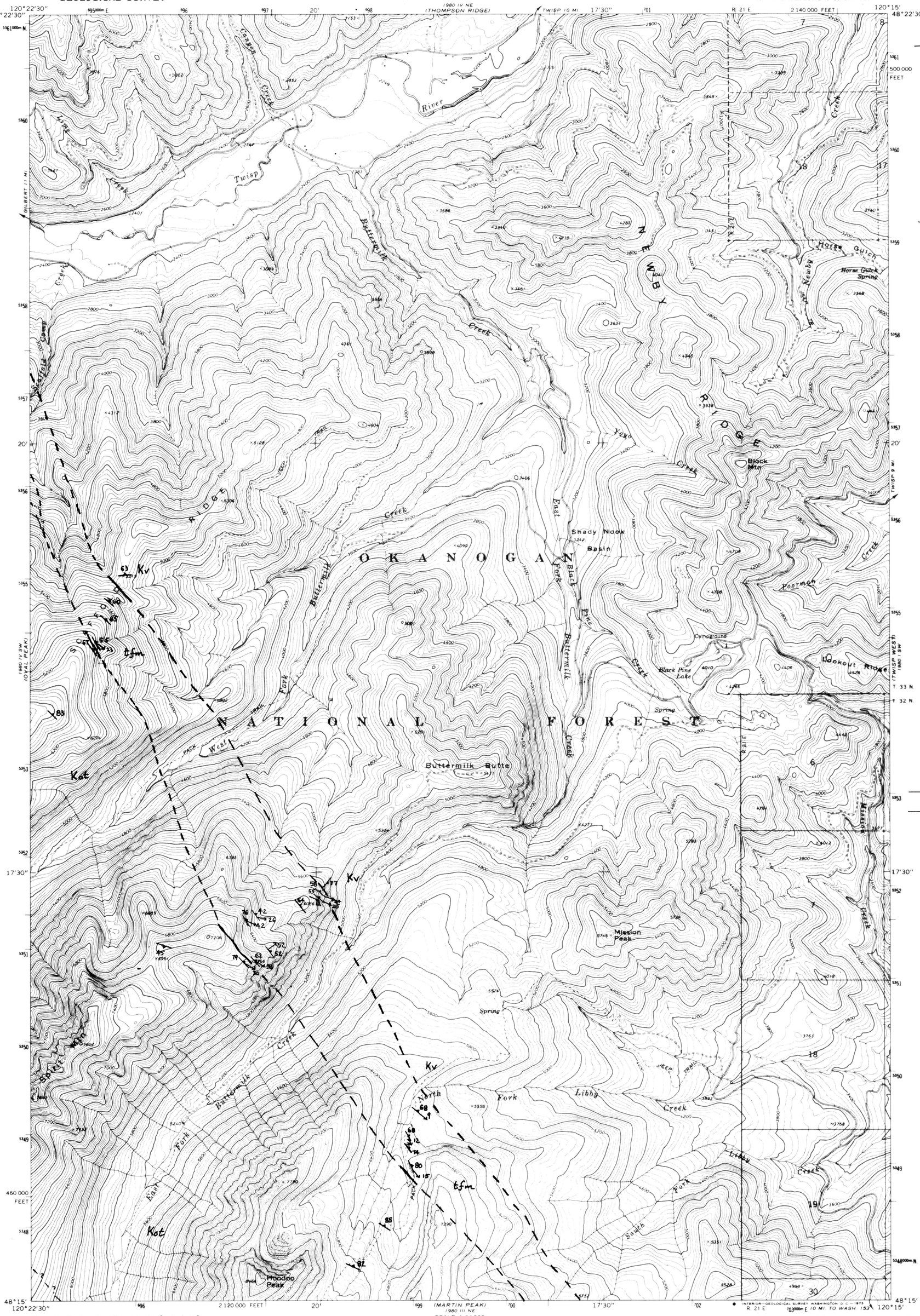
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

HOODOO PEAK QUADRANGLE
WASHINGTON—OKANOGAN CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
SE/4 BUTTERMILK BUTTE 15' QUADRANGLE

OPEN FILE REPORT 87-17
PLATE 9 OF 12



GEOLOGIC MAP OF PART OF THE HOODOO PEAK QUADRANGLE, WASHINGTON

by

ROBERT B. MILLER

1987

EXPLANATION

Kv	Volcanic and Volcaniclastic Rocks (Newby Group?)
ts	Twisp Valley Schist
tu	Ultramafic Rocks in Twisp Valley Schist
rs	Rainbow Schist
bma	Battle Mountain Gneiss
tlg	Tuckaway Lake Gneiss
ljg	Lake Juanita Leucogneiss
shc	Southern Heterogeneous Crystalline Complex
nhc	Northern Heterogeneous Crystalline Complex
tfm	Twisp River-Foggy Dew Mylonites
Kotf	Oval Peak Batholith-Foliated Unit
Kot	Oval Peak Batholith-Directionless-Weakly Foliated Unit
Kbt	Black Peak Batholith-Directionless-Weakly Foliated Phase
Kbm	Black Peak Batholith-Mafic Phase
Kbrf	Black Peak Batholith-Reynolds Peak Phase
Ktgo	Gabriel Peak Orthogneiss
wg	War Creek Gneiss

SYMBOLS

- Strike of vertical foliation
- Inclined foliation
- Inclined foliation with mineral lineation in the plane of the foliation
- Strike and Dip of Foliation
- Trend and plunge of mineral lineation
- Trend and Plunge of F_3 Axes in Twisp Valley Schist
- ——— – – – ? Contact: dashed where approximate; queried where uncertain
- ——— – – – ? Fault Contact: dashed where approximate; queried where uncertain

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
BRIAN J. BOYLE, Commissioner of Public Lands
ART STEARNS, Supervisor

DIVISION OF GEOLOGY AND EARTH RESOURCES
RAYMOND LASMANIS, State Geologist

Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs taken 1968. Field checked 1969

Polyconic projection. 1927 North American datum
10,000-foot grid based on Washington coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue

Where omitted, land lines have not been established

UTM GRID AND 1969 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 40 FEET
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

ROAD CLASSIFICATION

Primary highway, hard surface — Light-duty road, hard or improved surface
Secondary highway, hard surface — Unimproved road
Interstate Route — U. S. Route — State Route

HOODOO PEAK, WASH.
SE/4 BUTTERMILK BUTTE 15' QUADRANGLE
N4815—W12015/7.5

1969

AMS 1980 IV SE—SERIES V891

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PRINCE CREEK QUADRANGLE
WASHINGTON
7.5 MINUTE SERIES (TOPOGRAPHIC)

OPEN FILE REPORT 87-17
PLATE 10 OF 12

GEOLOGIC MAP OF PART OF THE PRINCE CREEK QUADRANGLE, WASHINGTON

by
ROBERT B. MILLER
1987

EXPLANATION

Kv	Volcanic and Volcaniclastic Rocks (Newby Group?)
ts	Twisp Valley Schist
tu	Ultramafic Rocks in Twisp Valley Schist
rs	Rainbow Schist
bmg	Battle Mountain Gneiss
tlg	Tuckaway Lake Gneiss
ljg	Lake Juanita Leucogneiss
shc	Southern Heterogeneous Crystalline Complex
nhc	Northern Heterogeneous Crystalline Complex
tfm	Twisp River-Foggy Dew Mylonites
Kotf	Oval Peak Batholith-Foliated Unit
Kot	Oval Peak Batholith-Directionless-Weakly Foliated Unit
Kbt	Black Peak Batholith-Directionless-Weakly Foliated Phase
Kbm	Black Peak Batholith-Mafic Phase
Kbrf	Black Peak Batholith-Reynolds Peak Phase
Kpg	Gabriel Peak Orthogneiss
wg	War Creek Gneiss

SYMBOLS

- Strike of vertical foliation
- Inclined foliation
- Inclined foliation with mineral lineation in the plane of the foliation
- Strike and Dip of Foliation
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- Trend and Plunge of F_3 Axes in Twisp Valley Schist
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Polyconic projection. 1927 North American datum
10,000-foot grid based on Washington coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue

Land lines have not been established in this area

SCALE 1:24 000

CONTOUR INTERVAL 40 FEET
DATUM IS MEAN SEA LEVEL

UTM GRID AND 1969 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

QUADRANGLE LOCATION

ROAD CLASSIFICATION
Trails

PRINCE CREEK, WASH.
N4807.5—W12022.5/7.5
1969
AMS 1980 III NW—SERIES V891

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UNITED STATES
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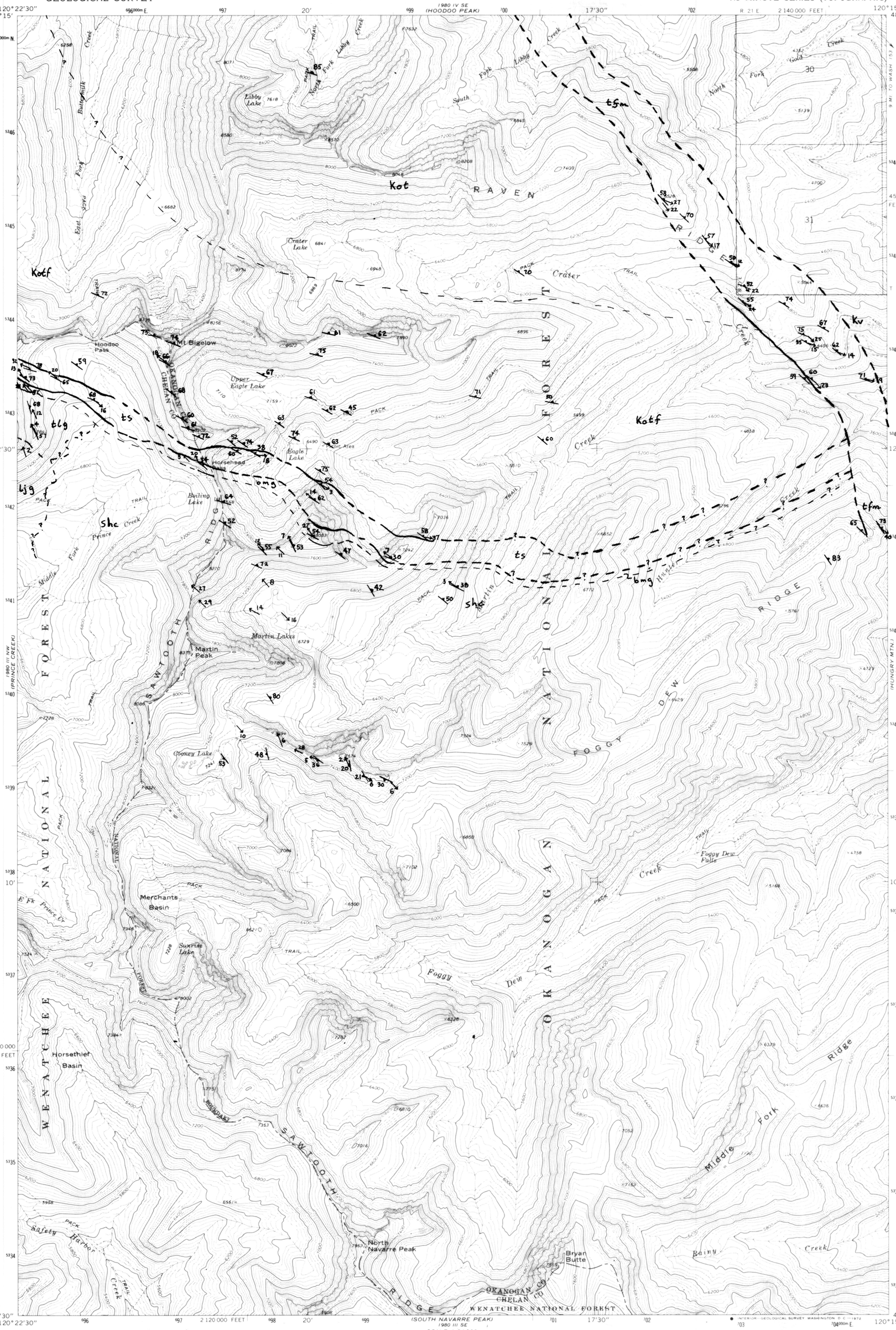
GEOLOGICAL SURVEY

MARTIN PEAK QUADRANGLE
WASHINGTON
7.5 MINUTE SERIES (TOPOGRAPHIC)

OPEN FILE REPORT 87-17
PLATE 11 OF 12

GEOLOGIC MAP OF PART OF THE MARTIN PEAK QUADRANGLE, WASHINGTON

by
ROBERT B. MILLER
1987



EXPLANATION

Kv	Volcanic and Volcaniclastic Rocks (Newby Group?)
ts	Twisp Valley Schist
tu	Ultramafic Rocks in Twisp Valley Schist
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Kbt	Black Peak Batholith-Directionless-Weakly Foliated Phase
Kbm	Black Peak Batholith-Mafic Phase
Kbrf	Black Peak Batholith-Reynolds Peak Phase
KJga	Gabriel Peak Orthogneiss
wg	War Creek Gneiss

SYMBOLS

- Strike of vertical foliation
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10,000-foot grid based on Washington coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue

Where omitted, land lines have not been established

UTM GRID AND 1969 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET
(GN, MN; 2°00' 31 MILS; 22° 391 MILS)

SCALE 1:24 000
1 MILE; 7000 FEET; 1 KILOMETER

CONTOUR INTERVAL 40 FEET
DATUM IS MEAN SEA LEVEL

QUADRANGLE LOCATION (WASHINGTON)

ROAD CLASSIFICATION
Primary highway, hard surface — Light-duty road, hard or improved surface
Secondary highway, hard surface — Unimproved road
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MARTIN PEAK, WASH.
N4807.5—W12015/7.5
1969
AMS 1980 III NE—SERIES V891

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ART STEARNS, Supervisor

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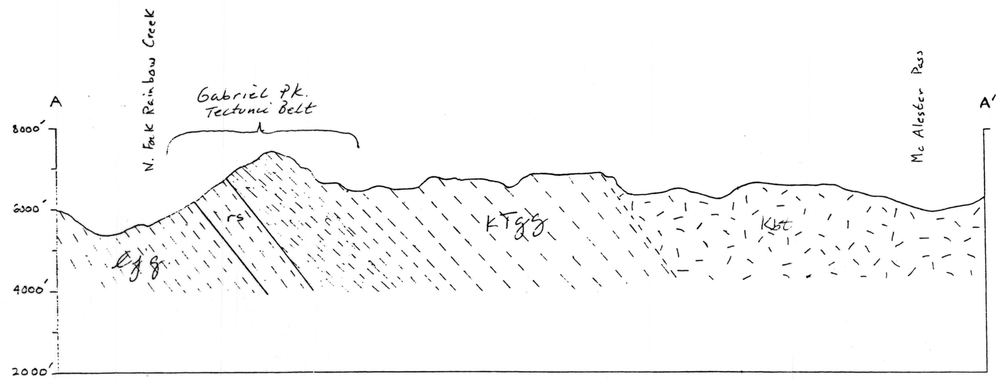
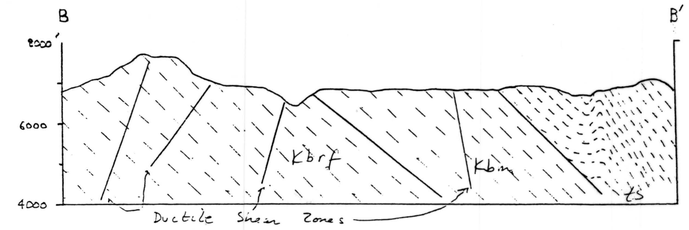
RAYMOND LASMANIS, State Geologist

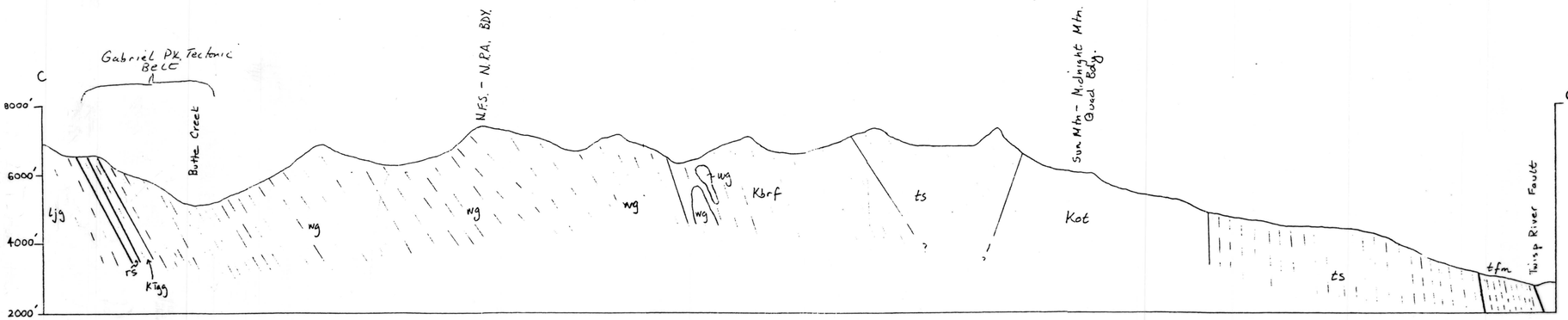
GEOLOGIC CROSS SECTIONS

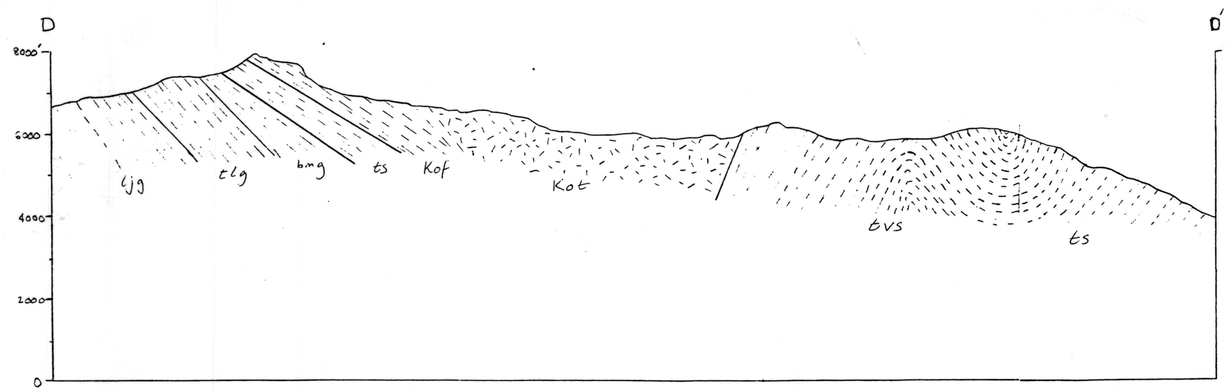
by

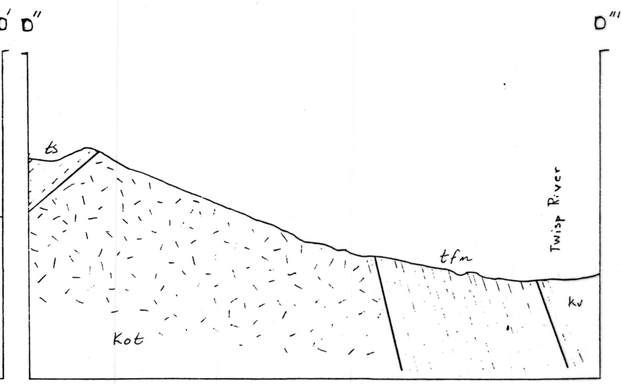
ROBERT B. MILLER
1987











SCALE 1:24,000

EXPLANATION

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