

EXPLANATION

Geologic Units

Pennsylvanian

- Upper**
 - Mid** Middle Pennsylvanian - undivided
 - Pd** Crooked Fork Group - undivided
 - Pd** Crab Orchard Mountains Group & Gizzard Group - undivided
 - Pd** Gizzard Group - undivided
- Lower**
 - Ma** Pennington Formation
 - Ma** Newman Limestone

Mississippian

- Upper**
 - Ma** Fort Payne Fm.
 - Ma** Chattanooga Shale
- Lower**
 - Ma** Rockwood Fm.

Ordovician

- Upper**
 - Or** Sequatchie Fm.
 - Or** Reedsville Shale
- Middle**
 - Chickamauga Supergroup**
 - Nashville Group**
 - Or** Cannon Ls.
 - Or** Cathays and Leipers Fm. - undivided
 - Or** Hermitage Fm.
 - Chickamauga Group**
 - Or** Chickamauga group undivided
 - Or** Moctama Fm.
 - Or** Witten Fm.
 - Or** Bowen Fm.
 - Or** Benbot Fm.
 - Or** Rockwell Fm.
 - Or** Fleanor Shale
 - Or** Blackford Fm. (includes Elders mbr.)
 - Stones River Group**
 - Or** Stones River Group - undivided
 - Or** Carvers Ls.
 - Or** Lebanon Ls.
 - Or** Pierce Ls. and Murfreesboro Ls. undivided
 - Or** Pong Spring Fm.
 - Or** Riley Ls.
- Lower**
 - Knox Group**
 - Or** Knox Group - undivided
 - Or** Macon Dolomite
 - Or** Kingsport Fm.
 - Or** Longview Dolomite
 - Or** Chepultepec Dolomite
 - Or** Copper Ridge Dolomite

- Lower**
- Conasauga Group**
 - Or** Conasauga Group - undivided
 - Or** Marysville Ls.
 - Or** Mulchusky Shale
 - Or** Dismal Gap Fm. (Maryville Ls.)
 - Or** Rogersville Shale
 - Or** Friendship Fm. (Rutledge Ls.)
 - Or** Pumpkin Valley Shale
- Or** Rome Fm. - undivided

Geologic Structures

Syncline
dashed where approximate

Anticline
dashed where approximate

Overturned Syncline
dashed where approximate

Major Fault
dashed where approximate, dotted where concealed

Minor Fault
dashed where approximate, dotted where concealed

Other

Geologic Map Sources:

- Cattermole, 1958, Knoxville 7.5-min Quadrangle Geologic Map, 1:24,000.
- Cattermole, 1960, Bearden 7.5-min Quadrangle Geologic Map, 1:24,000.
- Cattermole, 1962, Maryville 7.5-min Quadrangle Geologic Map, 1:24,000.
- Cattermole, 1966, Fountain City 7.5-min Quadrangle Geologic Map, 1:24,000.
- Coker et al., 1984, Pilot Mountain 7.5-min Quadrangle Geologic Map, 1:24,000.
- Garman and Ferguson, 1975, Fork Mountain 7.5-min Quadrangle Geologic Map, 1:24,000.
- Jewell, 1966, Lenoir City 7.5-min Quadrangle Geologic Map, 1:24,000.
- Jewell, 2007, Sweetwater 7.5-min Quadrangle Geologic Map, 1:24,000.
- Kohl and Lemiszak, 2008, Tranquility 7.5-min Quadrangle Geologic Map, 1:24,000.
- Kohl and Miller, 2007, Binfeld 7.5-min Quadrangle Geologic Map, 1:24,000.
- Kohl and Miller, 2007, Loudon 7.5-min Quadrangle Geologic Map, 1:24,000.
- Kohl, 2008, Norris 7.5-min Quadrangle Geologic Map, 1:24,000.
- Kohl, 2008, Philadelphia 7.5-min Quadrangle Geologic Map, 1:24,000.
- Lemiszak et al., 2012, Oak Ridge Geologic Map, 1:24,000.
- Lemiszak, 2001, Cave Creek 7.5-min Quadrangle Geologic Map, 1:24,000.
- Lemiszak and Kohl, 2008, Pattie Gap 7.5-min Quadrangle Geologic Map, 1:24,000.
- Lemiszak, 2013, Lovell 7.5-min Quadrangle Geologic Map, 1:24,000.
- Lemiszak, 2015, Elvertown 7.5-min Quadrangle Geologic Map, 1:24,000.
- Mills and Swingle, 1972, Roddy 7.5-min Quadrangle Geologic Map, 1:24,000.
- Moore et al., 1993, Harriam 7.5-min Quadrangle Geologic Map, 1:24,000.
- Moore et al., 2004, Camp Austin 7.5-min Quadrangle Geologic Map, 1:24,000.
- Neuman and Wilson, 1960, Blockhouse 7.5-min Quadrangle Geologic Map, 1:24,000.
- Rodgers, 1953, Niota 7.5-min Quadrangle Geologic Map, 1:24,000.
- Statter and Sykes, 1970, Duncan Flats 7.5-min Quadrangle Geologic Map, 1:24,000.
- Stearns et al., 1951, Crab Orchard Mountains Geologic Map, 1:24,000.
- Swingle, 1958, Rockwood 7.5-min Quadrangle Geologic Map, 1:24,000.
- Swingle, 1960, Lake City 7.5-min Quadrangle Geologic Map, 1:24,000.
- Swingle, 1964, Spring City 7.5-min Quadrangle Geologic Map, 1:24,000.
- Swingle, 1964, Ten Mile 7.5-min Quadrangle Geologic Map, 1:24,000.
- Swingle, 1964, Clinton 7.5-min Quadrangle Geologic Map, 1:24,000.
- Tiedeman et al., 1965, Cardiff 7.5-min Quadrangle Geologic Map, 1:24,000.

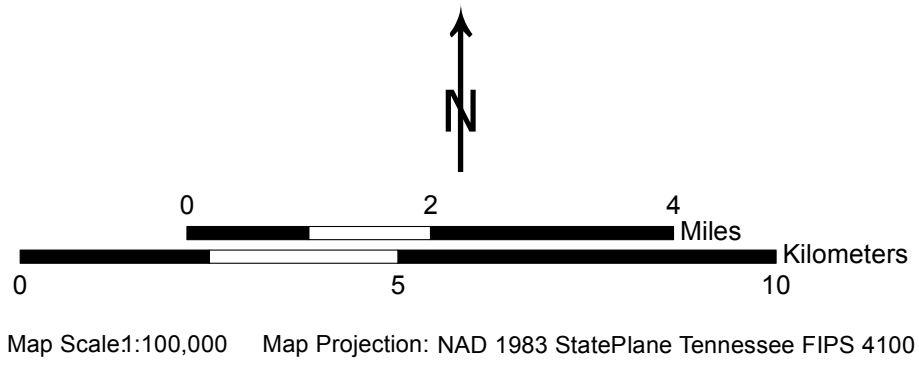


PLATE 1 Clinch River Site Vicinity Geologic Map