EXPLANATION

- 1.5 **Location and value of Devonian CAI_{max} sample (this report)**—Asterisk indicates sample had a questionable CAI value based on "conodont pearl" and was not contoured
- **Location of Middle Devonian to Silurian CAI_{max} sample**—Data from Harris and others (1978)
- **Devonian CAI_{max} isograd (this report)**—Dashed where inferred; hachured to indicate isograd depression
- **Middle Devonian to Silurian CAI_{max} isograd**—Data from Harris and others (1978)
- **8,000-ft isopach for Permian to Devonian 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**
- K **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
Ontario
Albany
Lycoming
Bedford
Franklin
Preston
Taylor
Roane
Wayne
Raleigh
Summers
Monroe
Giles
Area of kimberlites(?)
CLARENDON-LINDEN FAULT ZONE
BOWLING GREEN FAULT ZONE AND GRENVILLE FRONT
FINDLAY ARCH
MIDDLETOWN FAULT
AKRON-SUFFIELD FAULT ZONE
PITTSBURGH-WASHINGTON STRUCTURAL DISCONTINUITY
HF
TYRONE-MT. UNION STRUCTURAL DISCONTINUITY
Allegheny Plateau province
ALLEGHENY STRUCTURAL FRONT
BLUE MOUNTAIN STRUCTURAL FRONT
PITTSBURGH-WASHINGTON STRUCTURAL DISCONTINUITY
CAMBRIDGE STRUCTURAL DISCONTINUITY
CINCINNATI ARCH
GRENVILLE FRONT
WAVERLY ARCH
STARR FAULT
BSF
HINGE ZONE
OHIO-WEST VIRGINIA
CENTRAL WEST VIRGINIA ARCH
ALLEGHENY STRUCTURAL FRONT
FAULT
NORTH MOUNTAIN
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 FAULT
SAINT CLAIR THRUST FAULT
SALTVILLE FAULT
PULASKI FAULT

0 25 50 75 100 MILES
0 50 100 150 KILOMETERS

Figure 8.—Devonian conodont color alteration index (CAI_{max}) isograds superimposed on selected structural features and provinces.