

### Quaternary Sedimentary Deposits

Qa	Alluvium
Qls	Landslide deposits
Ql	Loess
Qd	Dune sand
Qrg	Catastrophic flood deposits, gravel
Qfs	Catastrophic flow deposits, slackwater deposits
Qgd	Glacial drift, undivided
Qgt	Glacial till
Qgo	Glacial outwash
Qgl	Glaciolacustrine deposits








### Tertiary Sedimentary Rocks

QPlc  
Mc

### Tertiary Volcanic Rocks

Mv <sub>wp</sub>	Wanapum Basalt, Priest Rapids Member
Mv <sub>wr</sub>	Wanapum Basalt, Roza Member
Mv <sub>wri</sub>	Wanapum Basalt, Roza and Frenchman Springs Member, undivided
Mv <sub>wf</sub>	Wanapum Basalt, Frenchman Springs Member
Mv <sub>g</sub>	Grande Ronde Basalt, undivided
Mv <sub>gN2</sub>	Grande Ronde Basalt, magnetostratigraphic unit N2
Mv <sub>gR2</sub>	Grande Ronde Basalt, magnetostratigraphic unit R2

### Intrusive Igneous Rocks

E <sub>id</sub> , 	Dacite porphyry dike swarm of Goat Mountain
E <sub>id</sub> , 	Hypabyssal dacite porphyry dikes near Banks Lake
E <sub>tr</sub> , 	Trachyte dikes
E <sub>r</sub> , 	Rhyolite dikes
E <sub>id</sub> , 	Dacite and andesite dikes
E <sub>an</sub> , 	Andesite dikes
E <sub>id</sub> , 	Cooper Mountain batholith
E <sub>imd</sub>	Biotite-hornblende monzoniorite
EP <sub>ig</sub>	Granite of Swawilla Basin
EP <sub>ig</sub> , 	Granite of Coffee Lake
EP <sub>igd</sub>	Granodiorite
TK <sub>it</sub>	Arbuckle Mountain tonalite

## Mixed Igneous and Metamorphic Rocks of Plutonic Complexes

	Chelan Complex
Kigb <sub>c</sub>	Gabbro of the Chelan Complex
Klg <sub>c</sub>	Leucocratic tonalite and tonalite gneiss of the Chelan Complex
Ktgm <sub>c</sub>	Mesocratic tonalite gneiss of the Chelan Complex
Kmg <sub>c</sub>	Migmatite of the Chelan Complex
Kbg <sub>c</sub>	Banded tonalite gneiss of the Chelan Complex
pKam <sub>c</sub>	Amphibolite within the Chelan Complex
pKhm <sub>c</sub>	Heterogeneous metamorphic rocks within the Chelan Complex

### Other Complexes

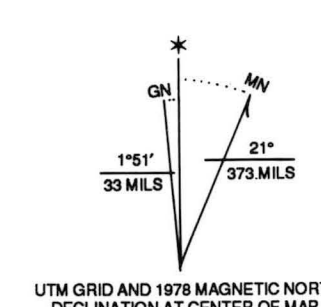
KJmg <sub>a</sub>	Migmatite, Alta Lake metamorphic rocks
Mzm <sub>g</sub>	Migmatitic granodiorite of Gibraltar Rock

### High-grade Metamorphic Rocks

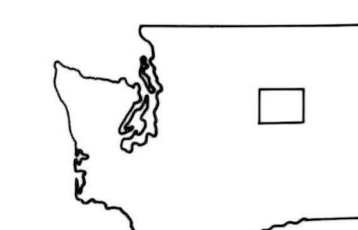
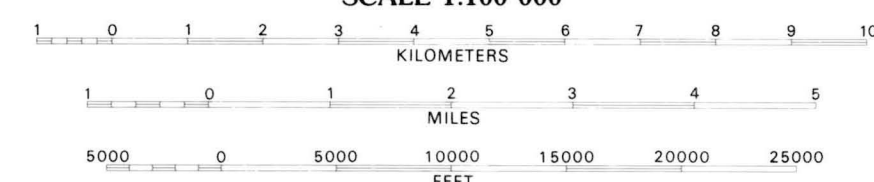
KJg	Tonalite gneiss near Chief Joseph Dam
pKh <sub>m</sub>	Amphibolite, schist, and gneiss of Alta Lake
pKh <sub>t</sub>	Amphibolite and schist of Twentyfive Mile Creek
pJhm	Metamorphic rocks east of Leahy

**EXPLANATION**

Contact  
 Fault - dashed where approximately located;  
 dotted where concealed  
 Fault - ball and bar on downthrown side  
 Thrust fault - sawteeth on upper plate  
 Anticline - dotted where concealed  
 Syncline - dotted where concealed  
 Monocline - dotted where concealed  
 Radiometric age locality



SCALE 1:100 000



Compiled by  
CHARLES W. GULICK AND MICHAEL A. KOROSEC

THIS REPORT CONSISTS OF 1 MAP AND A 20 PAGE TEXT