



EXPLANATION

<p>IN CROSS SECTIONS ONLY</p> <p>Ti QUARTZ MONZONITE OF SUMMIT CREEK (EDWARDS)</p> <p>Mc COPPER BASIN FORMATION (MISSISSIPPIAN)—Chick Mountain thrust plate</p> <p>UNNAMED DEVONIAN AND SILURIAN UNIT—Age relations unknown</p> <p>DSa Yellow-brown calcareous siltstone</p> <p>DSs Black siliceous argillite</p> <p>ON MAP AND SECTIONS</p> <p>St TRAIL CREEK FORMATION, RESTRICTED (SILURIAN)—Labeled in sections only</p> <p>PHI KAPPA FORMATION (MIDDLE SILURIAN TO LOWER ORDOVICIAN)</p> <p>Upper part (Middle to Lower Silurian)—Labeled in section E-E' only</p> <p>Main body (Ordovician)—Labeled in sections only</p> <p>Op Basin Gulch Quartzite Member (Lower Ordovician)—Labeled in sections only</p> <p>Opb ON MAP ONLY</p> <p>DS East Fork Formation (Ordovician)—Metamorphosed equivalents of Elm, Dolomite, Kinross, Quartzite, and Saturday Mountain Formations in Clayton area, Idaho (Hobbs and others, 1968)</p> <p>CONTACT—Dashed where approximately located or inferred</p> <p>U HIGH-ANGLE FAULT—Dashed where approximately located or inferred; U, upthrown side; D, downthrown side. Arrows show sense of relative movement in cross sections</p> <p>THRUST FAULT—Dashed where approximately located; sawtooth on upper plate. Arrows show direction of relative movement of upper plate in cross sections</p> <p>SOLE THRUST OF ALLOCHTHONOUS SEQUENCES OF LOWER PALEOZOIC ARGILLACEOUS ROCKS (WESTERN PACES)—Also marks abrupt metamorphic break along Pioneer window contact. Dashed where approximately located. Sawtooth on upper plate</p> <p>SHEAR ZONE—In sections only</p> <p>FIELD OBSERVATION</p>	<p>LOCALITY, USGS COLLECTION NUMBER, AND GRAPTOLITE ZONE OF ORDOVICIAN GRAPTOLITE COLLECTION—Consilient zones from Berry (1960); zonal ranges shown where collection not diagnostic or spans more than one zone</p> <p>Approximate Ordovician age where assignment to specific zone is not possible</p> <p>● Late Ordovician</p> <p>○ Middle Ordovician</p> <p>○ Early Ordovician</p> <p>LOCALITY, USGS COLLECTION NUMBER, AND GRAPTOLITE ZONE OF SILURIAN GRAPTOLITE COLLECTION—Asterisk indicates zone of Elze and Wood (1901-14); zonal ranges shown where collection not diagnostic or spans more than one zone</p> <p>Approximate Silurian age where assignment to specific zone is not possible</p> <p>● Middle Silurian</p> <p>○ Early Silurian</p> <p>LOCALITY WHERE GRAPTOLITES ARE PRESENT BUT NOT IDENTIFIED</p> <p>○ APPROXIMATE LOCALITY WHERE GRAPTOLITES REPORTED BY SPOELHOF (1972) BUT NOT COLLECTED OR CONFIRMED BY PRESENT INVESTIGATORS</p> <p>○ COLLECTION FROM ROCK THAT IS NOT IN PLACE—Only at locality less than one-half km north of confluence of Park and Summit Creeks; circle shows collection site, arrow points to source of material</p> <p>E-E' BIOSTRATIGRAPHIC AND STRUCTURAL SECTION—THRUST SLICE REFERRED TO IN TEXT—In section E-E' only</p> <p>DIP COMPONENT OF BEDS IN CROSS SECTIONS—WHERE ATTITUDE MEASURED IN FIELD—May be projected short distance into line of section</p>
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Base from U.S. Geological Survey Mendocino Peak, Phi Kappa Mountain, and Rock Hill Canyon, 1967

Geology by J. H. Dover, 1964-76; assisted by S. W. Hobbs, 1972

GEOLOGIC MAP AND CROSS SECTIONS SHOWING DISTRIBUTION OF MIDDLE SILURIAN TO ORDOVICIAN ROCKS, SAMPLE LOCALITIES, AND GRAPTOLITE ZONES, NORTHERN PIONEER MOUNTAINS, CENTRAL IDAHO