

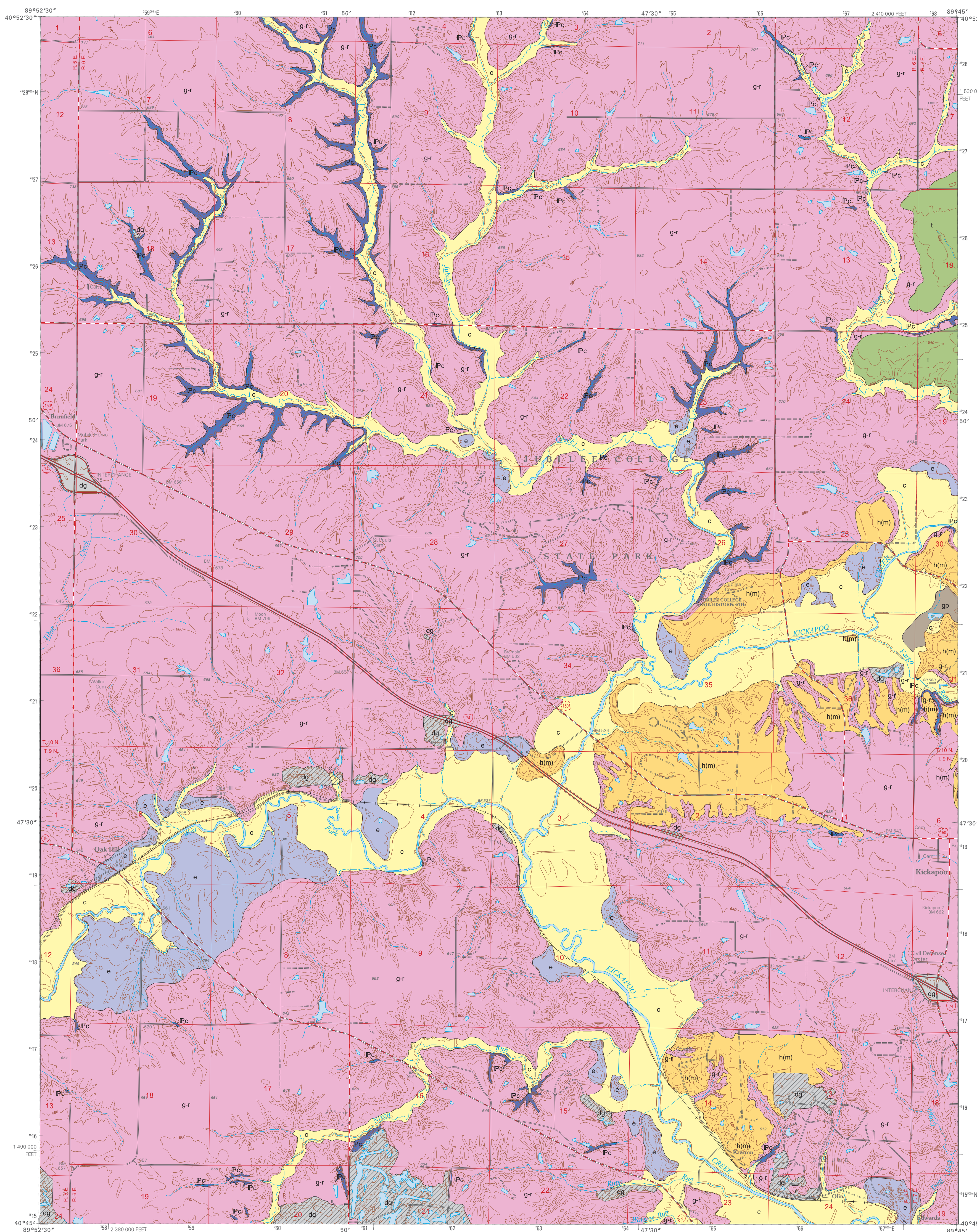
SURFICIAL GEOLOGY OF OAK HILL QUADRANGLE

PEORIA COUNTY, ILLINOIS

ILLINOIS STATE GEOLOGICAL SURVEY
E. Donald McKay III, Interim Director

Illinois Preliminary Geologic Map
IPGM Oak Hill-SG

François Hardy and C. Pius Weibel
2008

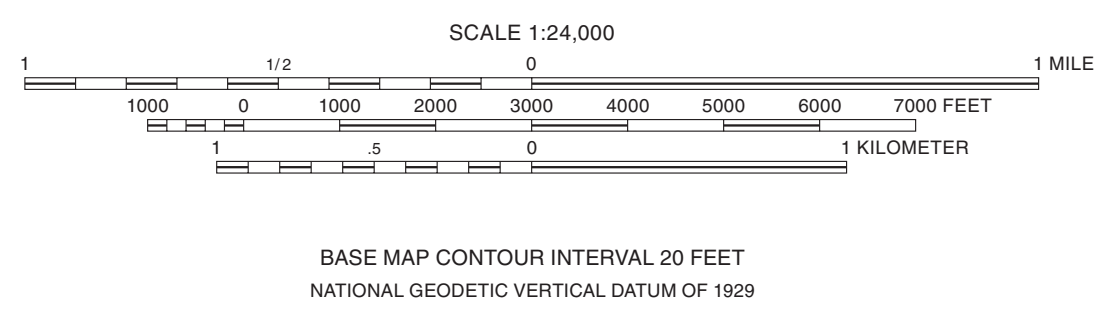


Description	Unit	Interpretation
QUATERNARY DEPOSITS		
HUDSON EPISODE (~12,000 years before present (B.P.) to today)		
Areas where surficial material has been covered or excavated; cover (fill) may include soil, residual materials, bedrock, and anthropogenic materials; excavated areas often contain fill; many areas of fill overlie disturbed deposits; thickness 0–40 feet	Disturbed ground (covered) dg (excavated) dg	Areas altered by anthropogenic activities; including construction of roads and excavations in gravel pits and coal strip-mines
Muck, organic silt, and peat; mottled, very dark gray to black; soft and compressible; usually water saturated; calcareous, contains shell fragments and plant material; stratified, interbedded with fine-grained sediments; typical thickness less than 10 feet	Grayslake Peat gp	Organic-rich materials deposited and preserved in slight depressions on the modern floodplain of Kickapoo Creek; may consist of formerly marsh vegetation; subject to frequent flooding
Sand and sandy gravel, with interbeds of clay, silt, and gravel; poor to well sorted; stratified; yellowish brown to dark gray; mottled; may include organic (wood) material and calcareous shells; typical thickness 5–25 feet	Cahokia Formation c	Recent (postglacial) fluvial and floodplain sediments that have been deposited during the past 12,000 years in the Kickapoo Creek drainage system; subject to frequent flooding for brief periods
WISCONSIN AND SANGAMON EPISODES (~130,000–12,000 years B.P.)		
Silt, silt loam, and silty clay loam; dark gray to yellowish brown; massive; soft to friable; non-calcareous in uppermost part; generally calcareous in lower part; weak cemented, dark reddish brown, ferromanganese oxide concretions are common; typical thickness 3–20 feet	Peoria and Roxana Silts (not on map; see figure 2 in accompanying report)	Proglacial eolian (wind-deposited) silt (loess) derived by wind erosion of clay and silt from outwash deposits as glacial floodwaters receded; blankets upland areas; generally absent or very thin on floodplains and tributaries of the Kickapoo Creek drainage system; both silts succeed Glasford Formation; Roxana Silt may occur beneath Tiskilwa Formation, and Peoria Silt succeeds and intertongues with deposits of Henry Formation
Silt and clay; laminated to thin bedded, rarely massive; gray to olive-green; in places calcareous; contains interbeds of diamicton, sand, and gravel; may contain wood fragments and shells; typical thickness 5–10 feet	Equality Formation e	Glacial and postglacial lake deposits infilling valleys, channels, or depressions on outwash and floodplains; interfingers and grades into alluvial and outwash deposits
Sand and interbedded gravel; stratified; thin to thick bedded, cross-bedding common; medium- to very coarse-grained sand with scattered cobbles and boulders; yellow brown to grayish brown; very well to poorly sorted; clasts are mainly of carbonate, igneous, and metamorphic compositions, clasts of local bedrock less common; typical thickness 10–30 feet	Henry Formation (Mackinaw facies) h(m)	Proglacial fluvial (outwash) sediments deposited within and adjoining to the valley of Kickapoo Creek; deposits (valley trains and terraces) formed as glacier meltwaters flowed from the receding glacial margin to the east
Diamicton (clay loam to loam texture); massive; dark grayish brown to brown with a distinctive reddish cast; calcareous; firm; typical thickness 5–60 feet	Tiskilwa Formation t	Subglacial and ice-marginal sediments (till) deposited directly from Tiskilwa glacial ice; unconformably overlies Glasford Formation
Diamicton (sandy loam to silty clay loam texture); massive; yellowish brown to dark brownish gray; calcareous; firm to hard; contains thin interbeds of sand, silt, or clay; weathered profile (Sangamon Geosol) at top occurs where overlain by Tiskilwa (Willman and Frye 1970); typical thickness 5–75 feet	Radnor Member, Glasford Formation g-r	Subglacial and ice-marginal sediments (till) deposited directly from Illinois Episode glacial ice; unconformably overlies bedrock
ILLINOIS EPISODE (~200,000–130,000 years B.P.)		
PRE-QUATERNARY DEPOSITS		
Shale, sandstone, limestone, coal, and clay; bedding ranges from thin to thick; often includes a weathered profile at the bedrock surface	Pennsylvanian Carboniferous Pc	Strata deposited in fluvial to marine settings, including nearshore marine, estuarine, deltaic, fluvial, and swamp environments

Base map compiled by Illinois State Geological Survey from digital (Digital Line Graph) data provided by the United States Geological Survey. Compiled by photogrammetric methods from imagery dated 1969. Field checked 1971. Revised from imagery dated 1993, 1995, and other sources. Field checked 1996. Map edited 1997.

North American Datum of 1983 (NAD 83)
Projection: Transverse Mercator
10,000-foot ticks: Illinois State Plane Coordinate system, west zone (Transverse Mercator)
1,000-meter ticks: Universal Transverse Mercator grid system, zone 16

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Geology based on field work by C. Pius Weibel and François Hardy, 1998–2000.
Digital cartography by C. Pius Weibel, Jennifer E. Carrell, and Jane E. J. Domier, Illinois State Geological Survey.

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ADJOINING QUADRANGLES
1 Laura
2 Princeville
3 Edelstein
4 Elmwood
5 Duntap
6 Farmington East
7 Hanna City
8 Peoria West

