

CORRELATION OF MAP UNITS

| | | |
|-------|-------------------------------------|-----------|
| Qal | Quaternary | PALEOZOIC |
| Qh | Quaternary | |
| Mtsp | Mississippian | |
| Dv | Devonian | |
| Sr | Silurian | |
| Ocm | Middle Ordovician | |
| Og | Middle Ordovician | |
| Oca | Middle Ordovician | |
| On | Lower Ordovician | |
| Ol | Lower Ordovician | |
| Ock | Upper Cambrian and Lower Ordovician | |
| Ockch | Upper Cambrian and Lower Ordovician | |
| Cc | Cambrian | |
| Ci | Cambrian | |

DESCRIPTION OF MAP UNITS

- Qal** Alluvial and low terrace deposits (Quaternary)—Unconsolidated deposits of sand, silt, clay, and gravel.
- Qh** High terrace deposits (Quaternary)—Medium to coarse gravel in a sand or sandy clay matrix.
- Mtsp** Tusculmbia Limestone, Fort Payne Chert, and Maury Formation undifferentiated (Lower and Upper Mississippian)—Tusculmbia Limestone: Light- to medium-dark-gray, thick-bedded, coarsely crystalline limestone. Fort Payne Chert: Thin irregularly bedded, grayish-orange, partly fossiliferous chert. Maury Formation: Grayish-yellow-green, moderate-red, and medium-gray claystone.
- Dv** Chattanooga Shale (Upper Devonian)—Dark-gray shale containing dark-gray partly pebbly sandstone in lower part.
- Sr** Red Mountain Formation (Lower and Upper Silurian)—Interbedded light- to medium-gray, fine- to coarse-grained partly fossiliferous sandstone and dark-gray shale; hematitic ironstone present in upper part.
- Ocm** Colvin Mountain Sandstone (Middle Ordovician)—Very light gray fine- to coarse-grained, quartzose sandstone.
- Og** Greensport Formation (Middle Ordovician)—Predominantly silty and shaly, mottled maroon and bluish-gray micritic limestone in the lower part; variegated red, ochre, and maroon siltstone interbedded with fine-grained, olive-gray sandstone in the upper part.
- Oca** Lenoir Limestone (Middle Ordovician)—Medium-dark-gray to dark-gray, argillaceous, micritic, stylonodular limestone; light- to dark-gray, fenestral, micritic limestone in lower part (Mosheim Limestone Member).
- Ocmg** Sequatchie Formation, Colvin Mountain Sandstone, Greensport Formation, and Chickamauga Limestone undifferentiated (Middle and Upper Ordovician)—Sequatchie Formation: Light-greenish-gray and reddish-gray, finely crystalline mottled argillaceous dolomite and dolomitic mudstone. Colvin Mountain Sandstone: Very light-gray, fine- to coarse-grained quartzose sandstone. Greensport Formation: Grayish-red and grayish-green argillaceous dolomite, shale, mudstone, and siltstone. Chickamauga Limestone: Light- to medium-greenish-gray, thin- to medium-bedded fossiliferous and fenestral limestone; grayish-red and greenish-gray limestone containing scattered chert grains and pebbles locally present in lower part; chert pebble conglomerate commonly at base (Attala Chert Conglomerate Member).
- Oca** Attala Chert Conglomerate Member of Chickamauga Limestone (Middle Ordovician?)—Chert pebble conglomerate and pebbly sandstone; green-gray and dark-red to maroon shale commonly at the base.
- On** Nevada Limestone (Lower Ordovician)—Light- to medium-bluish-gray, fossiliferous micritic limestone locally containing minor interbeds of very light to medium-gray, finely to medium crystalline dolomite.
- Ol** Longview Limestone (Lower Ordovician)—Interbedded light- to light-medium-gray micritic limestone; light-gray, medium crystalline dolomite; and light- to medium-gray, thin-bedded chert. Longview residuum consists of rounded, nodular, and bedded partly fossiliferous chert.
- Ockch** Chepultepec and Copper Ridge Dolomites undifferentiated (Upper Cambrian and Lower Ordovician)—Chepultepec Dolomite: Light- to medium-gray, finely to coarse crystalline cherty dolomite and intervals of light- to light-medium-gray micritic limestone weathered to dense and cavernous chert. Copper Ridge Dolomite: Light- to medium-gray, very finely to medium crystalline, laminated dolomite weathered to predominantly dense chert.
- Ock** Knox Group undifferentiated (Upper Cambrian and Lower Ordovician)—Light- to medium-gray, finely to medium crystalline, thick-bedded dolomite containing nodules, stringers, and beds of light- to dark-gray chert.
- Cc** Coasauga Formation (Middle and Upper Cambrian)—Gadsden *mushwad* and Rome *thrust shear*: Dark-gray to dark-greenish-gray shale commonly containing lenticular to thin-bedded medium- to dark-gray micritic limestone that is bioturbated in part. Ribbon-banded light- to dark-gray limestone and medium-gray dolomite and dark-gray stylonodular limestone are locally present. Helena *thrust shear*: Light-gray, medium- to thick-bedded, coarsely crystalline, vuggy dolomite.
- Ci** Rome Formation (Lower Cambrian)—Pale-olive and medium-greenish-gray silty shale, mudstone, and very fine grained sandstone containing thin- to medium-bedded, light-grayish-green, finely crystalline dolomite.

SYMBOLS FOR GEOLOGIC MAP

- Contact, dashed where located very approximately, showing location of control point (contact exposed or closely located)
- Contact, concealed beneath mapped units
- Thrust fault, located very approximately, sawtooth on upper plate
- Thrust fault, concealed beneath mapped units
- Trace of anticline axis, located approximately, arrow showing direction of plunge
- Water boundary
- Strike and dip of bedding
- Strike of vertical bedding

SYMBOLS FOR CROSS SECTIONS A-A', B-B', C-C', and D-D'

- Stratigraphic contact
- Fault, showing relative movement

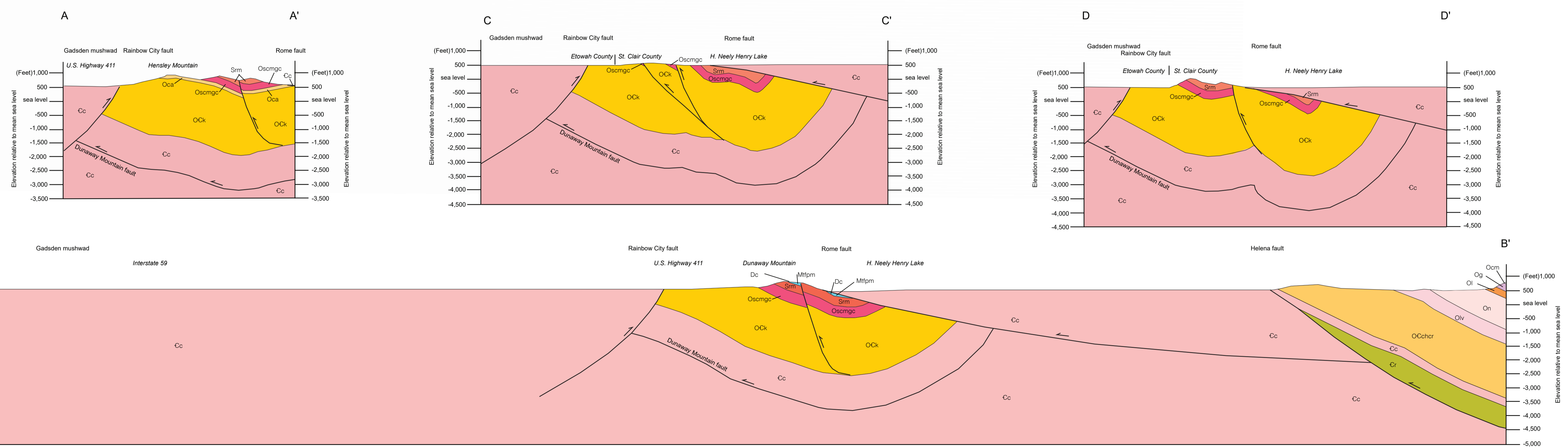
Base topographic map U.S. Geological Survey 1975
 Produced in cooperation with the U.S. Geological Survey, National Cooperative Geologic Mapping Program, Cooperative Agreement G09AC00200
 Polyconic projection, 1927 North American datum 10,000-foot grid based on Alabama (East) rectangular coordinate system
 Map rotated 0.525 degrees clockwise for display

SCALE 1:24,000
 1 MILE
 1 KILOMETER

CONTOUR INTERVAL 20 FEET
 NATIONAL GEODETIC VERTICAL DATUM OF 1929

QUADRANGLE LOCATION

Digital database by G. Daniel Irvin



GEOLOGIC MAP AND CROSS SECTIONS OF THE DUNAWAY MOUNTAIN 7.5-MINUTE QUADRANGLE, ETOWAH AND ST. CLAIR COUNTIES, ALABAMA

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