

(Areas of subaqueous deposits are shown by patterns of parallel lines; subaerial deposits by patterns of dots and circles)

Recent

Quaternary

Recent

Alluvium
(flood-plain deposits of present streams)

Warrior field
Cv

Cahaba field
Cca

Cosa field
Cco

Pottsville formation
(sandstone, conglomerate, shale, and coal beds; Eagle, Co. Quarry, Shades, Co. Pine, Co. Chert, Co. Wolf, Ridge, Co. and Straight Ridge, Co. sandstone members, and Stream, Co. conglomerate member)

Parkwood formation
(gray shale and sandstone; absent west of Shades Valley)

NORTH PART OF SHADES VALLEY
Cf

Floyd shale, upper part
(black or gray shale, shaly limestone, and sandstone)

Chert group

Bangor limestone (restricted)
(mainly light bluish-gray thick-bedded crystalline fossiliferous limestone and thin shale layers and partings)

SOUTH PART OF SHADES VALLEY
Cf

Floyd shale
(black or gray shale, some gray granular and impure shaly limestone, and much fine-grained gray and green sandstone)

Mississippian

Hartselle sandstone (restricted)
(thick-bedded coarse sandstone, generally hard but locally friable)

Gasper formation
(dark shale with thin sandy layers in upper part in places)

UNCONFORMITY

Warsaw limestone
(thick-bedded coarse gray or bluish fossiliferous limestone; absent east of Cahaba Valley)

Fort Payne chert
(chert and limestone)

UNCONFORMITY

Chattanooga shale and Frog Mountain sandstone *
(Chattanooga shale, black shale of Upper Devonian or early Carboniferous age, unconformable on Frog Mountain sandstone, red sandstone of Onondaga and Oriskany (Middle and Lower Devonian) age; both absent west of Red Mountain; Chattanooga shale absent in place east of Shades Valley)

UNCONFORMITY

Red Mountain formation
(sandstone, shale, and lamellar iron ore beds of late Medina and Clinton age)

UNCONFORMITY

SILURIAN AND POSSIBLY CARBONIFEROUS

SOUTHEAST OF CAHABA FIELD

Little Oak limestone
(lower part thick-bedded and dark; upper part thin-bedded, argillaceous, and contains some chert; of late Chazy age)

Not represented in the Chickamauga limestone

ATHENS

Athens shale
(black fissile shale; of Chazy age)

UNCONFORMITY

NORTHWEST OF CAHABA FIELD

Chickamauga limestone
(thick and thin bedded dark and light-gray limestone, upper part of Trenton and Black River (chiefly Louisville) age; lower part of Stones River (lower Chazy) age; beds of upper Chazy age (Little Oak and Atlanta) not present; Atlanta chert conglomerate member, Out. at base, in places, unconformable on Copper Ridge dolomite)

UNCONFORMITY

ORDOVICIAN

Lenoir and Mosheim limestones
(argillaceous and thick-bedded dark-gray limestone; of Stones River (lower Chazy) age)

UNCONFORMITY

Odenville and Newala limestones
(mainly pure fine-grained colorless or brittle limestone and some dolomite; of Beekmantown age)

Longview limestone
(cherty gray limestone and dolomite; of Beekmantown age)

UNCONFORMITY

Chepultepec dolomite
(dolomite with soft cavernous fossiliferous chert)

CAMBRIAN OR ORDOVICIAN

Copper Ridge dolomite
(chiefly dolomite with much gray tough, angular chert)

UNCONFORMITY

Ketona dolomite
(thick-bedded light-gray coarse-grained dolomite of great purity)

UNCONFORMITY

CONASAUGA

Conasauga ("Cosa") limestone
(thick-bedded dark fine-grained limestone and yellowish-green shale)

Rome ("Montevallo") formation
(purple and green shale with some limestone and sandstone and a persistent bed of calcareous sandstone at top)

CAMBRIAN



H.M. Wilson, Geographer,
H.B. Blair, in charge of section.
Topography by H.B. Blair, Assistants, R.L. Harrison
and Carroll Caldwell.
Control by C.B. Kendall.
Surveyed in 1905.

Scale 62500
Miles
Kilometers
Contour interval 20 feet.
Datum is mean sea level.
Edition of June 1927.

DIAGRAM OF TOWNSHIP

1	2	3	4	5	6	7	8	9	10	11	12
18 17 16 15 14 13	18 17 16 15 14 13	18 17 16 15 14 13	18 17 16 15 14 13	18 17 16 15 14 13	18 17 16 15 14 13	18 17 16 15 14 13	18 17 16 15 14 13	18 17 16 15 14 13	18 17 16 15 14 13	18 17 16 15 14 13	18 17 16 15 14 13
19 20 21 22 23 24	19 20 21 22 23 24	19 20 21 22 23 24	19 20 21 22 23 24	19 20 21 22 23 24	19 20 21 22 23 24	19 20 21 22 23 24	19 20 21 22 23 24	19 20 21 22 23 24	19 20 21 22 23 24	19 20 21 22 23 24	19 20 21 22 23 24
25 26 27 28 29 30	25 26 27 28 29 30	25 26 27 28 29 30	25 26 27 28 29 30	25 26 27 28 29 30	25 26 27 28 29 30	25 26 27 28 29 30	25 26 27 28 29 30	25 26 27 28 29 30	25 26 27 28 29 30	25 26 27 28 29 30	25 26 27 28 29 30

Geology by Charles Butts, assisted by
C.W. Washburne, William F. Prouty, and
E.F. Burchard.
Surveyed in 1906-1910.

Known fault
Probable fault
Concealed fault
(covered by younger deposits)

T Thrust side of thrust fault
U Uphrown side of normal fault
D Downthrown side of normal fault
/ 30° Strike and dip of stratified rocks
+ Strike of vertical beds
o Horizontal beds

* Includes Clear Branch sandstone, of Oriskany (Lower Devonian) age, on Red Mountain; Frog Mountain sandstone has recently been restricted to beds of Onondaga (Middle Devonian) age.
† Ozarkian of E. O. Ulrich.