This map shows the thickness of unlithified Quaternary deposits in Lee County, Illinois. Quaternary materials were deposited by glacial meltwaters and include till, sand, gravel, and loess of the Illinois and Wisconsin glacial episodes.

The thickest Quaternary deposits are found in the Bloomington Ridge Plain physiographic division, along the southern and eastern portion of the county, beneath broad ridges. These ridges, such as the Marseilles and Iroquois Moraines (Inset A) and the Seneca Moraine (Inset B), are typical of the Illinois and Wisconsin glacial episodes. Additionally, the Kaskaskia Moraine (Inset C) along the axis of the Rock and Troy bedrock valleys.

The thinnest Quaternary deposits are typically found in the north-west part of Lee County in the Rock River Hill Country physiographic division. These deposits are typically loess, windblown silt, over Illinoian till of the Glasford Formation. The Glasford Formation ranges in texture from clay loam to sandy loam diamicton.

The thickness of the Quaternary deposits of Lee County was determined by subtracting the elevation of the bedrock surface from the land surface elevation. The bedrock surface was determined from available data. The thickness of the deposits (glacial till and outwash, loess, and modern stream sediments) were included in this thickness interval.

References: