shale (Purisima and Santa Margarita formations), underlain by chalky bituminous shale, in places containing flinty layers, and by massive sandstone (upper part of Monterey group); underlain by heavy-bedded sandstone and conglomerate (Vaqueros sandstone) of Monterey group (Miocene); at base clayey shales with some fine-grained sandstone (San Lorenzo formation, Oligocene) | Miocene and Oligocene         |
| D | Hard sandstone (Tejon formation); chiefly conglomerate with sandstone; underlain by shale and thin limestone (Martinez formation)   | Eocene                        |
| E | Lava flows (basalt and rhyolite)  | Tertiary                      |
| F | Massive yellowish sandstone with conglomerate at bottom (Chico formation, Upper Cretaceous), underlain by limy and sandy shale (Knoxville formation, Lower Cretaceous)  | Cretaceous                    |
| G | Intrusive rocks and derivatives (diabase, gabbro, peridotite, pyroxenite, serpentine)   | Jurassic (?)                  |
| H | Sandstones with subordinate shales and varicolored thin-bedded flinty rocks (radiolarian cherts) and some limestones. Locally changed to schists near contact with igneous rocks. (Franciscan group)  | Jurassic (?)                  |
| I | White to light-gray crystalline limestone and micaceous schist  | Pre-Jurassic(?)               |
| J | Granite (quartz diorite)  | Pre-Jurassic(?)               |



122° (Sheet No. 5 A)

121°30'

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