EXPLANATION

QUATERNARY

Qal — **Alluvium.** Unconsolidated quartz silt, sand, and gravel containing clasts of local bedrock. Mapped only along larger streams.

LOWER PENNSYLVANIAN — Pottsville Formation

Ppvu — **Pottsville Formation, upper part.** Dark-gray silty shale and interbeds of coal and underclay; contains intervals of light- to medium-gray lithic sandstone and variably colored polymictic conglomerate.

Ppv — **Pottsville Formation undifferentiated.** Dark-gray silty shale containing intervals of light- to medium-gray lithic sandstone and interbeds of coal and underclay; predominantly dark-gray shale between lower quartzose sandstone members. Includes intervals of grayish-red shale in the Coosa synclinorium.

Ppvsr — **Straight Ridge Sandstone Member.** Lithic sandstone weathered grayish red and grayish orange brown.

Ppvwr — **Wolf Ridge Sandstone Member.** Very light gray quartzose sandstone.

Ppvp — **Pine Sandstone Member.** Very light gray quartzose sandstone containing scattered quartz pebbles and quartz pebble conglomerate; wavy-bedded sandstone and mudstone common near top. Includes a middle interval of shale.

Ppvs — **Shades Sandstone Member.** Very light gray quartzose sandstone containing scattered quartz pebbles and quartz pebble conglomerate. Includes a middle interval of dark-gray shale.

UPPER MISSISSIPPIAN

PMpw — **Parkwood Formation.** Medium- to dark-gray shale containing intervals of light- to medium-gray lithic sandstone.

Mf — **Floyd Shale.** Dark-gray to black shale containing siderite nodules; locally containing very minor sandstone.

LOWER TO MIDDLE MISSISSIPPIAN

Mfp — **Fort Payne Chert.** Grayish-orange, bedded fossiliferous chert.

LOWER OR MIDDLE(?) DEVONIAN(?)

Dfm — **Frog Mountain Sandstone.** Variably colored clay and claystone containing interbeds of light-grayish-brown sandstone.

MIDDLE ORDOVICIAN

Oa — **Athens Shale.** Interbedded dark-gray limy shale and very dark gray micritic limestone; weathers to graptolite-bearing shale.

Ol — **Lenoir Limestone.** Dark-gray partly fossiliferous stylonodular limestone locally containing chert nodules; medium- to dark-gray fenestral limestone at base (Mosheim Limestone Member).

LOWER ORDOVICIAN — Knox Group

Oo — **Odenville Limestone.** Dark-gray mottled dolomitic limestone overlain by dark-gray fossiliferous stylonodular limestone.

On — **Newala Limestone.** Light- to medium-bluish-gray chert-free micritic limestone containing minor interbeds of light- to light-bluish-gray dolomite and medium- to dark-gray mottled dolomitic limestone.

Olv — **Longview Limestone.** Interbedded light-medium-gray micritic and partly sandy limestone and light-gray dolomite; commonly contains thin interbeds and nodules of chert.

Och — **Chepultepec Dolomite.** Light- to dark-gray dolomite containing intervals of interbedded light- to medium-bluish-gray limestone; produces abundant predominantly cavernous chert.

UPPER CAMBRIAN

Ccr — **Copper Ridge Dolomite.** Light- to medium-gray dolomite producing abundant predominantly dense chert containing common algal laminations.

MIDDLE, TO UPPER, CAMBRIAN?

Cb — **Bibb Dolomite.** Medium to medium-dark-gray dolomite; produces cavernous and mealy chert.

Ck — **Ketona Dolomite.** Light- to dark-gray chert-free dolomite.

Cbf — **Brierfield Dolomite.** Medium- to medium-dark-gray dolomite; produces cavernous and mealy chert.

Cc — **Conasauga Formation.** Medium- to dark-gray limestone and dolomite containing interbedded olive-gray shale.

LOWER CAMBRIAN

Cr — **Rome Formation.** Grayish-red-purple and grayish-olive mudstone, shale, and siltstone containing interbedded sandstone, dolomite, and limestone; persistent interval of light-gray and grayish-red-purple to grayish-orange sandstone at top.

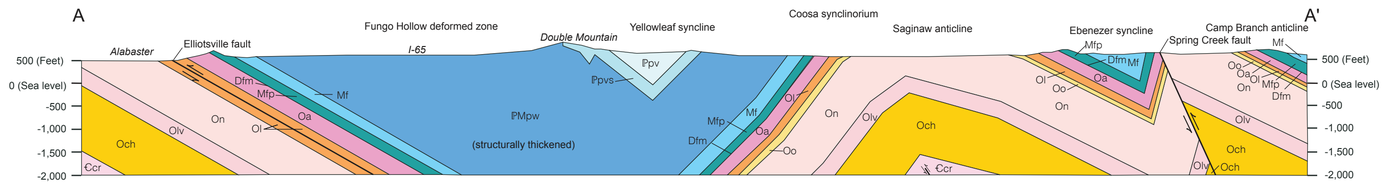
SYMBOLS FOR GEOLOGIC MAP

- Contact, approximately located, showing location of control point (contact exposed or closely located)
- Contact, located very approximately
- Contact, concealed beneath mapped units
- Thrust fault, approximatnely located, sawteeth on upper plate
- Thrust fault, located very approximately, sawteeth on upper plate
- Thrust fault, concealed beneath mapped units, sawteeth on upper plate
- Fault type unknown, approximately located, D on downthrown side
- Strike and dip of beds
- Vertical beds
- Strike and dip of overturned beds
- Anticline, showing trace and direction of plunge
- Syncline, showing trace and direction of plunge
- Overturned syncline, showing trace and direction of plunge

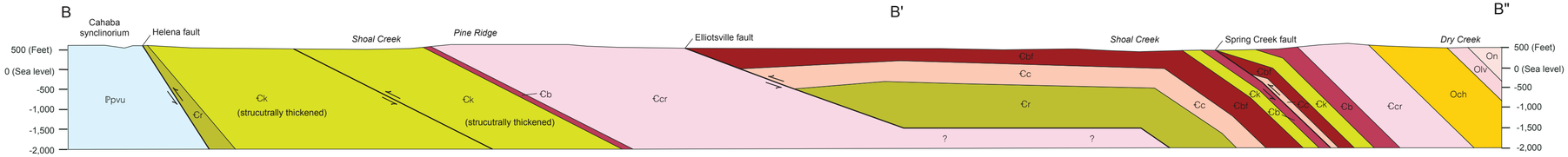
SYMBOLS FOR CROSS SECTION A-A' AND B-B'-B"

- Stratigraphic contact
- Thrust fault, showing relative movement

CROSS SECTION A-A'



CROSS SECTION B-B'-B"



CROSS SECTIONS A-A' AND B-B'-B" WITH EXPLANATIONS FOR THE GEOLOGIC MAP AND CROSS SECTIONS, ALABASTER 7.5-MINUTE QUADRANGLE, SHELBY COUNTY, ALABAMA

by

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