

WASHINGTON STATE DEPARTMENT OF Natural Resources
Bryan Smith, Commissioner of Public Lands
Ad. Nelson, Deputy Commissioner

NESPELEM QUADRANGLE

WASHINGTON DIVISION OF GEOLOGY AND EARTH RESOURCES
Raymond Lasmanis, State Geologist

PLATE 1
OPEN FILE REPORT 90-16
GEOLOGIC MAP OF THE NESPELEM 1:100,000 QUADRANGLE, WASHINGTON

GEOLOGIC UNITS

SEDIMENTARY AND VOLCANIC ROCKS AND DEPOSITS

- QUATERNARY SEDIMENTARY DEPOSITS
Sediments, undivided
Qs
Nonglacial Deposits
Qa Alluvium
Ql Loss
Qls Landslide deposits
Glacial Deposits
Qgd Drift
Qgl Glaciolacustrine deposits
Qglf Glaciolacustrine and catastrophic flood deposits, undivided
Qgo Outwash
Qgt Till
Qto Older till

TERTIARY SEDIMENTARY AND VOLCANIC ROCKS

- Columbia River Basalt Group
Wwvp Priest Rapids Member of the Wanapum Basalt
Wvgn2 Grande Ronde Basalt, magnetostratigraphic unit N2
Eocene Volcanic and Sedimentary Rocks
Evc Sanpoil Volcanics
Evc1 Volcanic breccia
Evc2 Dacite flow rock
Evs Volcanic and sedimentary rocks
Evs1 Pyroclastic rocks
Evs2 Rhyolacite of Cub Hill
Eco O'Brien Creek Formation

PALEOZOIC AND OLDER METASEDIMENTARY AND METAVOLCANIC ROCKS

- Rocks Generally West of the Manila Pass Fault
Pmm Metasedimentary rocks
Pw Wacke and quartzite
Pcb Carbonate rock
Parg Argillite
Pzm Metasedimentary rocks, undivided
Rocks West of the Huckleberry Range Fault
Rocks near Braden Hill
Cocg Chert-pebble conglomerate
Cocm Chert-quartz-bearing metasedimentary rocks
Cocor Siliceous argillite, phyllite, and chert
Cocw Chert-quartz-bearing quartzite and wacke
Cocb Carbonate rock
Cocw Greenstone
Covada Group
Omm Covada Group undivided
Omw Greenstone
Ocb Carbonate rock
Ow Wacke and quartzite
Rocks East of the Huckleberry Range Fault
Dcb Carbonate rock
Omm Leadbetter Slate
OCchw Metakine Formation
Cphm Mailen Phyllite
CZda Adly Quartzite

PRECAMBRIAN METASEDIMENTARY AND METAVOLCANIC ROCKS

- Windermere Group
Zmwh Huckleberry Formation-Greenstone Member
Zegh Huckleberry Formation-Conglomerate Member
Deer Trail Group
Yq Buffalo Hump Formation
Yq1 quartzite
Yq2 argillite
Yq3 Stensgar Dolomite
Yq4 McHale Slate
Yq5 Edna Dolomite
Yq6 Tigra Formation
Yq7 metasedimentary rocks, undivided
Yq8 quartzite

INTRUSIVE IGNEOUS ROCKS

TERTIARY HYPABSSAL INTRUSIVE ROCKS

- Hypabssal Intrusive Rocks
Eir Intrusive rhyolite near West Fork
Eda Hypabssal dacite dikes
Areas where Eocene hypabssal dacite dikes constitute more than 10 percent of the rock

PLUTONIC ROCKS

- Tertiary Intrusive rocks West of the Columbia River
Herron Creek suite
Eigv Varied granite near Stepstone Creek
Eigah Granite of Deadhorse Creek
Eigg Granite Mountain pluton
Eigmt Fire Mountain pluton
Eigjd Granodiorite of Joe Moses Creek
Devils Elbow suite
Eirmd Diorite of Little Moses Mountain
Eirmd Kettle Crest pluton
Eirmd Devils Elbow monzoniorite

- Keller Butte suite
Ehngm Granite of Moses Mountain
Ehnaam Medium-grained granite
Ehngm Varied granite
Ehngm Fine-grained granite
Ehngc Porphyritic granite of Coyote Creek

- Keller Butte pluton
Ehnaahg Garnet bearing granite of McGinnis Lake
Ehngm Quartz porphyry of Mount Tolman
Ehngb Porphyritic granite of Keller Butte
Ehna Granite of Swawilla Basin
Ehna Porphyritic granodiorite of Manila Creek
Ehngm Altered granite of Meadow Creek
Ehngc Plutonic complex of Johnny George
Ehngd Granite of Daisy Trail

- Pre-Tertiary Intrusive Rocks West of the Columbia River
Kliab Granodiorite of Barnaby Creek
Klia Granodiorite near Gold Creek
Kliam Granite and granodiorite near Meteor
Kligd Granodiorite of Rogers Bar
Klid Diorite of Stepstone Creek

- Tertiary and Older Intrusive Rocks East of the Columbia River
TKia Dikes and sills
TKiah Intrusive rocks in the Huckleberry Range
Kia Porphyry near Owl Creek
Kig Equigranular intrusive rocks near the Germanina mine
Kigd Granodiorite near Fruitland
Kiam Pluton near the Midnite Mine

- Pre-Cretaceous Mafic Intrusive Rocks
pKighb Ultramafic and mafic bodies near Bridge Creek
pKighb Mafic intrusive rocks near Stranger Creek
pKld Metadiorite of North Star Creek
u Serpentine near Parmenter Creek
Oigb Cabrio
Zib Intrusive greenstone dikes and sills

METAMORPHIC ROCKS

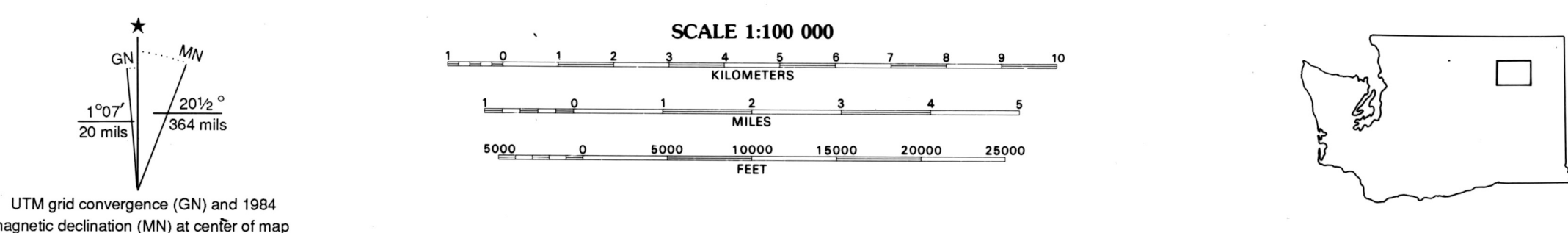
- Rocks West of the Sherman Fault
oga Gneiss and mylonitic rocks near Deernhorn Creek
pTAm Amphibolite
pTscw Schist
Pzmm Metamorphic rocks
Metamorphic Rocks of the Kettle Metamorphic Core Complex
Hall Creek Gneisses
pTsc Quartzite and schist
pTaz Quartzite
pTmg Mafic gneiss
pg Granitic orthogneiss
pTmm Heterogeneous metamorphic rocks

EXPLANATION

- ? — Contact - queried where approximately located
/// Contact - gradational
- - - Scratch boundary - boundary between reconnaissance and detailed mapping
- - - Fault - dashed where approximately located; dotted where concealed; queried where uncertain
- - - Thrust fault - sawtooth on upper plate, dashed where approximately located; dotted where concealed
- - - Low-angle normal fault - blocks on upper plate; dotted where concealed
- - - Anticline - dotted where concealed
- - - Overturned anticline - showing direction of dip of limbs, dotted where concealed
- - - Syncline - dotted where concealed
- - - Overturned syncline - showing direction of dip of limbs, dotted where concealed

- 47 Strike and dip of beds
36 Strike and dip of overturned beds
15 Strike of vertical beds
15 Strike and dip of foliation
15 Strike of vertical foliation
10 Bearing and plunge of lineation
47 Radiometric age locality (see Table 1)
5 Same geologic unit

Note: planar symbols (strike and dip of beds, foliation or schistosity, and cleavage) may be combined with linear symbols to record data observed at same locality by superimposed symbols at point of observation. Coexisting planar symbols are shown intersecting at point of observation



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Compiled by
NANCY L. JOSEPH

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THIS REPORT CONSISTS OF 1 MAP AND A 47 PAGE TEXT