

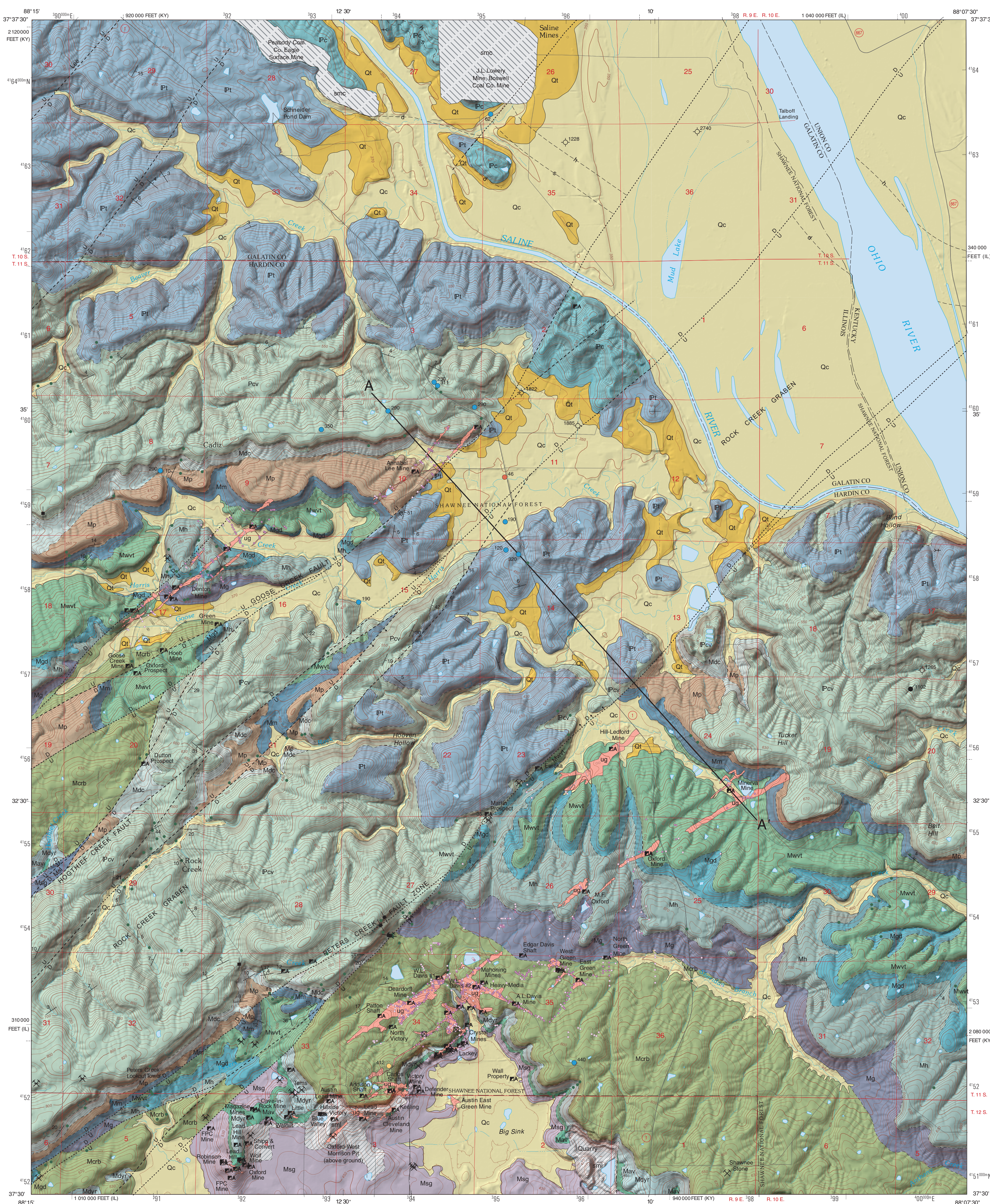
# BEDROCK GEOLOGY OF SALINE MINES QUADRANGLE

## GALLATIN AND HARDIN COUNTIES, ILLINOIS

Prairie Research Institute  
ILLINOIS STATE GEOLOGICAL SURVEY

Illinois Geologic Quadrangle Map  
IGQ Saline Mines-BG

F. Brett Denny, Joseph A. Devera, and Adam Kittler  
2013

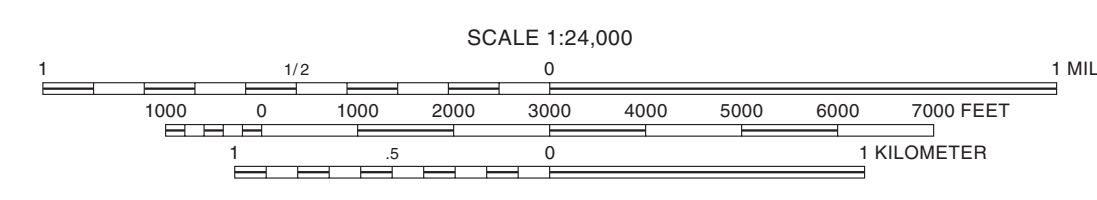


EXPLANATION		
	Underground mine (fluorite mine)	
	Surface mine (limestone quarry)	
	Surface mine (coal mine)	
	Cahokia Formation undifferentiated	Holocene
	Terrace deposits undifferentiated	Pleistocene
	Unconformity Carbondale Formation h, Herrin Coal s, Springfield Coal d, Davis Coal	Demioesian
	Tradewater Formation	Atokan
	Caseville Formation	Morrowan
	Unconformity Degonia Sandstone and Clore Formation	
	Palestine Sandstone	
	Menard Limestone	
	Waltersburg Formation, Vienna Limestone, and Tar Springs Sandstone	
	Glen Dean Limestone	
	Hardinsburg Sandstone	Chesterian
	Golconda Formation	
	Cypress Sandstone, Ridenhower Formation, and Bethel Sandstone	
	Paoli Limestone Downs Bluff Limestone Yankeetown Renault Limestone	
	Aux Vases Sandstone	
	Ste. Genevieve Limestone	
	St. Louis Limestone	Valmeyeran

Symbols	
	Strike and dip of bedding; number indicates degree of dip
	Vertical joints
	Abandoned drift mine (fluorite or coal)
	Abandoned shaft mine
	Raise or winze mine
	Active pit
	Abandoned pit (fluorite, coal, and sandstone)
	Field notes
Drill Holes	
	Stratigraphic boring
	Water wells
	Engineering boring
	Mineral boring (mineralized rock)
	Mineral boring (trace mineralized rock)
	Mineral boring (no mineralized rock)
	Inclined mineral boring
	Dry hole
	Oil well - plugged
	Numeric label indicates total depth of boring in feet.
Line Symbols	
	Contact
	Pennsylvania coal subcrop lines; Letter indicates coal unit.
	Fault
	Normal fault; bar and ball on downthrown side
	Fault; U on upthrown side, D on downthrown side
	A—A' Line of cross section

Base map compiled by Illinois State Geological Survey from digital data (2011 US Topo) provided by the United States Geological Survey. Hillshade and contours derived from 2010 FEMA LIDAR and 1994 USGS NED elevation data.

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



BASE MAP CONTOUR INTERVAL 10 FEET  
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Geology based on field work by F. Brett Denny, Joseph A. Devera, and Adam Kittler, 2011-2012.

Data compilation by April Halley. Digital cartography by Jane E. Johnson-Domier and Coy E. Potts. Hillshade by Donald E. Luman.

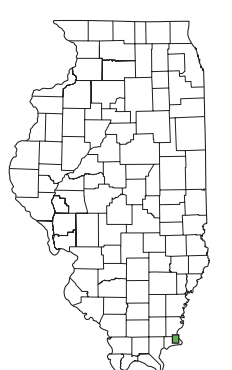
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ADJOINING QUADRANGLES		
1	2	3
4	5	6
7	8	

1 Equality  
2 Shawneetown  
3 Grove Center  
4 Karbers Ridge  
5 Dekoven  
6 Rosiclare  
7 Cave-in-Rock  
8 Repton

APPROXIMATE MEAN DECLINATION, 2013

ROAD CLASSIFICATION	
	State Route
	Other paved roads

