Area 7
Georgetown

Georgetown Region

Briggs, Cobbs Cavern, Ding Dong, Florence,
Georgetown, Hutto, Jarrell, Leander, Leander NE,
Liberty Hill, Mahomet, Nameless, Round Rock, Salado,
Weir, and Youngsport Quadrangles, Texas
(1:24,000 scale)

QUATERNARY

Qal—Alluvium. Gravel, sand, silt, and clay along streams and rivers; inundated regularly. Gravel is mostly limestone and chert. Along minor drainages, includes undivided low terrace deposits. Includes some local bedrock outcrops that are undivided.

Qt—Terrace deposits. Gravel, sand, silt, and clay along streams and rivers. Mostly above flood level along entrenched streams and rivers. Larger deposits along San Gabriel River, Berry Creek, and Brushy Creek are as thick as 36 ft and locally may be thicker. Deposits of adjacent terraces at different elevations are mapped separately.

Qu—Undivided alluvium. Sand, silt, clay, and some gravel. Includes terrace alluvium, local drainageway alluvium, and slope-wash alluvium.

Qt+Ktl—Undivided terrace deposits (Quaternary) and lower Taylor Group.

QUATERNARY TO TERTIARY

QTa—Older alluvium. Gravel, sand, clay; well-rounded pebble- to cobble-sized gravel, few boulders; mostly chert and limestone, some quartz and igneous and metamorphic rock detritus. Some deposits mostly sand and clay. Deposits typically cap topographically high areas. Precise age

unknown; deposits probably of different ages; possibly equivalent to Quaternary Leona Formation and to upper Tertiary or Quaternary Uvalde Gravel.

QTa+Qu—Older alluvium and terrace, drainageway, and slope-wash alluvium, undivided.

CRETACEOUS

Upper Cretaceous

Ktl—Lower Taylor Group, undivided, Includes Pecan Gap and Ozan Formations. Also includes local Sprinkle Formation that is equivalent to part of the Ozan Formation. Marl, calcareous clay, chalk. Outcrops are rare.

Kau—Austin Group. Chalk, marl, and limestone. Thin- to thick-bedded, bentonitic seams, pyrite or marcasite nodules common and weather to limonite. Fossils include inoceramus; inoceramus prisms common. In Austin–Georgetown region, the Austin Group includes six formations (oldest to youngest): the Atco, Vinson, Jonah, Dessau, Burditt, and Pflugerville Formations (Young, 1985). Only Atco through Dessau Formations occur north of Brushy Creek. Thickness ~360 to ~425 ft.

Kef—Eagle Ford Formation. Shale and silty limestone to calcareous siltstone. Unit consists of three lithologic intervals: a lower calcareous shale, a middle flaggy, silty limestone to calcareous siltstone, and an upper shale. Montmorillonitic clay. Thin (0.4 to 3 inches) bentonite beds may occur in the middle part of the unit (Garner and Young, 1976). About 65 ft thick in Williamson County and about 23 ft thick to the south in Travis County.

Kbu—Buda Formation. Limestone. Lower part is slightly glauconitic and fossiliferous; upper part is hard, resistant, burrowed, fossiliferous, and contains shell fragments. Thickness mostly between 3 and 30 ft; locally may be absent.

Kdr—Del Rio Formation. Clay. Calcareous, fossiliferous, poorly indurated, plastic, dark gray to olive brown; contains *Ilymatogyra arientina* (formerly *Exogyra arietina*). Slope forming or

underhanging where slumped below overlying Buda. Weathers light gray to yellowish gray. Forms highly expansive soil. Water tanks for livestock commonly excavated on outcrops. Thickness ~65 ft.

Lower Cretaceous

Kgt—Georgetown Formation. Limestone and marl. Nodular, very fossiliferous; diagnostic marine megafossils include *Waconell wacoensis* (formerly *Kingena wacoensis*) and *Gryphaea washitaensis*. Rare small vugs. Uppermost Edwards aquifer strata. Thickness increases northward from ~65 ft to 110 ft.

Ked—Edwards Limestone. Limestone, dolomitic limestone, and marl. Massive to thin beds, chert, and fossiliferous; fossils include rudistids. Shallow subtidal to tidal-flat cycles. Honeycomb textures, voids in collapse breccias, and cavern systems. Accounts for most of the Edwards aquifer strata. Thickness is between 100 and 300 ft; thins northward.

Kc—Comanche Peak Formation. Limestone and marl. Nodular, fossiliferous. Lower part of Edwards aquifer strata. Thickens northward from ~40 to 70 ft.

Kwkv—Keys Valley Member of Walnut Formation. Marl, argillaceous limestone, and some limestone. Thickness as much as ~50 ft. Walnut Formation consists of six members that include, from oldest to youngest, the Bull Creek, Bee Cave, Cedar Park, Whitestone, Keys Valley, and the upper marl member (Moore, 1964). The upper marl member occurs north of southern Bell County and is not mapped in the study area.

Kwcpbc—Cedar Park, Bee Cave, and Bull Creek Members, undivided, of Walnut Formation. Limestone, argillaceous limestone and marl. Individual members are ~30 to 50 ft thick. Walnut Formation consists of six members that include, from oldest to youngest, the Bull Creek, Bee Cave, Cedar Park, Whitestone, Keys Valley, and the upper marl member (Moore, 1964). The upper marl member occurs north of southern Bell County and is not mapped in the study area.

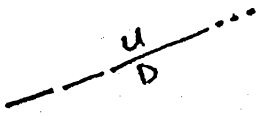
Kwkv+Kwwh+Kwcpbc+Ked—Keys Valley, Whitestone, Cedar Park, Bee Cave, and Bull Creek Members, undivided, of the Walnut Formation and Edwards Formation, undivided. Limestone, argillaceous limestone, and marl. Area of Edwards interfingering with Walnut members, and Whitestone Member interfingering with Keys Valley Member.

Kwwh+Kwcpbc+Ked—Whitestone, Cedar Park, Bee Cave, and Bull Creek Members, undivided, of the Walnut Formation and Edwards Formation, undivided. Limestone, argillaceous limestone, and marl. Area of Edwards interfingering with Walnut members.

Kpa—Paluxy Formation. Quartz sandstone. Calcareous; interbedded with limestone. Occurs only in northwest part of study area. Thickness less than 10 ft in map area.

Kgru—upper Glen Rose Formation. Limestone, dolomitic limestone, and marl. Shallow subtidal to tidal-flat cycles. Alternating resistant and recessive beds forming stair-step topography. Marine megafossils include molluscan steinkerns, rudistids, oysters, and echinoids; local dinosaur tracks. Dolomitic limestones contain water. *Corbula* interval, commonly one to three thin beds containing the bivalve, informally divides the lower and upper Glen Rose Formation. Only upper Glen Rose strata crops out in the map area.

Map Symbols



Fault; **U**, upthrown side; **D**, downthrown side; dashed where relatively less distinct than solid; dotted where covered.



Doline. Probable karst-related collapse or subsidence of bedrock.



Strike and dip of beds dipping between 2° and 6°



Approximate axis of gentle monocline.