U. S. DEPARTMENT OF THE INTERIOR

U. S. GEOLOGICAL SURVEY

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

by

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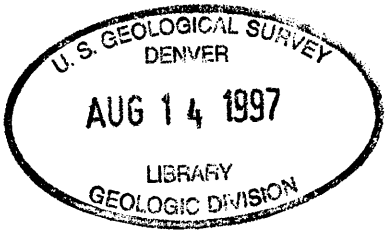
Open-File Report 97-428



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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) avaialable 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.

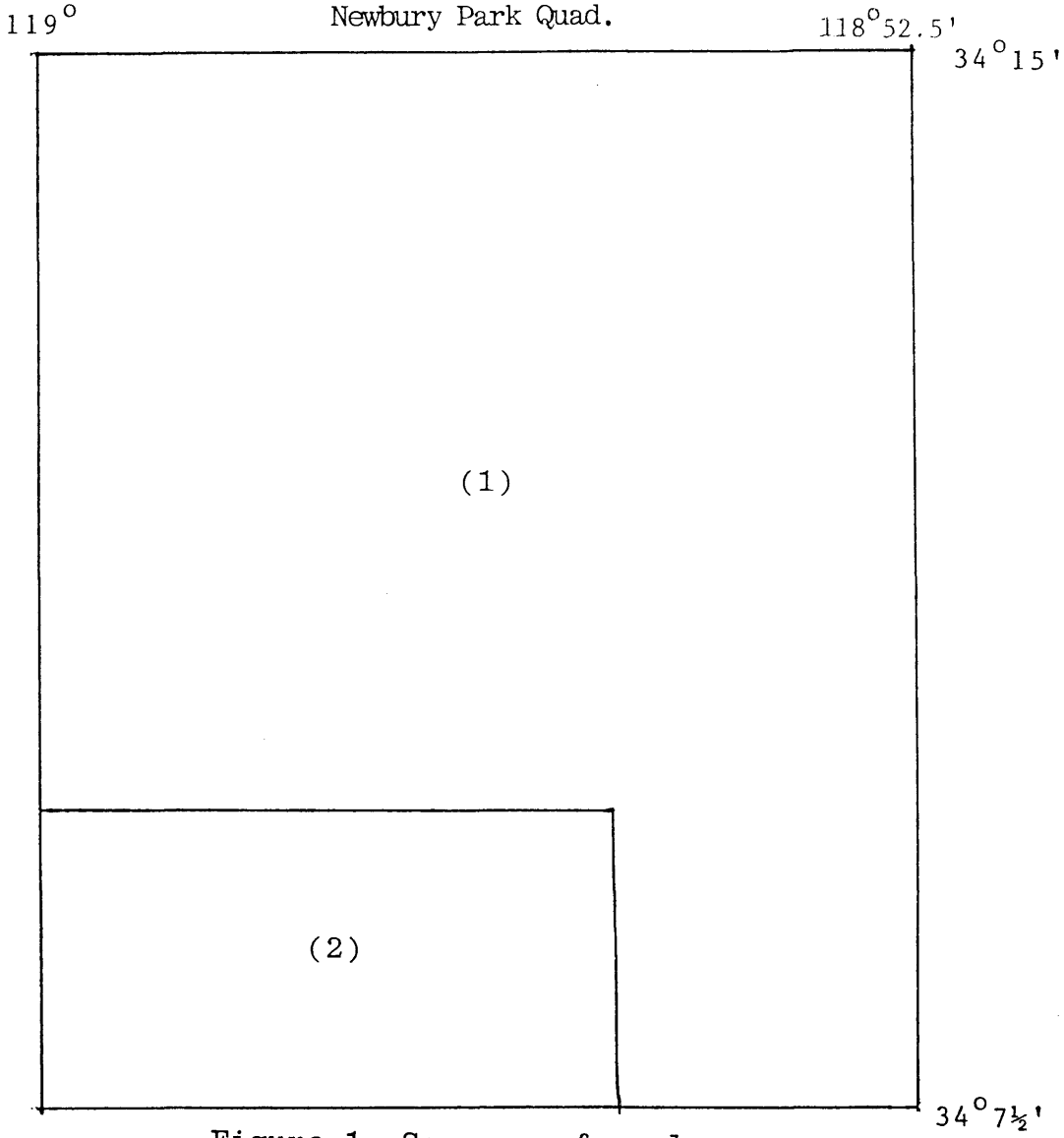
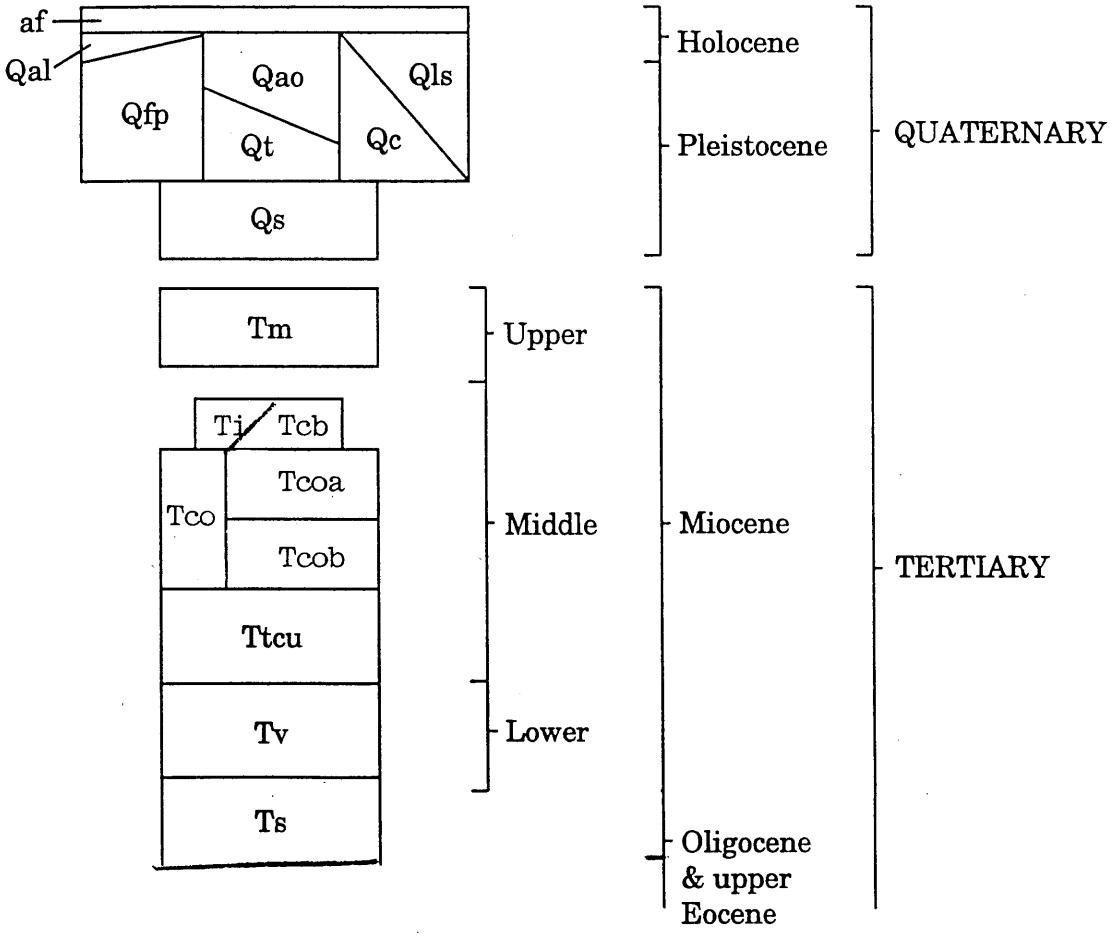


Figure 1- Sources of geology

1. California Division Mines and Geology (1972), and Weber (1984), with additions from Morton (1972).
2. Sonneman, H. S. (1975), with additions from Morton (1972).

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



EXPLANATION, PRELIMINARY GEOLOGIC MAP, NEWBURY PARK QUADRANGLE

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 Saucesian 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

Anticline— Approximately located, dotted where concealed; showing crestline

Syncline— Approximately located, dotted where concealed; showing troughline

70 **Strike and dip of inclined beds**

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

California Division of Mines and Geology, 1972, Geologic map of southern Ventura County, California: Prelim. Rpt. 14, pl. 1, scale 1:48,000.

Morton, D. M., 1972, Reconnaissance photo-interpretation map of major landslides, southern Ventura County, California: Calif. Div. Mines and Geology, Prelim. Rpt. 14, pl. 5, scale 1:48,000.

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Weber, F. H. Jr., 1984, Geology of the Calabasas-Agoura-Eastern Thousand Oaks area, Los Angeles and Ventura Counties, California: Calif. Div. Mines and Geol. Open-File Rpt. 84-1 LA, pl. 1, scale 1:48,000.

Wentworth, C. M., and Fitzgibbon, T. T., 1991, Alacarte User Manual (Ver. 1.0): U.S. Geol. Survey Open File Rpt. 91-587C, 267 p.

Yerkes, R. F., and Showalter, P. K., 1990, Exploratory wells drilled in the Los Angeles, California 1:100,000 quadrangle: U. S. Geol. Survey OFR 90-627, 46 p., 1 map at 1:100,000.

Table 1--DATA ON EXPLORATORY WELLS, NEWBURY PARK QUADRANGLE[1]

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

[1]Data from Yerkes and Showalter, 1990.
[2]E, Eocene; K, Cretaceous; M, Miocene; O, Oligocene (Sespe Fm.).

Table 2--DATA ON FOSSIL LOCALITIES, NEWBURY PARK QUADRANGLE

MAP NO[1]	T	RW	SEC	COLLECTOR[2]	AGE[3]	MAP UNIT	SOURCE
FJ23-1	2N	20	22	USGS	Q	Qal	RHC*, unpub.
F69C4	1N	19	5	USGS	Mem	Tt	RHC*, unpub.
F69C5	2N	19	31	USGS	Mm	Tt	RHC*, unpub.
F69C8	1N	19	6	USGS	Mem	Tt	RHC*, unpub.
f69C1	2N	19	32	USGS	Mem	Tt	RHC*, unpub.
f69C2	2N	19	32	USGS	Mem	Tt	RHC*, unpub.
f69C3	1N	19	5	USGS	M	Tt	RHC*, unpub.
f69C10	1N	19	6	USGS	Mem	Tt/Tc	RHC*, unpub.
f69C11	1N	19	8	USGS	Mem	Tt	RHC*, unpub.
f69C12	1N	19	4	USGS	Mm?	Tt	RHC*, unpub.

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