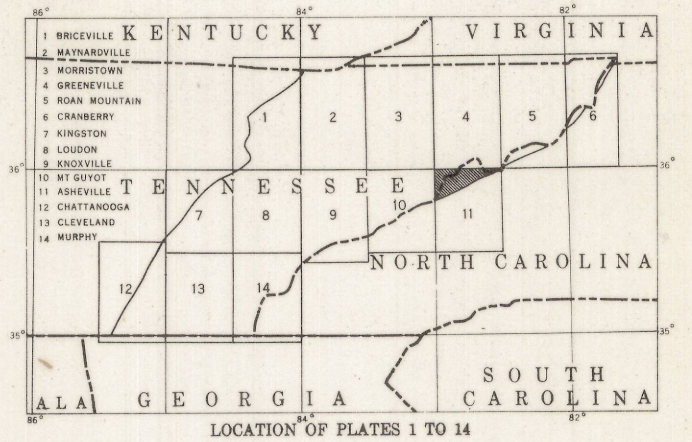
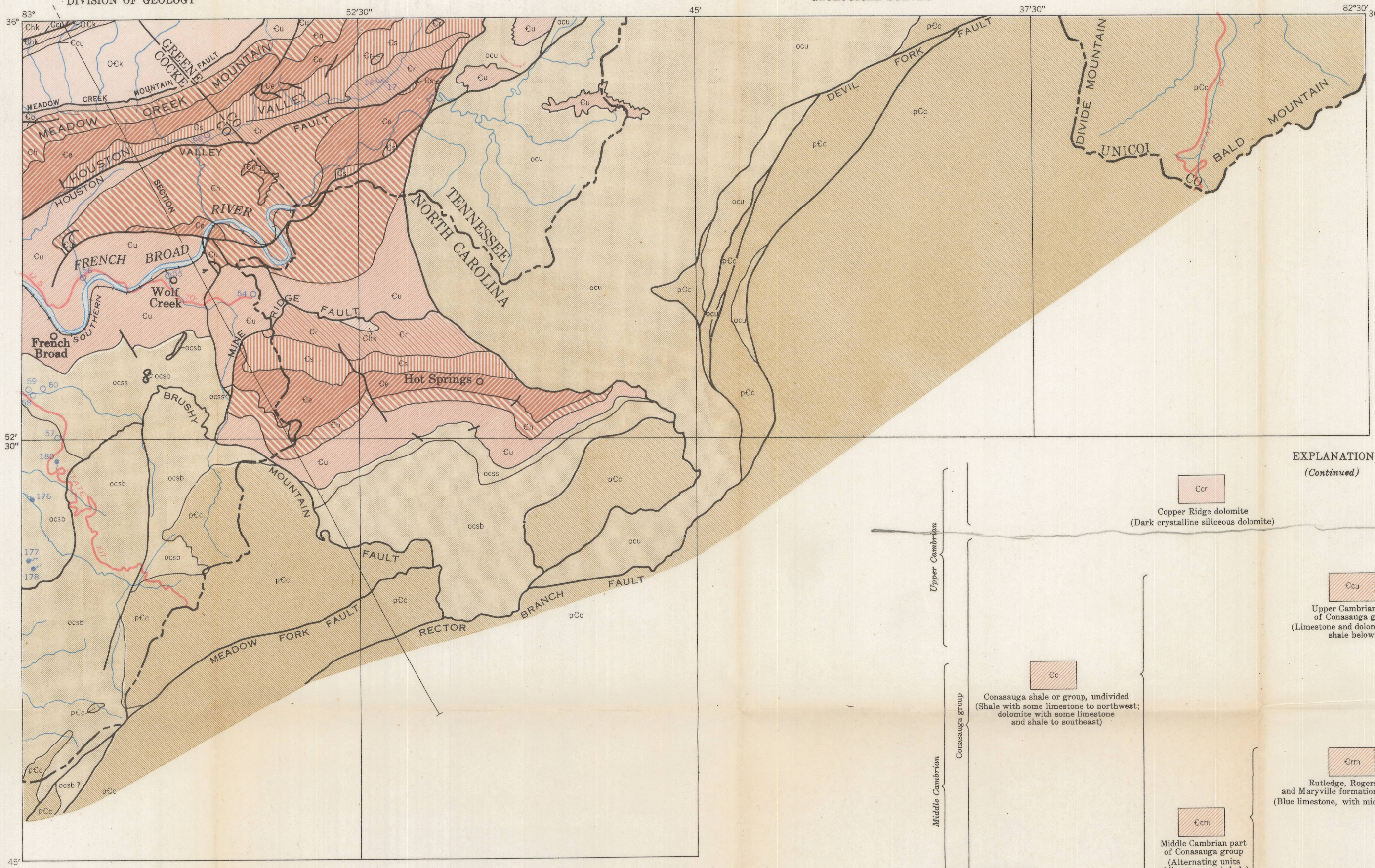




EXPLANATION
(Continued)

Ccr
Copper Ridge dolomite
(Dark crystalline siliceous dolomite)

Ccc
Conococheague limestone
(Blue limestone
ribbed with dolomite)

Cmn
Maynardville limestone
(Limestone below, dolomite above)

Ccu
Upper Cambrian part
of Conasauga group
(Limestone and dolomite above,
shale below)

Cn
Nolichucky shale
(Greenish shale)

Cm
Maryville limestone
(Blue limestone,
mostly ribbed
with dolomite)

Crg
Rogersville shale
(Light green shale)

Crt
Rutledge limestone
(Blue limestone,
mostly ribbed
with dolomite)

Chk
Honaker dolomite
(Siliceous dolomite;
some limestone beds;
dolomitic shale near base)

Cpv
Pumpkin Valley shale
(Greenish silty shale)

Cra
Sandstone-bearing member
of Rome formation
(Varicolored shale, siltstone,
and sandstone; some dolomite layers)

Cra
Rome formation
(Varicolored shale,
siltstone, and sandstone;
some dolomite
and limestone layers)

Cra
Apison member of Rome formation
(Bright red and green shale)

Cra
Shady dolomite
(Blue-gray and white dolomite)

Cra
Hesse sandstone
(White sandstone)

Cra
Murray shale
(Greenish silty shale)

Cra
Nebo sandstone
(White sandstone)

Cra
Nichols shale
(Greenish silty shale)

Cra
Cochran conglomerate
(Feldspathic sandstone
and conglomerate)

Cra
Hampton formation
(Greenish silty shale and siltstone,
with feldspathic sandstone layers)

Cra
Unicoi formation
(Feldspathic sandstone
and conglomerate;
some siltstone and shale)

Cra
Sanduck shale
(Argillaceous shale
and silty shale,
with conglomerate
and sandstone lenses)

Cra
Pigeon siltstone
(Massive greenish siltstone
and fine-grained sandstone)

Cra
Snowbird formation
(Shale, siltstone, arkose,
and conglomerate)

Cra
Ocoee series, undivided
(Dark, poorly sorted rocks from
shale to graywacke conglomerate)

Cra
Mount Rogers volcanic group
(Purple and green metavolcanic rocks)

Cra
Pre-Cambrian crystalline complex
(Granitic and gneissic rocks with inclusions
of mica and hornblende schist)

Cra
Contact

Cra
Fault

Cra
Fault
Dashed where approximately located

Cra
Doubtful or probable fault

Cra
Well showing location
The first number indicates the number within the county,
the second the well number in group

Cra
Spring showing location

EXPLANATION

is
Paleozoic intrusive rocks
(Mica peridotite in Union Co.;
metadiorite in Sevier Co.; metagabbro in Polk Co.)

Pu
Pennsylvanian rocks, undifferentiated
(Sandstone and shale, with coal beds)

Mp
Pennington formation
(Varicolored shale and sandstone)

Mn
Newman limestone
(Limestone, generally massive to northwest, shaly to southeast)

Mip
Fort Payne chert
(Very cherty limestone, weathering to chert)

Mg
Grainger formation
(Siltstone, sandstone, and shale)

M.Dc.
Chattanooga shale
(Black shale)

M.Ds.
Basal Mississippian and Devonian shale
(Black shale above and below,
silty shale and sandstone between)

Sr
Rockwood formation
(Shale and siltstone, with beds of iron ore;
some sandstone to southeast)

Sr
Hancock limestone
(Sandy limestone and dolomite)

Sr
Silurian sandstone and shale, undivided
(Sandstone, siltstone, and shale,
with beds of iron ore in upper part)

Sr
Sevier shale
(Blue cherty, massive,
and silty limestone)

Sr
Chickamauga limestone, unit 1
(Blue cherty, massive,
and silty limestone)

Sr
Athens shale
(Bluish calcareous shale and
shaly limestone; some sandstone
to southeast; blue limestone at base)

Sr
Chickamauga limestone, unit 2
(Blue limestone, mostly nodular and shaly;
some shale to southeast)

Sr
Chickamauga limestone, unit 3
(Blue flaggy limestone and
yellow silty limestone)

Sr
Moccasin formation
(Maroon liny shale, shaly limestone,
and blue flaggy limestone)

Sr
Chickamauga limestone, unit 4
(Blue crystalline well-bedded
limestone; upper part shaly limestone)

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Reedville shale
(Bluish calcareous shale)

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GEOLOGIC MAP OF EAST TENNESSEE: ASHEVILLE, AND MASTER EXPLANATION
SHOWING LOCATION OF WELLS AND SPRINGS

Scale
1
125,000
5

0 10 Miles

Base compiled and materials assembled by C. H. Heins,
G. D. DeBuchanne and R. M. Richardson of the U. S. Geological Survey
Maps prepared for printing by N. B. Johnson, C. E. James, J. B. Carter,
and others of the U. S. Geological Survey

Geology compiled by John Rodgers, U. S. Geological Survey
(For Description of sources see text)
Locations of wells and springs listed in the text by George D. DeBuchanne,
R. M. Richardson, and others of the U. S. Geological Survey