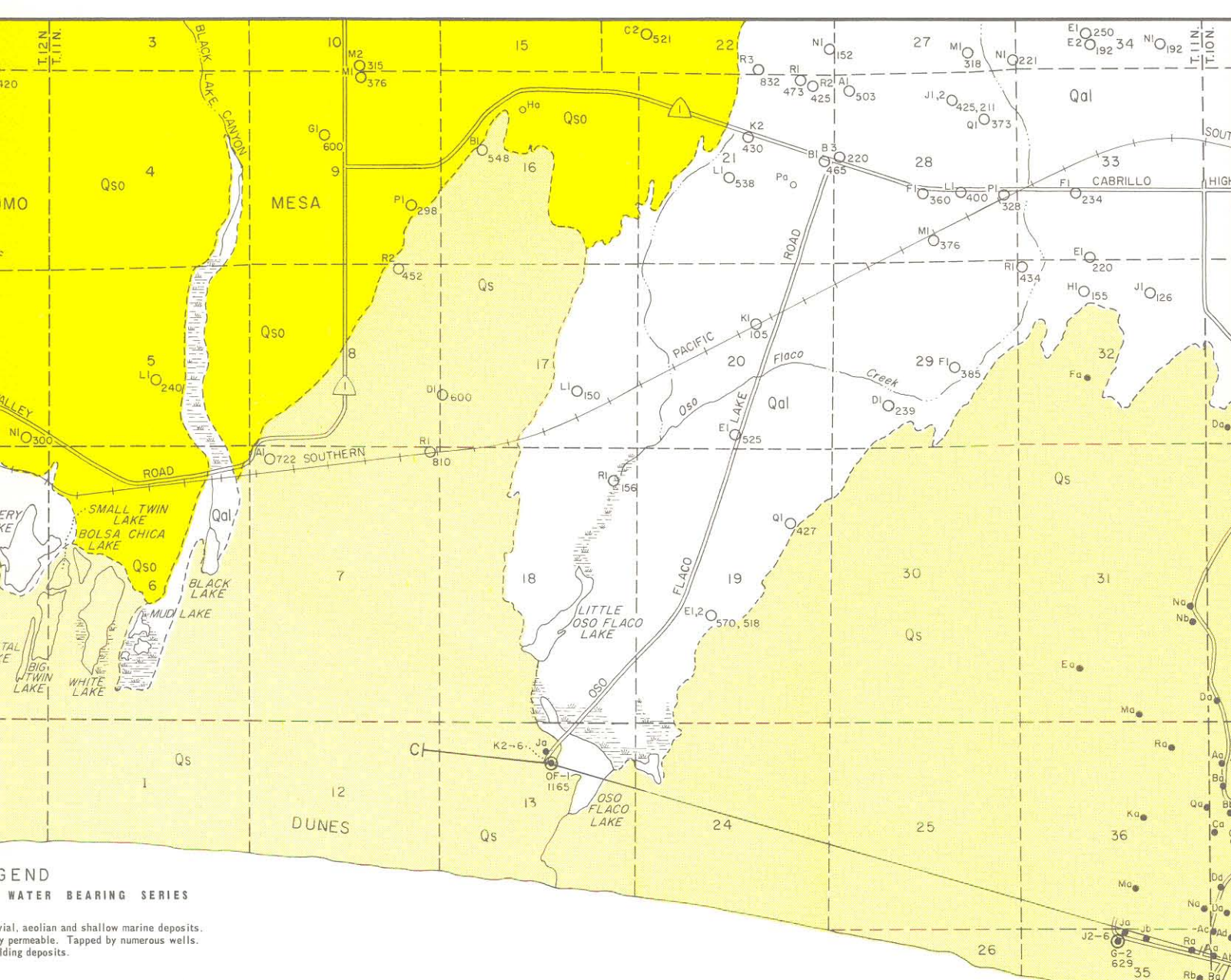


**LEG**  
YOUNGER W

Unconsolidated fluvial  
Moderately to highly p  
Principal water yieldi

- |                      |  |   |
|----------------------|--|---|
| QUATERNARY           | RECENT   | <b>RECENT DUNE SAND</b><br>ACTIVELY DRIFTING  |
|                      |  | <b>ALLUVIUM</b><br>GRAVEL, SAND, SILT         |
|                      | UPPER<br>PLEISTOCENE                               | <b>TERRACE DEPOSITS</b><br>SAND, GRAVEL, SILT |
|                      |  | <b>OLDER DUNE SAND</b><br>STABILIZED          |
|                      |  | <b>ORCUTT SAND</b><br>SLIGHTLY DEFORMED       |
| LOWER<br>PLEISTOCENE | <b>PASO ROBLES FORMATION</b><br>SAND, GRAVEL, SILT |   |
| TERTIARY             | MIOCENE<br>PLIOCENE                                | <b>CAREAGA SAND</b><br>UNCONSOLIDATED         |
|                      |  | <b>PISMO FORMATION</b><br>UNDIFFERENTIATED    |





**LEGEND**

**WATER BEARING SERIES**  
 aeolian and shallow marine deposits. Highly permeable. Tapped by numerous wells. Shifting deposits.

**ESSENTIALLY NONWATER BEARING SERIES**  
 Consolidated marine, volcanic and igneous rocks. Underlie and flank the water bearing deposits. Yield small quantities of fresh water from fractures at shallow depths in hill and mountainous areas. Contain brackish to saline water at depth.

**WATER BEARING SERIES**  
 cemented shallow marine deposits. Low to medium permeability. Now tapped by only a few wells. Important water supply.

**WATER BEARING SERIES**  
 cemented shallow marine deposits. Low to medium permeability. Now tapped by only a few wells. Important water supply.

**WATER BEARING SERIES**  
 cemented shallow marine deposits. Low to medium permeability. Now tapped by only a few wells. Important water supply.

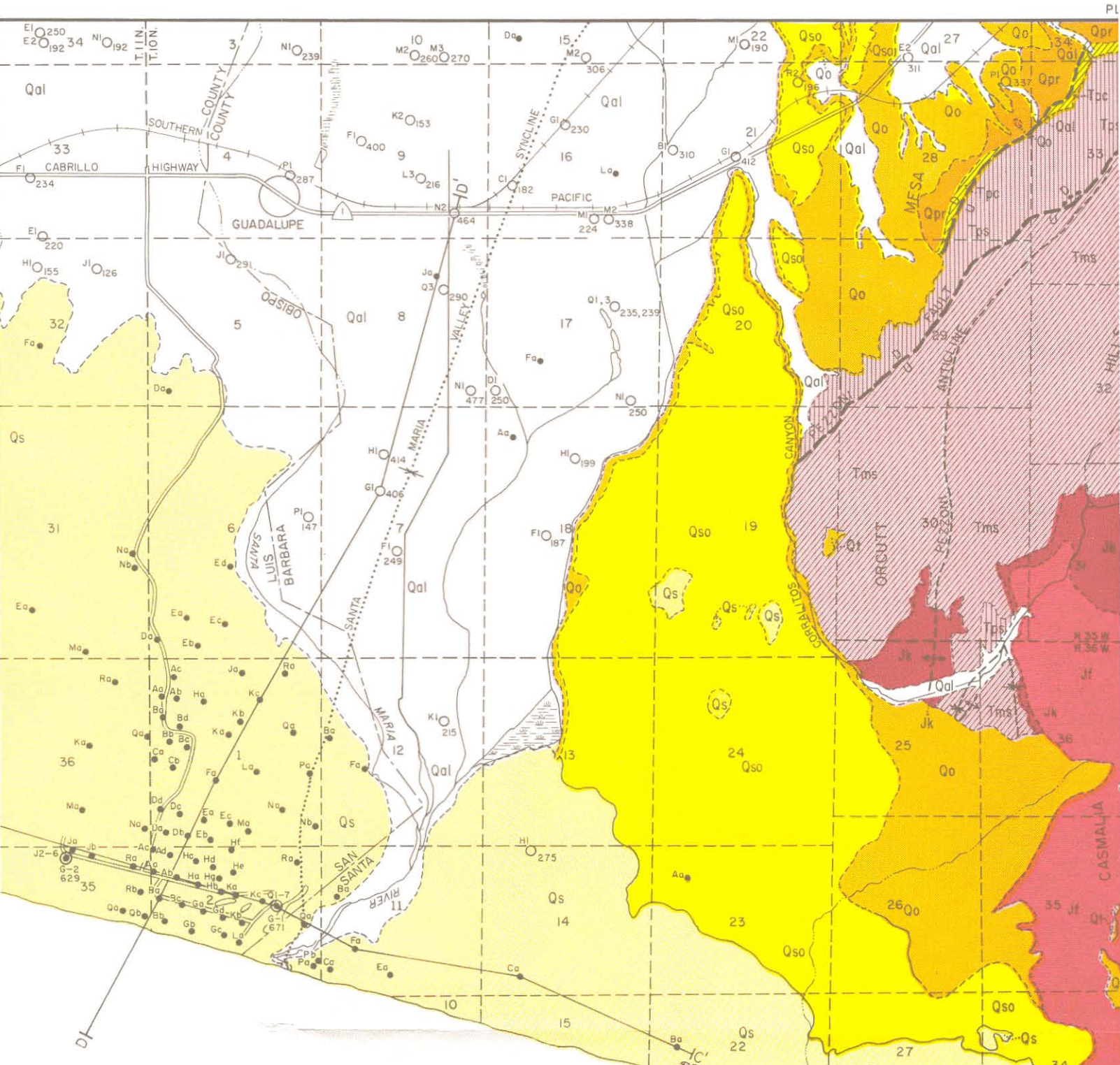
**WATER BEARING SERIES**  
 cemented shallow marine deposits. Low to medium permeability. Now tapped by only a few wells. Important water supply.

TERTIARY  
 MIocene  
 PLIOCENE  
 JURASSIC

- PLIOCENE**
  - UNDIFFERENTIATED MARINE SEDIMENTARY ROCKS.**  
SANDSTONES, SILTSTONES, AND SHALES
  - UNDIFFERENTIATED MARINE SEDIMENTARY ROCKS**  
CONGLOMERATES, SANDSTONES, SILTSTONES, AND SHALES
  - UNDIFFERENTIATED VOLCANIC ROCKS**
- MIOCENE**
- JURASSIC**
  - KNOXVILLE FORMATION**  
SHALE, THIN-BEDDED SANDSTONE, AND CONGLOMERATE
  - FRANCISCAN FORMATION**  
UNDIFFERENTIATED IGNEOUS, SEDIMENTARY, AND METAMORPHIC ROCKS

- FAULT, DASHED LINE WITH DOTS**
- CONTACT, DASHED LINE**
- ANTICLINE, DASHED LINE WITH UPWARD ARROWS**
- SYNCLINE, DASHED LINE WITH DOWNWARD ARROWS**
- LINE OF GEOLOGIC STRUCTURE, SOLID LINE WITH 'A' AND 'A''**
- WATER WELL, CIRCLE WITH 'A1' AND '473'**
- OIL WELL, CIRCLE WITH 'Ja' AND '473'**
- OIL WELL, CIRCLE WITH 'Jo' AND '473'**
- DWR EXPLORATION WELL, CIRCLE WITH 'A1' AND '473'**





- FAULT, DASHED WHERE APPROXIMATELY LOCATED, DOTTED WHERE CONCEALED. D DOWNTHROWN SIDE. U UPTHROWN SIDE.
- CONTACT, DASHED WHERE INFERRED.
- ANTICLINE, DASHED WHERE APPROXIMATELY LOCATED. DOTTED WHERE CONCEALED.
- SYNCLINE, DASHED WHERE APPROXIMATELY LOCATED. DOTTED WHERE CONCEALED.
- LINE OF GEOLOGIC SECTION

- WATER WELL WITH DRILLER'S LOG AND DEPTH
- OIL WELL WITH ELECTRIC LOG
- OIL WELL WITH DRILLER'S LOG
- DWR EXPLORATORY TEST HOLE

MUSSEL POINT

STATE OF CALIFORNIA  
THE RESOURCES AGENCY  
DEPARTMENT OF WATER RESOURCES POINT  
SOUTHERN DISTRICT

STATUS OF SEA-WATER INTRUSION:  
PISMO BEACH-GUADALUPE AREA  
SAN LUIS OBISPO AND SANTA BARBARA COUNTIES

**AREAL GEOLOGY**

SCALE OF FEET  
1000 0 2000 4000 6000

1969