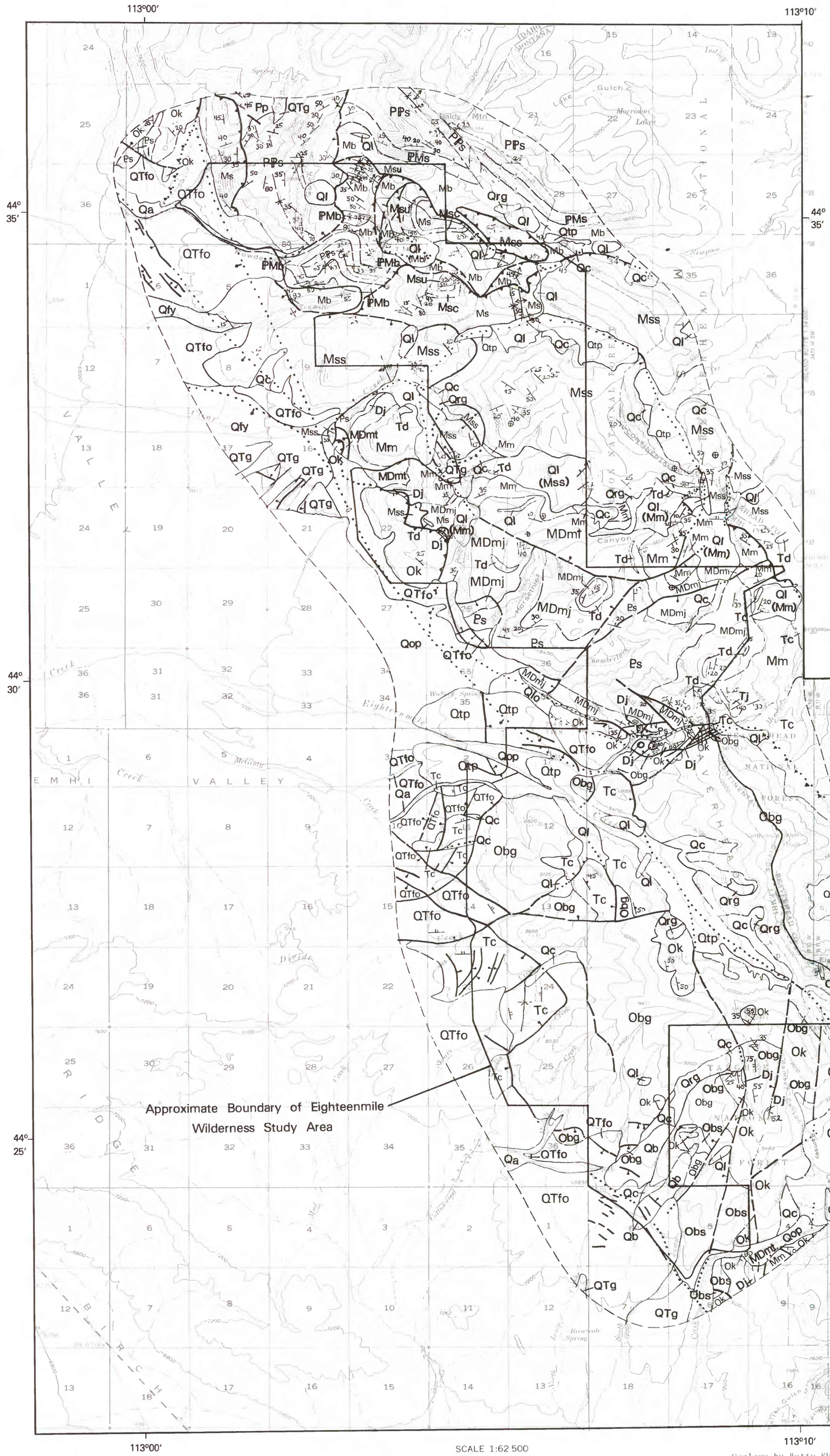
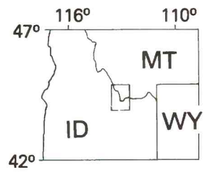
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

PREPARED FOR THE U.S. BUREAU OF LAND MANAGEMENT
(GEM PHASE 2)

OPEN-FILE REPORT
84-279
PLATE 1 OF 4





Base from U.S. Geological Survey 1:62,500
Morrison Lake 1956, Nicholia 1956, and
Scott Peak 1957 quadrangles

SCALE 1:62 500

1 ½ 0 1 2 3 4 MILES

1 .5 0 1 2 3 4 KILOMETERS

Geology by Betty Skipp assisted by Jean M. LaDue, 1982-83; geology in vicinity of Dry Canyon modified from B. K. Lucchitta (1966); geology in vicinity of Eighteenmile Peak modified from Skipp and others (1983)

GEOLOGIC MAP OF THE EIGHTEENMILE WILDERNESS STUDY AREA (ID-43-3), LEMHI COUNTY, IDAHO

CORRELATION OF MAP UNITS

SURFICIAL DEPOSITS

Qa Qc Qf Ql
Qtp Qop Qrg Qb Qfy Qtfo Qlo Qtg

Holocene
Pleistocene
Pliocene
QUATERNARY

UNCONFORMITY

AUTOCHTHONOUS ROCKS

Tc Td Tj

Eocene
TERTIARY

UNCONFORMITY

ALLOCHTHONOUS ROCKS

Pp

Upper Permian
Lower Permian
PERMIAN

DISCONFORMITY

PPs
PMb
Mb
Msu
Msc Mss
Ms
Mm
MDmt

Upper to Lower Pennsylvanian
PENNSYLVANIAN
Upper Mississippian
Lower Mississippian
MISSISSIPPIAN

UNCONFORMITY

MDmj

Upper Devonian
DEVONIAN

Dj

UNCONFORMITY

Obg / Obs

Upper and Middle Ordovician
ORDOVICIAN

UNCONFORMITY

Ok

Middle Ordovician

UNCONFORMITY

Ps

PROTEROZOIC

DESCRIPTION OF MAP UNITS

Qa	ALLUVIAL DEPOSITS (HOLOCENE)
Qc	COLLUVIAL DEPOSITS (HOLOCENE)
Qf	ALLUVIAL FAN DEPOSITS (HOLOCENE)
Ql	LANDSLIDE DEPOSITS (QUATERNARY)--Map unit in parentheses indicates semicoherent debris primarily of that unit
Qtp	TILL OF PINEDALE GLACIATION (UPPER PLEISTOCENE)
Qop	OUTWASH OF PINEDALE GLACIATION (UPPER PLEISTOCENE)
Qrg	ROCK GLACIER DEPOSITS (PLEISTOCENE)
Qb	BOULDER TRAIN (PLEISTOCENE)
Qfy	YOUNGER ALLUVIAL FAN GRAVEL (PLEISTOCENE)
Qlo	OLDER LANDSLIDE DEPOSITS (PLEISTOCENE)
QTfo	OLDER ALLUVIAL FAN GRAVEL (LOWER PLEISTOCENE TO PLIOCENE)
QTg	GRAVEL (LOWER PLEISTOCENE TO PLIOCENE)
Tc	CHALLIS VOLCANICS (EOCENE)
Td	DIKE OR SILL (EOCENE(?))
Tj	JASPEROID (EOCENE(?))
Pp	PHOSPHORIA FORMATION (PERMIAN)
PPs	SNAKY CANYON FORMATION (PERMIAN AND PENNSYLVANIAN)
PMb	BLUEBIRD MOUNTAIN FORMATION (LOWER PENNSYLVANIAN AND UPPER MISSISSIPPIAN)
Mb	BIG SNOWY FORMATION (UPPER MISSISSIPPIAN)
Msu	SURRETT CANYON FORMATION (UPPER MISSISSIPPIAN)
Msc	SOUTH CREEK FORMATION (UPPER MISSISSIPPIAN)
Ms	SCOTT PEAK FORMATION (UPPER MISSISSIPPIAN)
Mss	SURRETT CANYON, SOUTH CREEK, AND SCOTT PEAK FORMATIONS UNDIVIDED (UPPER MISSISSIPPIAN)
Mm	MIDDLE CANYON FORMATION (UPPER AND LOWER MISSISSIPPIAN)
MDmt	MC GOWAN CREEK AND THREE FORKS FORMATIONS UNDIVIDED (LOWER MISSISSIPPIAN AND UPPER DEVONIAN)
MDmj	MC GOWAN CREEK, THREE FORKS, AND JEFFERSON FORMATIONS UNDIVIDED (LOWER MISSISSIPPIAN AND UPPER DEVONIAN)
Dj	JEFFERSON FORMATION (UPPER DEVONIAN)
Obg	BEAVERHEAD MOUNTAINS PLUTON (UPPER AND MIDDLE ORDOVICIAN): GRANITE
Obs	SYENITE
Ok	KINNIKINIC QUARTZITE (MIDDLE ORDOVICIAN)
Ps	SANDSTONE (PROTEROZOIC)

EXPLANATION

- CONTACT--Dashed where approximately located; queried where uncertain
- FAULTS--Dashed where approximately located; dotted where concealed; queried where uncertain
- Fault--Bar and ball on downthrown side where mostly normal slip; arrow indicates mostly strike slip
- Thrust fault--Teeth on upper plate
- FOLDS--Showing trace of axial plane; dashed where approximately located
- Anticline
- Overturned anticline--Showing direction of dip of limbs
- Syncline
- Overturned syncline--Showing direction of dip of limbs

STRIKE AND DIP OF BEDDING

- Approximate attitude from air photos
- Inclined
- Overturned
- Vertical
- Horizontal

STRIKE AND DIP OF CLEAVAGE

- Inclined
- Vertical

- STRIKE AND DIP OF INCLINED LAVA FLOWS
- LIMIT OF GEOLOGIC MAPPING
- PROSPECT
- MINE

This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature.