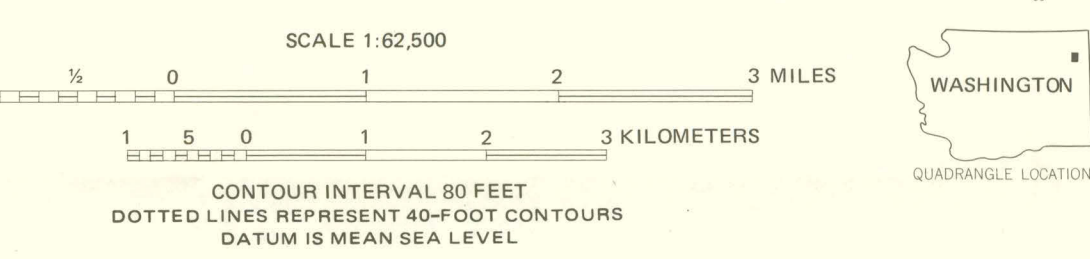
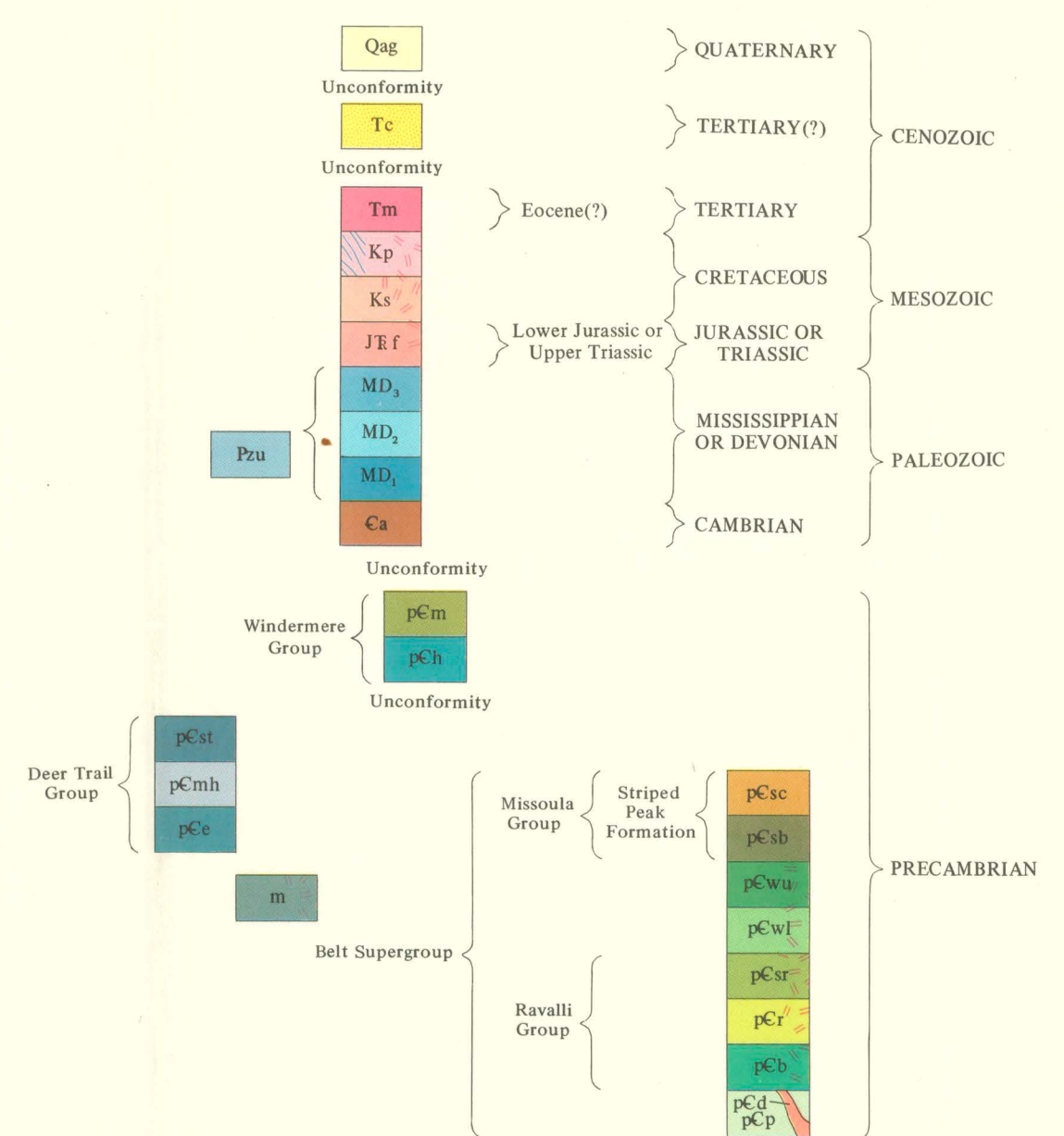


Base from U.S. Geological Survey  
Chewelah Mountain 1:62,500, 1966  
1000-meter Universal Transverse Mercator  
grid ticks



Geology by L. D. Clark and  
F. K. Miller, 1963-64; F. K. Miller  
assisted by J. C. Moore, 1965

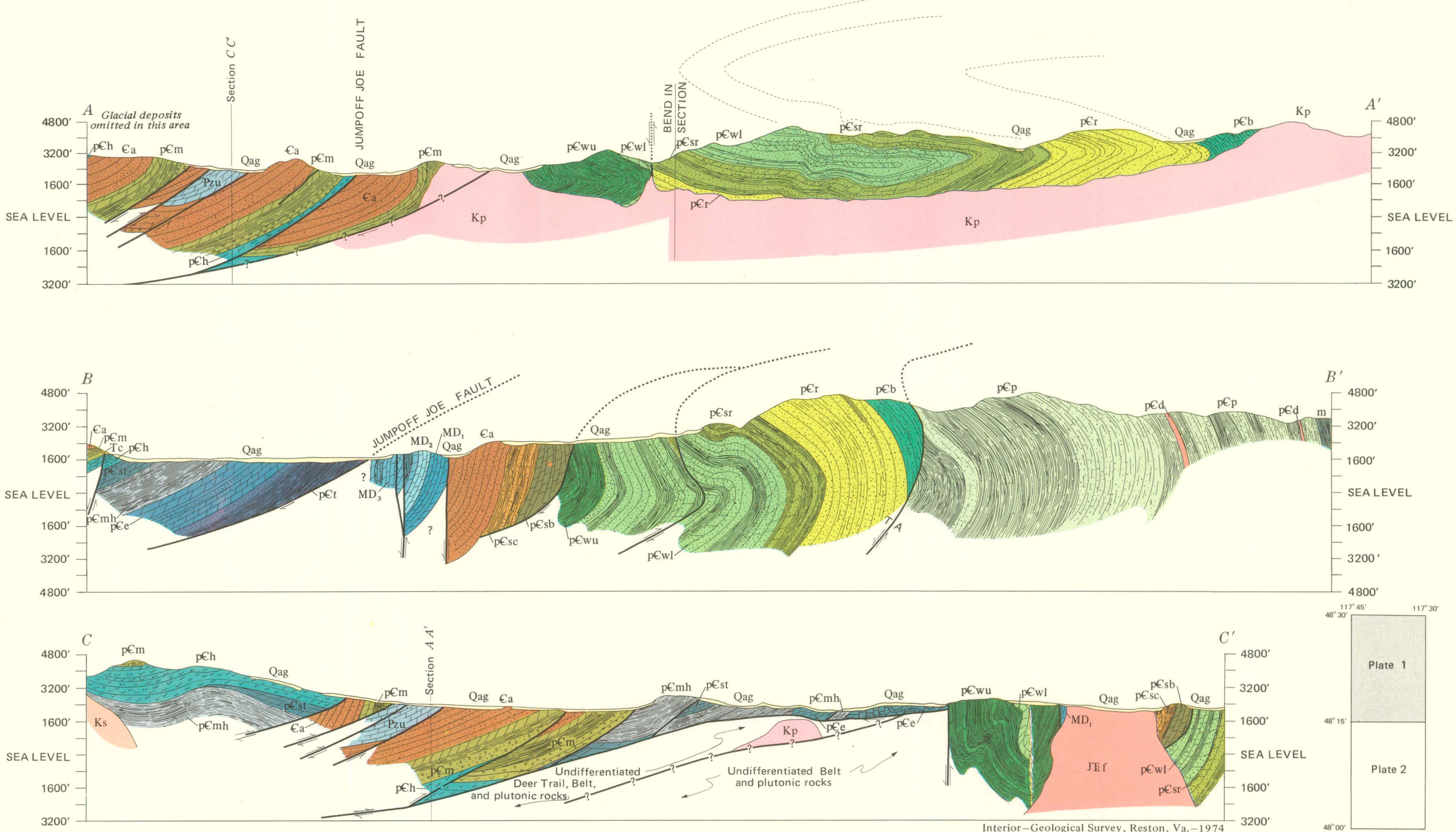
CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

- Qag** GLACIAL, ALLUVIAL, AND TALUS DEPOSITS, UNDIFFERENTIATED  
Chiefly unconsolidated gravel, sand, and clay
- Tc** CONGLOMERATE - Well-indurated cobble to boulder conglomerate
- Tm** MAFIC DIKES - Euhedral phenocrysts of hornblende, biotite, and feldspar in a fine-grained matrix
- Kp** PHILLIPS LAKE GRANODIORITE (Cretaceous) - Contains muscovite and biotite. Medium to coarse grained. Double dash overprint indicates presence of dikes associated with the Phillips Lake Granodiorite; wavy line overprint indicates where metamorphic roof remnants are numerous in the unit
- Ks** STARVATION FLAT QUARTZ MONZONITE (Cretaceous) - Contains hornblende and biotite. Medium to coarse grained
- JEt** FLOWERY TRAIL GRANODIORITE (Upper Triassic or Lower Jurassic) - Contains hornblende and biotite. Has high color index
- MD<sub>3</sub>** UNIT 3 - Light-tan dolomite and purple and green calcareous slate
- MD<sub>2</sub>** UNIT 2 - White dolomite, in part oolitic
- MD<sub>1</sub>** UNIT 1 - Dark-gray dolomite. Oolitic and conglomeratic
- Pzu** PALEOZOIC CARBONATE ROCKS, UNDIVIDED
- Ca** ADDY QUARTZITE (Cambrian) - White to purple vitreous quartzite
- WINDERMERE GROUP** (Precambrian)
  - pCm** MONK FORMATION - Slate, dolomite, conglomerate, and quartzite
  - pCh** HUCKLEBERRY FORMATION - Slightly metamorphosed basalt and volcanic clastic rocks. Minor conglomerate
- DEER TRAIL GROUP** (Precambrian)
  - pCst** STENSGAR DOLOMITE - Pink, tan, or gray dolomite, argillite, and siltite
  - pCmh** McHALE SLATE - Black, gray, and green laminated argillite
  - pCe** EDNA DOLOMITE - Impure dolomite, argillite, and quartzite
- m** METAMORPHIC ROCKS, UNDIVIDED - Schist and phyllite. Probably derived from Belt Supergroup or Deer Trail Group
- BELT SUPERGROUP** (Precambrian)
  - MISSOULA GROUP**
    - STRIPED PEAK FORMATION**
      - Member c - Gray laminated argillite and siltite
      - Member b - Impure gray and maroon dolomite
    - WALLACE FORMATION**
      - Upper part; dark laminated argillite
      - Lower part; carbonate-bearing siltite and quartzite, and argillite
  - RAVALLI GROUP**
    - ST. REGIS FORMATION** - Lavender and maroon argillite, siltite, and quartzite
    - REVETT FORMATION** - White fine-grained quartzite
    - BURKE FORMATION** - Light- to medium-gray siltite
    - PRICHARD FORMATION** - Laminated argillite, siltite, and quartzite. pCd. metabasite sills

- Contact** - Approximately located; queried where doubtful
- Fault** - Dashed where approximately located; dotted where concealed; queried where doubtful. U, upthrown side; D, downthrown side. Arrows indicate relative direction of lateral movement, or apparent lateral movement. T and A on cross sections indicate movement toward and away from the observer. Circled numbers indicate northwest-trending faults discussed in text
- Thrust fault** - Dashed where approximately located; dotted where concealed; queried where uncertain. Sawtooth on upper plate
- Shear zone**
- Fold, showing trace of axial plane** - Dashed where approximately located; dotted where concealed
- Anticline**
- Syncline**
- Overturned syncline**
- Strike and dip of beds**
  - Inclined
  - Overturned
  - Rotated more than 180°
  - Vertical
  - Horizontal
- Strike and dip of schistosity**
  - Inclined
  - Vertical
  - Horizontal
- Strike and dip of parallel beds and schistosity**
  - Inclined
  - Vertical
  - Horizontal
- Strike and dip of cleavage**
  - Inclined
  - Vertical
  - Overturned
- Strike and dip of parallel beds and cleavage** - Where bedding is shown overturned, cleavage may or may not be overturned
  - Inclined
  - Vertical
  - Overturned
- Strike and dip of slip cleavage**
  - Inclined
  - Vertical
- Strike and dip of overturned beds and slip cleavage** - Cleavage may or may not be overturned
  - Inclined
  - Vertical
- Bearing and plunge of minor fold axis**



GEOLOGIC MAP OF THE NORTH HALF OF THE CHEWELAH-LOON LAKE AREA,  
STEVENS AND SPOKANE COUNTIES, WASHINGTON

Interior - Geological Survey, Reston, Va., 1974