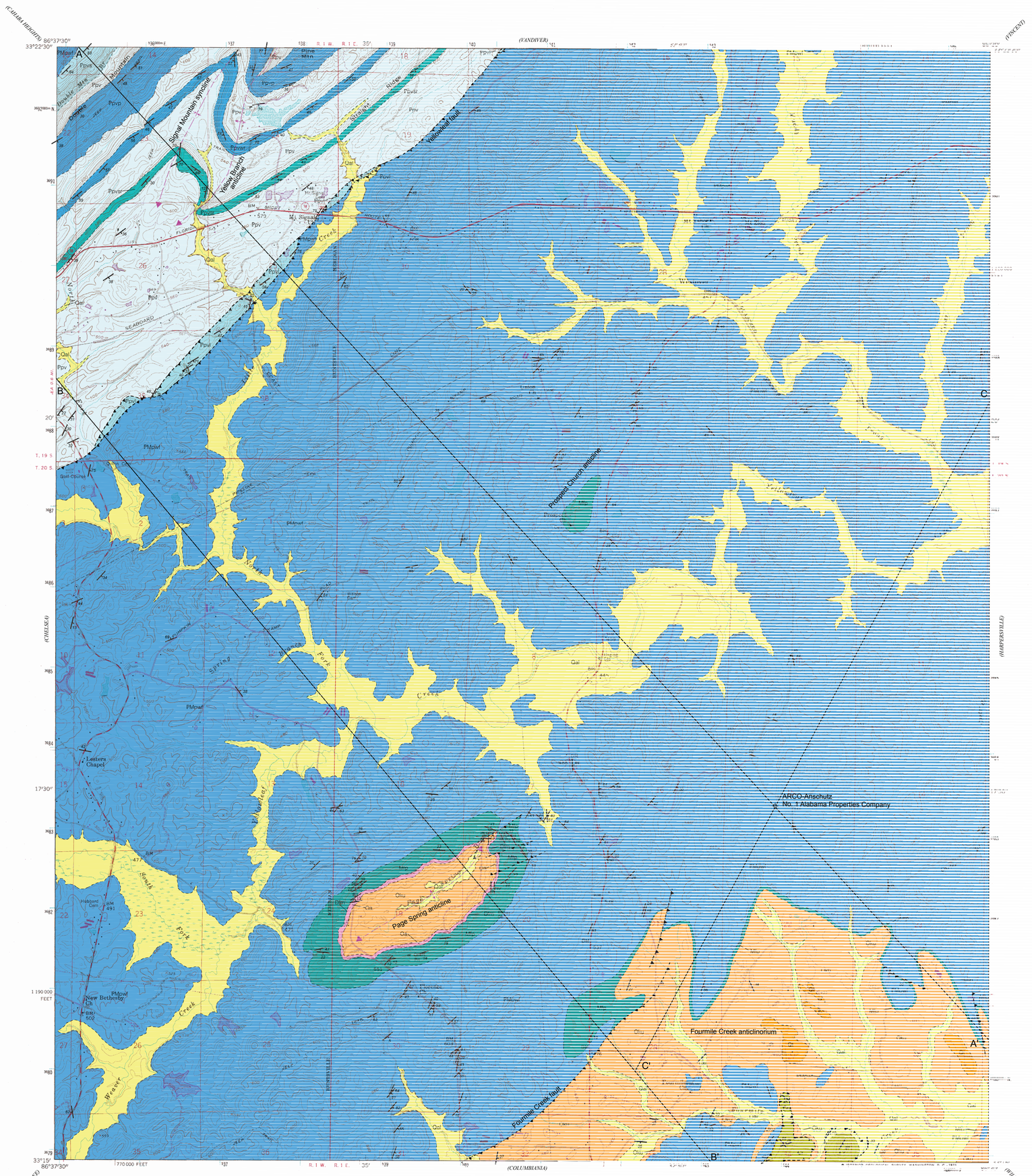
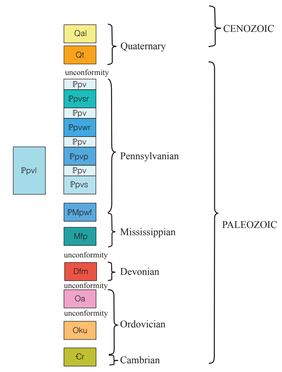


CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

Qal — **Alluvium (Quaternary)**—Unconsolidated deposits of sand, silt, and gravel.

Qt — **Terrace deposits (Quaternary)**—Coarse gravel.

Ppv — **Pottsville Formation (Lower Pennsylvanian)**—Between the mappable sandstone members, mostly dark-gray shale with interbeds of sandstone, reddish-brown mudstone, and coal.

Ppvsr — **Pottsville Formation, Straight Ridge Sandstone Member (Lower Pennsylvanian)**—Light-gray to light-tan, fine- to medium-grained, thin- to thick-bedded, quartzose to sublithic sandstone.

Ppvwr — **Pottsville Formation, Wolf Ridge Sandstone Member (Lower Pennsylvanian)**—White to tan, fine-grained, thin-bedded, quartzose to sublithic sandstone.

Ppvl — **Pottsville Formation lower part undifferentiated (Lower Pennsylvanian)**—Light-gray, fine- to medium-grained, quartzose sandstone and quartz-pebble conglomerate.

Ppvp — **Pottsville Formation, Pine Sandstone Member (Lower Pennsylvanian)**—Light-gray, fine- to medium-grained, thin-bedded to massive, quartzose sandstone with locally abundant quartz pebbles.

Ppvs — **Pottsville Formation, Shades Sandstone Member (Lower Pennsylvanian)**—Light-gray, very fine to coarse-grained, thin-bedded to massive, quartzose sandstone with quartz pebbles.

PMpwf — **Parkwood Formation and Floyd Shale undifferentiated (Upper Mississippian and Lower Pennsylvanian)**—**Parkwood Formation**: Medium- to dark-gray, partly carbonaceous shale with rare marine fossils and limestone interbeds; gray-brown to medium-gray, very fine to fine-grained, partly argillaceous, partly micaceous, thin- to thick-bedded sandstone. **Floyd Shale**: Dark-gray to black shale.

Mfp — **Fort Payne Chert (Middle Mississippian)**—Light-gray, buff-weathering, thin-bedded nodular chert with locally abundant molds of pelmatozoan columnals.

Dfm — **Frog Mountain Sandstone (Lower and Middle Devonian)**—Light-gray, fine- to very coarse grained, quartzose sandstone; light-gray chert.

Oa — **Athens Shale (Middle Ordovician)**—Medium-gray to black, fissile shale, locally with abundant graptolites.

Oku — **Upper Knox Group undifferentiated (Upper Cambrian and Lower Ordovician)**—Light- to dark-gray, thick-bedded, micritic limestone with interbeds of bioclastic wackestone and peloidal wackestone; medium- to dark-gray, dolomitic, stylonodular, fossiliferous wackstone and argillaceous limestone; light-gray, fine-crystalline, thick-bedded dolomite; white, medium-grained, quartzose sandstone; light- to dark-gray chert.

Cr — **Rome Formation (Lower Cambrian)**—Maroon to purple and green shale; light-gray, very fine to fine-grained sandstone.

SYMBOLS FOR GEOLOGIC MAP

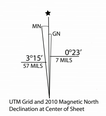
- Contact, dashed where located very approximately, showing location of control point
- Contact, concealed beneath mapped units
- Thrust fault, located very approximately, sawteeth on upper plate
- Thrust fault, concealed beneath mapped units
- Trace of syncline axis, located approximately, arrow showing direction of plunge
- Trace of anticline axis, located approximately, arrow showing direction of plunge
- Strike and dip of bedding
- Strike of vertical bedding
- Small-scale fold
- Exploratory drill hole (not productive)

Base topographic map U.S. Geological Survey 1948 (Photorevised 1983)

Produced in cooperation with the U.S. Geological Survey, National Cooperative Geologic Mapping Program, Cooperative Agreement 008HQAG0150

Polyconic projection. 1927 North American datum
10,000-foot grid based on Alabama (East) rectangular coordinate system

Map rotated 0.35 degrees clockwise for display



UTM Grid and 2010 Magnetic North Declination at Center of Sheet

SCALE 1:24,000

1 1/2 0 1 MILE

1 1/2 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Digital database by G. Daniel Irvin

GEOLOGIC MAP OF THE WESTOVER 7.5-MINUTE QUADRANGLE, SHELBY COUNTY, ALABAMA

By
William A. Thomas, G. Daniel Irvin, W. Edward Osborne, Dorothy E. Raymond, and James A. Drahovzal
2017

GEOLOGICAL SURVEY OF ALABAMA
Founded 1846

Berry H. (Nick) Tew, Jr.
State Geologist