

Stratigraphic Column Miami County, Kansas

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Quaternary System

Alluvial deposits

Qal

Undifferentiated alluvium

Occurs below floodplains. Consists of coarse gravel to clay; Holocene ages.

Qt

Alluvial terrace deposits

Occurs below low alluvial terraces. Consists of coarse gravel to clay; late Pleistocene and Holocene ages.

Ng

Neogene alluvial gravel

High-terrace and chert-rich gravels sometimes mantled by fine-grained alluvium; Neogene and possibly Pleistocene in age.

Slope deposits

Qsl

Colluvial apron and alluvial fan deposits

Footslope deposits. Consists of coarse gravel to clay; late Pleistocene and Holocene ages.

Eolian deposits

Ql

Loess

Occurs on uplands and high alluvial terraces. Fine-grained sediments, dominantly silt-sized; includes lentils of volcanic ash; Pleistocene and Holocene ages

Pennsylvanian System

Pls

Pennsylvanian Lansing Group

Stanton Limestone (~35 ft thick)

Three limestones, separated by two shales; lowermost limestone is Captain Creek Limestone (dense, cherty sometimes grading upward to oolitic limestone), overlain by Eudora Shale (gray-black, fissile), then Stoner Limestone (shaly, fossiliferous), overlain by Rock Lake Shale (gray), overlain by South Bend Limestone (sandy limestone, non-resistant)

Plv-p

Pennsylvanian Lansing Group

Vilas Shale and Plattsburg Limestone (~35 ft thick)

Vilas Shale (gray-light gray, sandy) overlies Plattsburg Limestone. Plattsburg is composed of two limestones separated by a shale. Lowermost is Merriam Limestone (dense, gray, resistant grading upward to a cherty limestone), overlain by Hickory Creek Shale (gray to yellow nodular, calcareous), overlain by Spring Hill Limestone (gray, sandy, oolitic at top).

- Pkb-w** **Pennsylvanian Kansas City Group** (~90 ft thick)
Bonner Springs Shale and Wyandotte Limestone
Bonner Springs Shale (~5 ft, green to gray sandy shale) overlies ~85 ft thick Wyandotte Limestone. Wyandotte is composed of three limestones separated by two shales. Lowermost is Frisbie Limestone (brown-gray, massive, fossiliferous) overlain by Quindaro Shale (gray-yellow, sandy), overlain by Argentine Limestone (gray, cherty, fossiliferous), overlain by Island Creek Shale (gray-orange, clayey, brachiopods) overlain by Farley Limestone (gray, oolitic, brachiopods)
- Pkl-i** **Pennsylvanian Kansas City Group** (~20 ft thick)
Chanute Shale (yellow-brown, sandy, clayey, with thin coal locally) overlying the Drum Limestone (yellow-gray resistant limestone, locally cross-bedded)
- Pkc-dn** **Pennsylvanian Kansas City Group** (~90 ft thick)
Cherryvale Shale is largely composed of shale (green-gray, poorly exposed) with interbedded thin poorly exposed limestones and Dennis Limestone. Dennis is composed of Stark Shale (black, fissile) overlain by Winterset Limestone (dense, cherty near base, less resistant, oolitic at top)
- Pkg-s** **Pennsylvanian Kansas City Group** (~40 ft thick)
Galesburg Shale (gray, olive, sandy) overlies Swope Limestone. Swope is composed of two limestones separated by shale. Lower limestone is Middle Creek Member (gray, resistant), middle shale is Hushpuckney Shale (black, fissile), upper limestone is Bethany Falls Limestone (gray-brown, w/shaly partings, fossiliferous)
- PkcP** **Pennsylvanian Kansas City Group** (~10 ft thick)
Ladore Shale (gray-light green, thin, calcareous) overlies Hertha Limestone. Hertha is composed of two limestones separated by a middle shale. Hertha is generally poorly exposed. Lower limestone is the Critzer Limestone Member (thin, cherty), overlain by Mound City Shale (buff, sandy shale) overlain by Sniabar Limestone Member (locally oolitic, cherty). Upper part of Pleasanton Group (mostly Tacket Formation is included in this stratigraphic unit, as it is poorly exposed in area mapped)