Preliminary Geologic Map of the Newbury Park 7.5' Quadrangle, Southern California

by

R. F. Yerkes¹ and R. H. Campbell²

Open-File Report 97-428

This report is preliminary and has not been reviewed for conformity with U. S. Geological Survey editorial standards or the North American Stratigraphic Code. Any use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by the U. S. Government.

¹345 Middlefield Road
Menlo Park, CA 94025

²922 National Center,
Reston, VA 20192
INTRODUCTION

This map is a preliminary product of the Southern California Digital 1:100,000 Geologic Map Series (Southern California Areal Mapping Project—SCAMP (Morton and Kennedy, 1989). The 1:24,000 manuscript for this map was compiled from original sources, chiefly at 1:24,000, and scanned and processed digitally using the U. S. Geological Survey Alacarte menu-driven interface (Wentworth and Fitzgibbon, 1991) for ARC/INFO, a commercial geographic information system (GIS) available from Environmental Systems Research Institute, Redlands, California.

This 1:24,000 quadrangle is one of sixteen that form the west half of the Los Angeles 1:100,000 quadrangle; the 1:24,000 quadrangles form the basic data supporting the regional-scale quadrangle, and thus include available data on exploratory oil wells and fossil collections.

Stratigraphic nomenclature is largely that of the source materials; it is subject to further modification as compilation progresses. Minor adjustments have been made in geologic boundaries to conform to the metric base, which was enlarged from 1:100,000.

The base map layers, drainage, roads, and topo contours, were prepared from publicly-available digital line graph (DLG) data for the 1:100,000 Los Angeles metric topographic map (1979 edition) by R. H. Campbell, U. S. Geological Survey, Reston, VA.

CORRELATION OF MAP UNITS, PRELIMINARY GEOLOGIC MAP,
NEWBURY PARK QUADRANGLE

Holocene
Pleistocene
QUATERNARY

Upper

Miocene

Middle

Tertiary

Lower

Oligocene & upper Eocene

Oligocene

Eocene & upper

Middle

Eocene

Lower

Tertiary

Upper

Miocene

Middle

Quaternary

Holocene
Pleistocene

Holocene

Pleistocene

Oligocene & upper Eocene

Eocene

Lower

Middle

Upper

Miocene

Tertiary

Quaternary

Holocene
Pleistocene

Upper

Middle

Lower
DESCRIPTION OF MAP UNITS

af Artificial fill

Qal Alluvium (Holocene)--Unconsolidated clay, sand, and gravel in stream beds and valley fill; locally includes colluvium, slopewash, and talus; Qsc--Sand, gravel, silt, and clay, unconsolidated, in active stream channels (northwest corner of map)

Qfp Floodplain deposits (Holocene and Pleistocene)--Sand, gravel, silt, and clay; unconsolidated and unsorted; dissected by modern drainages

Qao Older alluvium (Holocene and Pleistocene)--Poorly consolidated sand and gravel; dissected; includes floodplain deposits

Qls Landslide deposits (Holocene and Pleistocene)--Parent materials include both surficial deposits and bedrock; query (?) indicates doubtful assignment

Qc Colluvium (Holocene and Pleistocene)--clayey silt, sand, and gravel; unconsolidated and unsorted; may cemented by calcium carbonate

Qt Terrace deposits (Pleistocene)--Gravel, sand, and silt, slightly to well-consolidated, chiefly on flanks of valleys or streams

Qs Saugus Formation (Pleistocene)--Nonmarine sandstone and conglomerate; query (?), assignment doubtful

Tm Modelo Formation (middle and upper Miocene)--Siliceous or diatomaceous shale or siltstone, minor fine-grained sandstone; shales in the northwest quarter of the Thousand Oaks quadrangle (next east) yield upper Luisian to middle Mohnian (late middle to upper Miocene) foraminifers

Ti Intrusive rocks--chiefly basalt or diabase; some dacite plugs

Tcb Calabasas Formation (of Topanga Group) (middle Miocene)--Sandstone and siltstone, massive to poorly bedded, scattered calcareous concretions; local pebble conglomerates contain quartzites and clasts derived from underlying volcanic rocks

Tco Conejo Volcanics (of Topanga Group) (middle Miocene)--Andesitic to basaltic flows, volcanic breccia and agglomerate; thickness about 1800 m; microfaunal age Saucian to Relizian, K/Ar age 15.5-13.9 m.y. (Turner and Campbell, 1979); Tcoa, chiefly andesitic or dacitic; Tcob, chiefly basaltic
Ttcu Topanga Canyon Formation (of Topanga Group) (middle Miocene) -fine- to medium-grained sandstone, minor interbedded siltstone and shale; thickness about 1300 m; locally yields early or middle Miocene gastropods or foraminifers

Tv Vaqueros Formation (early Miocene) - Sandstone, massive to thick-bedded, coarse grained, arkosic; locally contains reefs of fossil debris and locally abundant *Pecten nevadanus*; thickness about 195 m

Ts Sespe Formation (Oligocene to early Miocene) - Nonmarine pebbly to conglomeratic sandstone, commonly having reddish or greenish clayey siltstone

**MAP SYMBOLS**

--- Contact or mapped horizon—Long-dashed where approximately located, short-dashed where inferred

---?--- Fault—Long-dashed where approximately located, short-dashed where inferred, dotted where concealed, queried where doubtful

вших Anticline—Approximately located, dotted where concealed; showing crestline

 erotici Syncline—Approximately located, dotted where concealed; showing troughline

Strike and dip of inclined beds

Diamond 408 Exploratory well—Number refers to table 1, below

* FH13 Fossil locality—F, macrofossil collection; f, microfossil collection; number refers to table 2, below
REFERENCES


Table 1—DATA ON EXPLORATORY WELLS, NEWBURY PARK QUADRANGLE¹

<table>
<thead>
<tr>
<th>MAP NO.</th>
<th>T</th>
<th>FW</th>
<th>SEC</th>
<th>OPERATOR</th>
<th>NAME/NUMBER</th>
<th>ELEVATION (ft)</th>
<th>TOTAL DEPTH (ft)</th>
<th>BOTTOM²</th>
</tr>
</thead>
<tbody>
<tr>
<td>350</td>
<td>2n</td>
<td>20</td>
<td>20</td>
<td>Royal Resources</td>
<td>St. Johns Semi-nary 1-20</td>
<td>337</td>
<td>9746</td>
<td>M</td>
</tr>
<tr>
<td>351</td>
<td>2N</td>
<td>20</td>
<td>21</td>
<td>Texaco, Inc.</td>
<td>Miketta 1</td>
<td>413</td>
<td>8045</td>
<td>E</td>
</tr>
<tr>
<td>352</td>
<td>2N</td>
<td>20</td>
<td>23</td>
<td>Shell CPI</td>
<td>Everett C-1</td>
<td>443</td>
<td>532</td>
<td>M</td>
</tr>
<tr>
<td>353</td>
<td>2N</td>
<td>20</td>
<td>23</td>
<td>Exxon Co. U.S.A.</td>
<td>Burkett 1</td>
<td>339</td>
<td>5530</td>
<td>M</td>
</tr>
<tr>
<td>354</td>
<td>2N</td>
<td>20</td>
<td>27</td>
<td>Camarillo Refin. &amp; Petrol. Co.</td>
<td>1</td>
<td>200</td>
<td>1100</td>
<td>M</td>
</tr>
<tr>
<td>355</td>
<td>2N</td>
<td>20</td>
<td>28</td>
<td>Joe Schuck</td>
<td>1</td>
<td>500</td>
<td>1073</td>
<td>M</td>
</tr>
<tr>
<td>357</td>
<td>2N</td>
<td>20</td>
<td>32</td>
<td>ARCO</td>
<td>Camarillo 1</td>
<td>136</td>
<td>11002</td>
<td>O</td>
</tr>
<tr>
<td>360</td>
<td>2N</td>
<td>20</td>
<td>36</td>
<td>ARCO</td>
<td>Janss 1</td>
<td>316</td>
<td>8151</td>
<td>O</td>
</tr>
<tr>
<td>382</td>
<td>2N</td>
<td>20</td>
<td>33</td>
<td>Conejo Hills Oil</td>
<td>Janss 1</td>
<td>770</td>
<td>7247</td>
<td>O</td>
</tr>
<tr>
<td>383</td>
<td>2N</td>
<td>19</td>
<td>33</td>
<td>F.E. Abbott, Trst. Core Hole 1</td>
<td>725</td>
<td>1268</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>419</td>
<td>1N</td>
<td>20</td>
<td>11</td>
<td>Justice Oil Co.</td>
<td>1</td>
<td>660</td>
<td>860</td>
<td>M</td>
</tr>
<tr>
<td>420</td>
<td>1N</td>
<td>20</td>
<td>22</td>
<td>Calif.-Wyo. Oil Prod. Assoc.</td>
<td>1</td>
<td>800</td>
<td>872</td>
<td>M</td>
</tr>
<tr>
<td>421</td>
<td>1N</td>
<td>20</td>
<td>24</td>
<td>Sycamore Oil Co.</td>
<td>Hansen 1</td>
<td>1200</td>
<td>1703</td>
<td>M</td>
</tr>
<tr>
<td>424</td>
<td>1N</td>
<td>19</td>
<td>6</td>
<td>Superior Oil Co.</td>
<td>Janss Comm. 1</td>
<td>618</td>
<td>6015</td>
<td>O</td>
</tr>
<tr>
<td>425</td>
<td>1N</td>
<td>19</td>
<td>7</td>
<td>Newbury Park Comm. Oil Prod.</td>
<td>1</td>
<td>645</td>
<td>400</td>
<td>M</td>
</tr>
<tr>
<td>426</td>
<td>1N</td>
<td>19</td>
<td>7</td>
<td>L.I. Bartlow &amp; J. Hetman</td>
<td>Sime Hayes 1</td>
<td>672</td>
<td>695</td>
<td>M</td>
</tr>
<tr>
<td>427</td>
<td>1N</td>
<td>19</td>
<td>7</td>
<td>L.I. Bartlow &amp; J. Hetman</td>
<td>Sime Hayes 2</td>
<td>665</td>
<td>922</td>
<td>M</td>
</tr>
<tr>
<td>431</td>
<td>1N</td>
<td>19</td>
<td>29</td>
<td>Morgan Brown, Inc. McMahan 1</td>
<td></td>
<td>1006</td>
<td>7096</td>
<td>K</td>
</tr>
</tbody>
</table>

¹Data from Yerkes and Showalter, 1990.
²E, Eocene; K, Cretaceous; M, Miocene; O, Oligocene (Sespe Fm.).
<table>
<thead>
<tr>
<th>MAP NO 1</th>
<th>T</th>
<th>RW</th>
<th>SEC</th>
<th>COLLECTOR 2</th>
<th>AGE 3</th>
<th>UNIT</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FJ23-1</td>
<td>2N</td>
<td>20</td>
<td>22</td>
<td>USGS</td>
<td>Q</td>
<td>Qa1</td>
<td>RHC*, unpub.</td>
</tr>
<tr>
<td>F69C4</td>
<td>1N</td>
<td>19</td>
<td>5</td>
<td>USGS</td>
<td>Mem</td>
<td>Tt</td>
<td>RHC*, unpub.</td>
</tr>
<tr>
<td>F69C5</td>
<td>2N</td>
<td>19</td>
<td>31</td>
<td>USGS</td>
<td>Mm</td>
<td>Tt</td>
<td>RHC*, unpub.</td>
</tr>
<tr>
<td>F69C8</td>
<td>1N</td>
<td>19</td>
<td>6</td>
<td>USGS</td>
<td>Mem</td>
<td>Tt</td>
<td>RHC*, unpub.</td>
</tr>
<tr>
<td>f69C1</td>
<td>2N</td>
<td>19</td>
<td>32</td>
<td>USGS</td>
<td>Mem</td>
<td>Tt</td>
<td>RHC*, unpub.</td>
</tr>
<tr>
<td>f69C2</td>
<td>2N</td>
<td>19</td>
<td>32</td>
<td>USGS</td>
<td>Mem</td>
<td>Tt</td>
<td>RHC*, unpub.</td>
</tr>
<tr>
<td>f69C3</td>
<td>1N</td>
<td>19</td>
<td>5</td>
<td>USGS</td>
<td>M</td>
<td>Tt</td>
<td>RHC*, unpub.</td>
</tr>
<tr>
<td>f69C10</td>
<td>1N</td>
<td>19</td>
<td>6</td>
<td>USGS</td>
<td>Mem</td>
<td>Tt/Tc</td>
<td>RHC*, unpub.</td>
</tr>
<tr>
<td>f69C11</td>
<td>1N</td>
<td>19</td>
<td>8</td>
<td>USGS</td>
<td>Mem</td>
<td>Tt</td>
<td>RHC*, unpub.</td>
</tr>
<tr>
<td>f69C12</td>
<td>1N</td>
<td>19</td>
<td>4</td>
<td>USGS</td>
<td>Mm?</td>
<td>Tt</td>
<td>RHC*, unpub.</td>
</tr>
</tbody>
</table>

1 F, macrofossil collection; f, microfossil collection; number same as collector's number.
3 M, Miocene; Q, Quaternary; e, early; m, middle.
* RHC, R. H. Campbell, U. S. Geol. Survey field investigation.