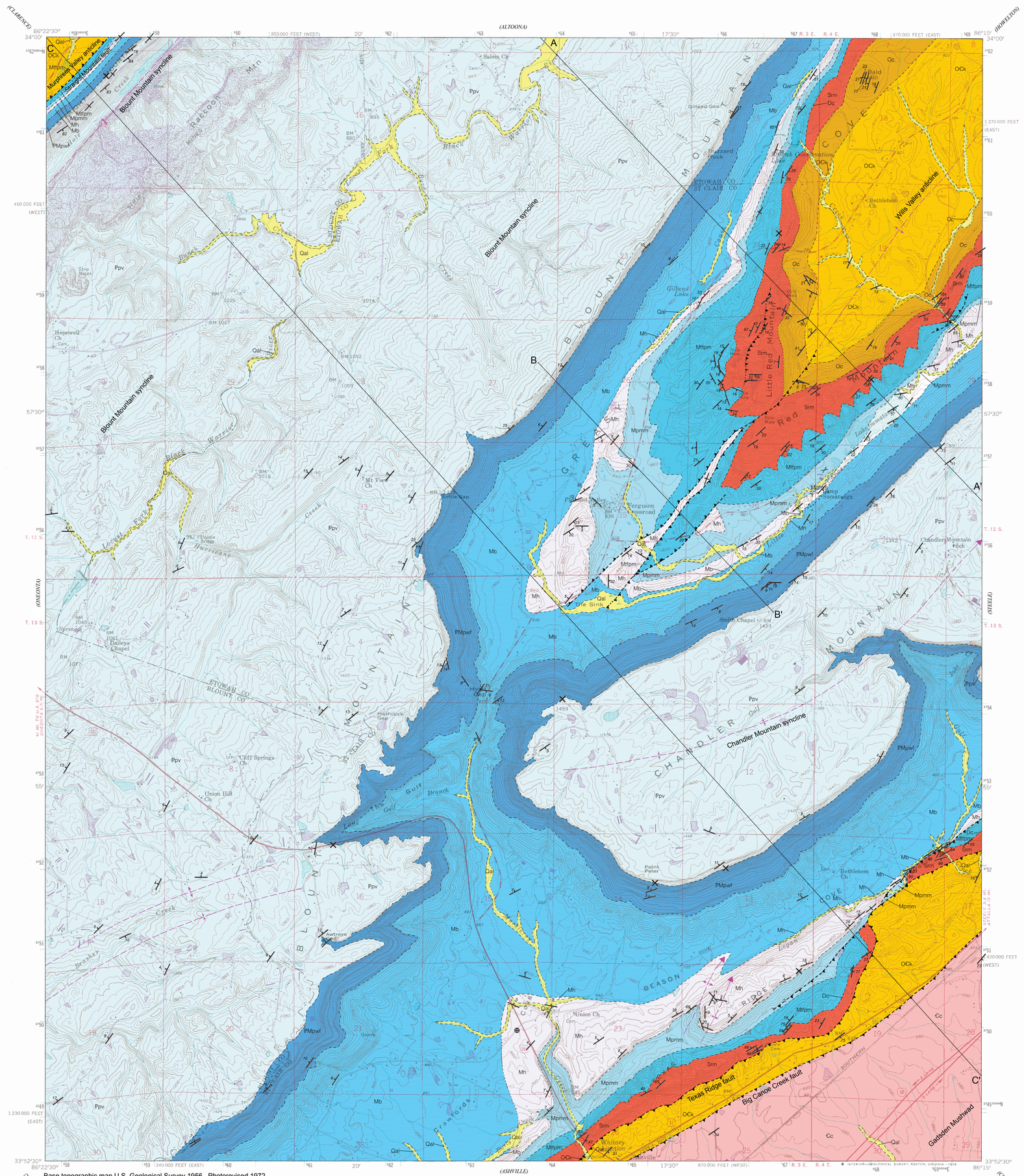


CORRELATION OF MAP UNITS

Qal	Quaternary	CENOZOIC
unconformity		
Ppv	Pennsylvanian	PALEOZOIC
PMpwf	Mississippian	
Mb	Mississippian	
Mh	Mississippian	
Mpmm	Mississippian	
Mtfpm	Mississippian	
unconformity		
Dc	Devonian	
unconformity		
Srm	Silurian	
unconformity		
Osc	Ordovician	
unconformity		
OCk	Ordovician	
Cc	Cambrian	

DESCRIPTION OF MAP UNITS

Qal **Alluvium (Quaternary)**—Unconsolidated clay, silt, sand, gravel, and cobbles containing clasts of local bedrock. Mapped only along larger streams.

Ppv **Pottsville Formation (Lower Pennsylvanian)**—Very light- to medium-gray, fine- to medium-grained and locally coarse-grained, thin- to massive-bedded quartzose sandstone containing intervals of quartz- and siderite-pebble conglomerate; plant fossils and thin coal seams are locally present.

PMpwf **Parkwood Formation and Floyd Shale undifferentiated (Upper Mississippian and Lower Pennsylvanian)—Parkwood Formation:** Medium- to dark-gray shale and mudstone containing units of light- to medium-gray, thin- to locally thick-bedded, partly rippled, partly crossbedded sandstone locally containing siderite pebbles. **Floyd Shale:** Medium- to dark-gray shale containing interbeds of medium-gray, argillaceous, fossiliferous limestone; maroon, grayish-green, and black shale also present.

Mb **Bangor Limestone (Upper Mississippian)**—Light- to dark-gray, partly crossbedded, bioclastic and lesser oolitic limestone in thin to thick beds; medium-gray to medium-bluish-gray, thin- to medium-bedded fossiliferous limestone in the upper part; light-gray to grayish-orange fossiliferous chert residuum common in upper part of the formation.

Mh **Hartselle Sandstone (Upper Mississippian)**—Very light to light-gray, medium- to coarse-grained, thin- to massive-bedded, locally fossiliferous, quartzose sandstone.

Mpmm **Pride Mountain Formation and Monteagle Limestone undifferentiated (Upper Mississippian)—Pride Mountain Formation:**—Medium- to dark-gray, fissile shale; contains grayish-orange to medium-gray, thin- to lenticular- and wavy-bedded, fine- to medium-grained sandstone in upper part. **Monteagle Limestone:** Interbedded light- to dark-gray oolitic limestone and light-gray bioclastic limestone in medium to massive beds.

Mtfpm **Tuscumbia Limestone, Fort Payne Chert, and Maury Formation undifferentiated (Lower and Middle Mississippian)—Tuscumbia Limestone:** Light- to dark-gray, medium- to thick-bedded, bioclastic limestone locally containing chert nodules. **Fort Payne Chert:** Light-olive-gray to dark-gray, thin- to medium-bedded, fossiliferous limestone and thin- to medium-bedded, partly fossiliferous, light- to dark-gray, dense chert that commonly weathers grayish orange and contains yellowish-orange to brown clay partings. **Maury Formation:** Grayish-yellow-green to pale-yellowish-green shale, fossiliferous in the upper part.

Dc **Chattanooga Shale (Upper Devonian)—**Dark-gray to black, fissile, carbonaceous shale and mudstone; thin beds of medium- to grayish-black, fine- to medium-grained, partly pebbly sandstone are present at the base.

Srm **Red Mountain Formation (Lower and Upper Silurian)—**Yellowish- to medium-gray, thin- to medium-bedded, partly ferruginous and locally conglomeratic sandstone and grayish-yellow to dark-gray shale; contains grayish-red-purple to light-brown calcareous and fossiliferous ironstone ore beds in the middle part.

Osc **Sequatchie Formation and Chickamauga Limestone (Middle and Upper Ordovician)—Sequatchie Formation:** Variegated moderate-yellowish-brown, greenish-gray, and maroon calcareous shale and thin- to medium-bedded, yellowish- to light-gray, argillaceous, fossiliferous, and partly sandy limestone. **Chickamauga Limestone:** Light-olive-gray to dark-gray, thin- to thick-bedded, partly argillaceous, partly fossiliferous limestone; a bed of grayish-yellow-green to moderate-yellow-green bentonite is present in the upper part.

OCk **Knox Group undifferentiated (Upper Cambrian and Lower Ordovician)**—Light- to medium-dark-gray, fine- to medium-crystalline, thin- to massive-bedded dolomite containing irregular nodules and stringers of light-tan to black, dense chert; weathers to dominantly light-colored residual chert in an orange-brown to dark-reddish-brown clay matrix; residual chert commonly preserves the texture of the original carbonate rocks.

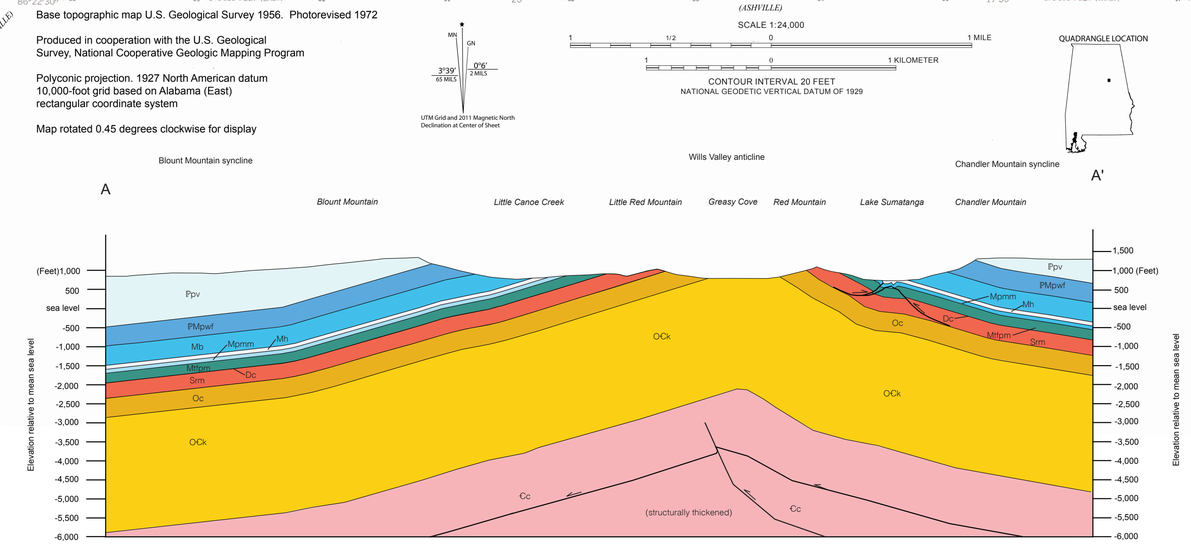
Cc **Conasauga Formation (Middle and Upper Cambrian)**—Dark-gray to dark-greenish-gray shale commonly containing thin- to flaggy-bedded, yellowish-gray to olive-gray micritic limestone that is stylonodular in part.

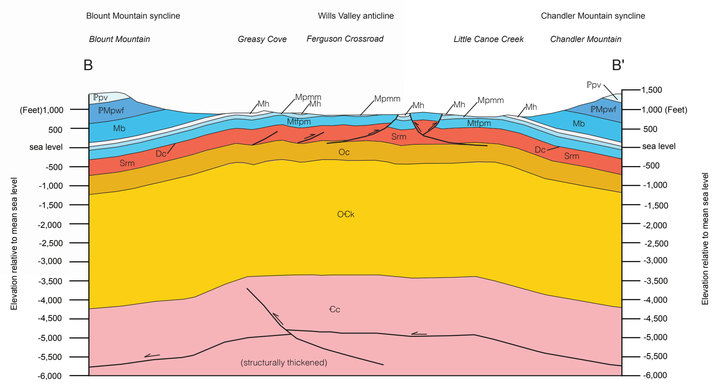
SYMBOLS FOR GEOLOGIC MAP

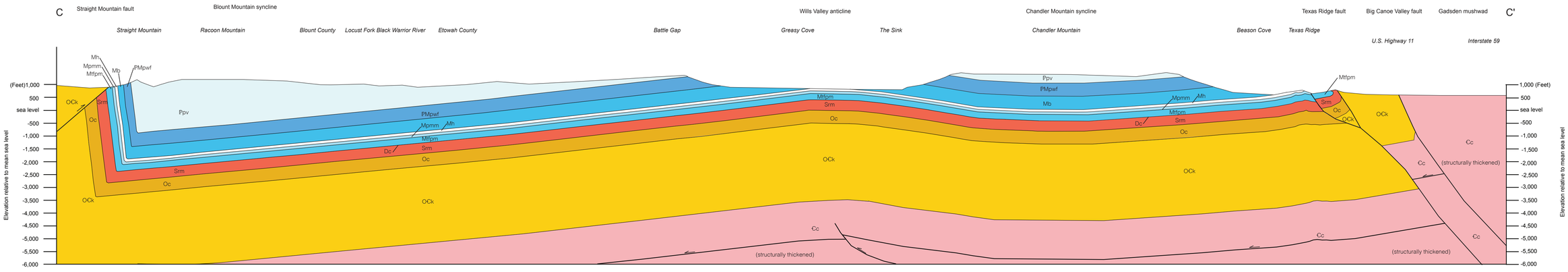
- Contact, located very approximately
- Contact, concealed beneath mapped units
- Thrust fault, located very approximately, sawteeth on upper plate
- Thrust fault, concealed beneath mapped units
- Trace of syncline axis, located approximately, arrow showing direction of plunge
- Trace of anticline axis, located approximately, arrow showing direction of plunge
- Strike and dip of bedding
- Horizontal bedding
- Vertical bedding
- Strike and dip of overturned bedding

SYMBOLS FOR CROSS SECTIONS

- Stratigraphic contact
- Fault, showing relative movement







GEOLOGIC MAP OF THE HYATT GAP 7.5-MINUTE QUADRANGLE, ST. CLAIR, ETOWAH, AND BLOUNT COUNTIES, ALABAMA

by

G. Daniel Irvin, W. Edward Osborne, and William A. Thomas

2017

GEOLOGICAL SURVEY OF ALABAMA
Founded 1848

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State Geologist