



EXPLANATION

SEDIMENTARY ROCKS

Quaternary

- Qal**
Alluvium
Clay, silt, sand, and gravel, unconsolidated, gray, light-brown, or reddish-brown.
- Qt**
Terrace deposits
Clay, silt, sand, and gravel, unconsolidated or poorly consolidated, gray, light-brown, or reddish-brown.
- Qtsu**
Qts
Ts
Ts
Saugus formation
North of San Fernando River, brownish-red-brown, and tan sandstone and conglomerate, reddish-brown mudstone, and greenish-gray siltstone or very fine grained sandstone, and upper unnamed member, brown, reddish-brown, and tan sandstone and conglomerate. South of San Fernando River, brownish-red-brown, and tan sandstone and conglomerate, reddish-brown mudstone, and greenish-gray siltstone with interbedded sandstone and conglomerate. *Ts*, intertongues with upper part of Pico formation.
- Pico**
Pico formation
Light olive-gray and black-gray siltstone and fine-grained sandstone, light-brown and gray sandstone and conglomerate, *Pt*, dominantly siltstone or very fine grained sandstone. *Pt*, dominantly siltstone or very fine grained sandstone. Upper part intertongues with Saugus formation and lower part with Towsley formation. Megafossil lithologic units within the formation do not occur in any fixed stratigraphic position.
- Towsley**
Towsley formation
Brown siltstone and mudstone, light-brown and gray sandstone and conglomerate. *Ts*, dominantly siltstone or mudstone unit. *Ts*, dominantly sandstone or conglomerate unit. *Ts*, upper part intertongues with Pico formation and lower part with Towsley formation. Megafossil lithologic units within the formation do not occur in any fixed stratigraphic position.
- Tm**
Modelo formation
Brown or gray siltstone, mudstone, and siliceous shale with minor amounts of light-brown or gray sandstone and some light-gray limestone. Upper part intertongues with Towsley formation.
- Tm**
Mint Canyon formation
Greenish-gray or light-brown siltstone and mudstone, light-brown or gray sandstone and conglomerate. *Tm*, *Tm*.
- Ts**
Siltstone, sandstone, and conglomerate.

IGNEOUS AND METAMORPHIC ROCKS

bc
Basement complex
Includes schist, gneiss, quartz, and marble, hornblende and biotite diorite gneiss, and plutonic igneous rocks ranging in composition from granite to quartz diorite.

Landslide area

Geologic boundary or position of mapped bed
Dashed where approximately located.

Fault, showing dip
Dashed where approximately located or inferred; dotted where concealed; queried where doubtful; U, upthrown side; D, downthrown side.

Fault, showing relative movement
Dashed where approximately located or inferred; dotted where concealed. ↑ on upper plate.

Thrust fault
Dashed where approximately located or inferred; dotted where concealed. ↑ on upper plate.

Anticline
Showing trace of axial plane and direction of plunge of axis. Dashed where approximately located; dotted where concealed.

Syncline
Showing trace of axial plane and direction of plunge of axis. Dashed where approximately located; dotted where concealed.

Overtured anticline
Showing trace of axial plane and direction of dip of limbs. Dashed where approximately located; dotted where concealed.

Overtured syncline
Showing trace of axial plane and direction of dip of limbs. Dashed where approximately located; dotted where concealed.

Strike and dip of beds

Strike and dip of overturned beds

Horizontal beds

Apparent dip of beds, strike undetermined

Megafossil locality

Microfossil locality

Vertebrate fossil locality

Location of measured section of the Towsley formation
Number referred to in text

Well being drilled

Dry hole

Producing oil well

Shut-in oil well

Abandoned oil well

Producing gas well

Abandoned oil well converted to water well

Abandoned oil well converted to water drive well

Dry hole converted to water drive well
Well data as of March 1951

NOTE: See table 10 for data on numbered wells.

Wells mentioned in text or used in constructing structure sections, but not listed on wildcard table

Map symbol	Operator	Well	Field	On or near structure section
A	Breckonridge, B. B.	Reno 1	Placenta	B-E
B	Harrison and Stewart	No. 1	De Witt Canyon area of Newhall field	
C	do.	No. 3	do.	
D	Humble Oil and Refining Co.	Newhall Corp. 1	Castaic Junction	A-A'
E	do.	NLF 1	do.	A-A'
F	do.	NLF 2	do.	E-E'
G	do.	NLF 3	do.	A-A'
H	do.	NLF 5	do.	A-A'
I	do.	NLF 6	do.	A-A'
J	do.	NLF 8	do.	A-A'
K	Hurley-Kelley	Orduno 1	Ramona	A-A'
L	Morton and Dolley	Hilly 1	Newhall	B-E
M	Newhall Land and Farming Co.	Socal 2	Del Valle	F-F'
N	Ohio Oil Co.	Vasquez 1	do.	A-A'
O	do.	Vasquez 13	do.	A-A'
P	Republic Petroleum Corp.	Fink 3	Whitney Canyon area of Newhall field	F-F'
Q	Sonavia and Yant	Juanita	Placenta	B-E
R	Southern California Drilling Co.	Needham 1	Tunnell area of Newhall field	
S	Southern California Petroleum Co.	Vasquez 4	Del Valle	F-F'
T	Standard Oil Co.	Blair 7	do.	A-A'
U	do.	C.S.O.W. 2	Pico Canyon area of Newhall field	
V	do.	C.S.O.W. 12	do.	A-A'
W	do.	C.S.O.W. 13	do.	A-A'
X	do.	C.S.O.W. 32	do.	A-A'
Y	do.	Elsmore 2	Elsmore area of Newhall field	A-A'
Z	do.	Sepulveda 12	Del Valle	A-A'
AA	do.	Sepulveda 20	do.	A-A'
BB	do.	Wiley 4	Wiley Canyon area of Newhall field	
CC	do.	Wiley 18	do.	
DD	do.	Wiley 19	do.	
EE	do.	Wiley 25	do.	
FF	Sunray Oil Co.	RSP 1	Newhall-Potrero	B-E
GG	do.	RSP 9-3	do.	E-E'
HH	do.	RSP 11	do.	E-E'
II	do.	RSP 22	do.	E-E'
JJ	do.	RSP 44	do.	E-E'
KK	do.	RSP 53-5	do.	E-E'
LL	do.	RSP 65-6	do.	E-E'
MM	do.	RSP 66	do.	
NN	do.	RSP 78	do.	
OO	do.	RSP 83	do.	
PP	do.	RSP 89	do.	
QQ	do.	RSP 91	do.	
RR	do.	RSP 97-7	do.	E-E'
SS	do.	RSP 99	do.	E-E'
TT	Texas Co.	Ken 1	Ramona	
UU	Trigoad Oil Co.	Kinler	Del Valle	F-F'
VV	Union Oil Co.	Barnes 1	do.	F-F'
WW	do.	Barnes 2	do.	F-F'
XX	do.	Barnes 3	do.	F-F'
YY	do.	Barnes 4	do.	F-F'
ZZ	do.	Barnes 7	do.	F-F'
AAA	do.	Lincoln 1	do.	A-A'
BBB	do.	Lincoln 2	do.	A-A'
CCC	do.	Lincoln 16	do.	A-A'
DDD	do.	Lincoln 18	do.	A-A'
EEE	York Oil Co.	No. 1	Tunnell area of Newhall field	A-A'

