PLATE 8-1. Explanation of Basin-fill and Bedrock Units on PLATES 8A and 8B. Lithostratigraphic, Hydrostratigraphic and Time-Rock Unit, and Fault-Zone Category Definitions in TABLE 2

RA Channel and overbank-floodplain deposits of the Rio Grande—Late Quaternary; as much as 100 ft (30 m) thick and mostly in the saturated zone

Qb Alkali-olivine basalt flows and cinder cones associated with volcanic centers in the Mesilla Basin-West Mesa and West Potrillo Mountains areas—Pleistocene

SFG Rio Grande-rift basin fill-undivided—mostly Santa Fe Group: HSU's USF/MSF/LSF (*LFAs 1-10*)—Late Oligocene to Early Pleistocene; thickness- locally up to 3,600 ft (1100 m), but less than 2,500 ft (760 m) in the MeB

Tmi Intermediate to silicic (felsitic) plutonic rocks in the Organ and Dona Ana Mountains, and Mt. Riley-Cox and **TmLC** areas, including monzodiorite to syenite stocks— Oligocene and Late Eocene (Seager et al. 1987, Clemons 1993, Seager 1995)

Tmrs Silicic pyroclastic and volcaniclastic rocks—Oligocene; mainly rhyolite and latite ashflow tuffs and tuffaceous sandstones, with some capping basaltic-andesite flows

TmCH Cedar Hills vent zone (Seager and Clemons 1975; Mack et al. 1994, 1998). N-S aligned series of flow-banded rhyolite domes and feeder conduits (unit Tmrs) that are intruded into the Tlvs/Tls/Pz/XY stratigraphic sequence in the Cedar-Corralitos Upland Basin (**PL. 2,** and **PL. 5a** and **5d**)

TmLC Lanark igneous-intrusive complex (Clemons 1993, Report **Part 6.3.2a**). Mixed felsic intrusive-rock varieties (Tmi), and contact-altered volcanic and sedimentary rocks of the intruded-bedrock sequence (Tlvs/Tls/K/P-**TBL. 2**). The "complex" is located in southern part of the Northern Mid-Basin High, where it is buried by at least 1,500 ft (455 m) of SFG basin fill near UPRR **Lanark Siding (**no. 237, **TBL. 1**; **PLS. 1B**, **1C**, **3, 5i** and **5q**, and **8A**)

Tlvs Volcaniclastic and epiclastic-sedimentary rocks, local basal gypsite beds, and some andesite flows and breccias. Palm Park-Rubio Peak correlative of Eocene age. The unit is locally buried by as much as 1,450 ft (442 m) of SFG basin fill and is about 3,880 ft (1,183 m) thick in no.180 oil test (**TBLS. 1** and **2; PLS. 5h** and **5q**).

Tli Intrusive igneous rocks of intermediate composition; porphyritic and generally fine grained; and intercalated with Tlvs clastic rocks. Eocene age

Tls Mostly sedimentary rocks, sandstones, mudstones and conglomerates with minor or no volcanic constituents (non-marine). General Love Ranch/Lobo Fm correlative of Paleocene and Early Eocene age. The unit is about 7,000 ft (2,134 m) thick in no.180 oil test (**PLATE 5h** and **5q**). An inferred correlative sequence of siliciclastic rocks is at least 1,000 ft (330 m) thick in no.397 oil test (**TBL. 1**, **PL. 5s**).

K Sandy to shaly limestone, pelecypod-coquina limestone, silty shale, calcareous sandstone, and limestone-pebble conglomerate, with local gypsite interbeds (marine). Early Cretaceous Age, and subject to major Laramide tectonic deformation. Approximately 1550 to 2200 ft (470-670m) thick in the East Potrillo Mountains. The unit is about 1,050 ft (320 m) thick in no.180 oil test, and 5,512 ft (1,680 m) thick in no.394 oil test (**TBL. 1**)

Pz Primarily limestone, with shale, sandstone, redbed mudstones, and local gypsite beds (mostly marine)—Paleozoic age rocks-undivided

XY Igneous and metamorphic rocks, undivided. Proterozoic (Precambrian) age