

APPENDIX

Explanation of Geologic Units

Gainesville North Quadrangle

QUATERNARY

Qal—Alluvium. Sand, silt, clay, and gravel.

Qt—Terrace deposits of streams. Sand, silt, clay, and gravel.

Qt1—Higher terrace deposits of streams. Sand, silt, clay, and gravel.

Qtrr—Terrace deposits of Red River. Sand, silt, clay, and gravel.

LOWER CRETACEOUS

Kms—Main Street Limestone. Limestone and some thin beds of argillaceous limestone; wackestone, packstone, and grainstone fabrics; fossils common; about 10 ft thick. Some argillaceous limestone is oyster packstone. Main Street outcrop lies a short distance east of the Gainesville quadrangle.

Kpp—Pawpaw Formation. Sandstone and mudstone/shale; ferruginous; concretions; crossbedding. Thickness as great as 45 ft.

Kwe—Weno Formation. Marl, calcareous shale, and some thin beds of limestone and sandstone; concretions and fossils. Upper limestone, Quarry Limestone, is a quartz-rich shell packstone and is a few feet thick. Weno thickness as much as 50 ft.

Kd—Denton Clay. Clay/shale and some limestone and sandstone; calcareous; fossils.

Upper 3- to 5-ft-thick limestone contains abundant *Gryphaea*. Up to 65 ft thick.

Kfwdc—Fort Worth Limestone and Duck Creek Formation, undivided. Limestone, argillaceous limestone, and marl; mostly packstone and wackestone fabric. Fort Worth Limestone: Limestone interbedded with argillaceous limestone and marl; fossils abundant; about 30 to 40 ft thick. Duck Creek Formation: Lower 50 to 60 ft is limestone and lesser argillaceous limestone and marl; fossils abundant; ammonites common. Upper 40 to 50 ft is marl, argillaceous limestone, and lesser limestone; fossils abundant.

Kki—Kiamichi Formation. Marl, calcareous shale, and some sandy limestone and sandstone; *Gryphaea* common in some beds; thickness about 50 ft.

Kgdw—Goodland Limestone and Walnut Clay, undivided. Limestone and less argillaceous limestone and marl. Goodland Limestone: Limestone and less argillaceous limestone; wackestone, packstone, and grainstone fabrics; massive to nodular bedding; fossils abundant; as much as 20 ft thick. Walnut Clay: Argillaceous limestone and marl; fossils include common *Exogyra texana* and *Gryphaea*; as much as 10 ft thick.

Ka—Antlers Sand. Sand, clay, and conglomerate; lower and upper intervals mostly sand; middle interval mostly clay; thickness 500 to 650 ft. Outcrop belt is minor in Gainesville North Quadrangle area.