EXPLANATION

- **Location and value of Ordovician CAI_{max} sample (this report)**—al, allochthonous strata; au, autochthonous strata
- **Location of Ordovician CAI_{max} sample**—Data from Harris and others (1978)
  - The senior author has assigned a CAI value of 1.5 to 2.0 for the Trenton Limestone in this well
  - The CAI value of 3.0 is from the Beekmantown Dolomite about 1,500 to 2,000 ft below the Trenton Limestone in this well (No. 8610T James)
  - The senior author has assigned a CAI value of 3.5 to 4.0 for the Trenton Limestone at this outcrop location
- **Ordovician CAI_{max} isograd (this report)**—Dashed where inferred; hachured to indicate isograd depression
- **Ordovician CAI_{max} isograd**—Data from Harris and others (1978)
- **12,000-ft isopach for Middle Ordovician to Permian strata**—Data from Harris and others (1978)
- **Thrust fault**—Sawteeth on upper plate
- **Fault**—Dashed where inferred; BSF, Burning Springs fault; HF, Highlandtown fault
- **Structural front**—Dashed where inferred
- **Structural discontinuity**—Dashed where inferred
- **Hinge zone**
- **Kimberlite**

- **Mesozoic basins**
- **Blue Ridge province**
- **Great Valley (Pa., Md.) and Shenandoah Valley (Va., W. Va.)**
- **Martinsburg Formation**
- **Hamburg Sequence**
- **Valley and Ridge province**
- **Eocene intrusive rocks**
- **Scranton gravity high**
- **Henderson dome**
- **Lackawanna syncline**
- **Rome trough**

Lake Ontario
Lake Erie
CANADA
UNITED STATES
Adirondack Mountains
Allegheny Plateau province
CLARENDON-LINDEN FAULT ZONE
BOWLING GREEN FAULT ZONE AND GRENVILLE FRONT
FINDLAY ARCH
MIDDLETOWN FAULT
AKRON-SUFFIELD FAULT ZONE
CAMBRIDGE STRUCTURAL DISCONTINUITY
PITTSBURGH-WASHINGTON STRUCTURAL DISCONTINUITY
APPALACHIAN STRUCTURAL DEFORMATION
CINCINNATI ARCH
WAVERLY ARCH
GRENVILLE FRONT
STARR FAULT
Area of kimberlites(?)
ALLEGHENY STRUCTURAL FRONT
BLUE MOUNTAIN STRUCTURAL FRONT
FSF
HINGE ZONE
OHIO-WEST VIRGINIA
CENTRAL WEST VIRGINIA ARCH
FAULT
NORTH MOUNTAIN FAULT
PULASKI FAULT
LEXINGTON DOME
LEXINGTON FAULT ZONE
KENTUCKY RIVER FAULT ZONE
PAINT CREEK UPLIFT
IRVINE-PAINT CREEK FAULT ZONE
ROCKCASTLE RIVER FAULT ZONE
GRENVILLE FRONT
PERRY COUNTY UPLIFT
FLOYD COUNTY EMBAYMENT
PIKE COUNTY ARCH
RUSSELL FORK FAULT
PINE MOUNTAIN THRUST FAULT
HUNTER VALLEY BY-PASS
SAINT CLAIR THRUST FAULT
SALTVILLE FAULT
Clarendon
Seneca
Schenectady
Tioga
Broome
Chemung
Susquehanna
Bradford
Sullivan
Wyoming
Lycoming
Clinton
Centre
Mercer
Gilmer
Lewis
Braxton
Randolph
Pendleton
Pocahontas
Highland
Bell
Lee

0 25 50 75 100 MILES
0 50 100 150 KILOMETERS

Figure 5.—Ordovician conodont color alteration index (CAI_{max}) isograds superimposed on selected structural features and provinces.