EXPLANATION

Qya — Younger alluvial deposits
(Fanglomerate, fine-grained bolson deposits and sand dunes west of mountains; slope wash deposits and alluvium within mountain area)

Qoa — Older alluvial deposits
(Fanglomerate west of mountains; slope deposits and gravel within mountain area)

Ti — Intrusive igneous rocks
(Small plug of trachyte in eastern part of area)

QUATERNARY

TERTIARY (?)

NORTHWEST PART OF AREA

SOUTHEAST PART OF AREA

Ochoa series

Pcs — Castile formation
(Laminated anhydrite, altered to gypsum on outcrop; some limestone)

Guadalupe series

Pcb (ss) — Carlsbad limestone
(Thin-bedded, with sandstone members, ss)

Pc (m, br) — Capitan limestone
(Thick-bedded or massive, with some particularly massive layers, m; passes locally into breccia, br)

Pg — Goat Seep limestone
(Thick-bedded to massive, in part sandy)

Pds — Sandstone tongue of Cherry Canyon formation
(Fine-grained sandstone)

Delaware Mountain group

Pdb — Bell Canyon formation
(Fine-grained sandstone, with Lamar limestone member (lb), flaggy limestone bed (7), and Rader (6), Pinery (5), and Hegler (4) limestone members)

Pdc — Cherry Canyon formation
(Fine-grained sandstone, some shaly sandstone, with Manzanita (3), South Wells (2), and Getaway (1) limestone members; lumpy gray limestone phase of Manzanita (3a) separately mapped in southeast part of area; thin beds of quartzite (q) separately mapped in places between South Wells and Getaway members)

Pdy — Brushy Canyon formation
(Fine to coarse-grained sandstone, conglomerate locally at base; some limestone lenses, ls)

UNCONFORMITY

Leonard series

Bone Spring limestone

Pbc — Cutoff shaly member
(Shale and thin-bedded limestone)

Pby — Victorio Peak gray member
(Thick-bedded, light gray or gray-brown limestone)

Pbl — Black limestone beds
(Thin-bedded, in part shaly)

Pbc — Cutoff shaly member
(Shale and thin-bedded limestone, probably equivalent to typical Cutoff shaly member of northwest part of area)

Pbl — Black limestone beds
(Thin-bedded, in part shaly)

PERMIAN

BASE CONCEALED

45 — Normal fault, showing dip and downthrown side
(Broken where hypothetical, dotted where concealed by younger deposits)

Vertical fault

40 — Strike and dip
(Shows slope of tilted beds, and in places slope of original depositional surfaces)

Horizontal strata

Well drilled for oil
(Abandoned)

Quarry or prospect opening

Base west of 104°45′ from map of U. S. Geological Survey Guadalupe Peak quadrangle; to east, compiled from ground surveys by P. B. King and others, and from aerial photographs

Geology by P. B. King and H. C. Fountain. Surveyed in 1934, 1935, and 1939. Eastern part revised from aerial photographs, 1946.

Section along line A–A′

Section along line B–B′ GUADALUPE PEAK HORST

Section along line C–C′

Section along line D–D′

Members of Cherry Canyon formation (Pdc) and Bell Canyon formation (Pdb) not shown separately on sections

GEOLOGIC MAP AND SECTIONS OF SOUTHERN GUADALUPE MOUNTAINS, TEXAS

Scale 1:48,000

1 1/2 0 1 2 3 4 Miles

Contour interval 250 feet
Datum is mean sea level

1948