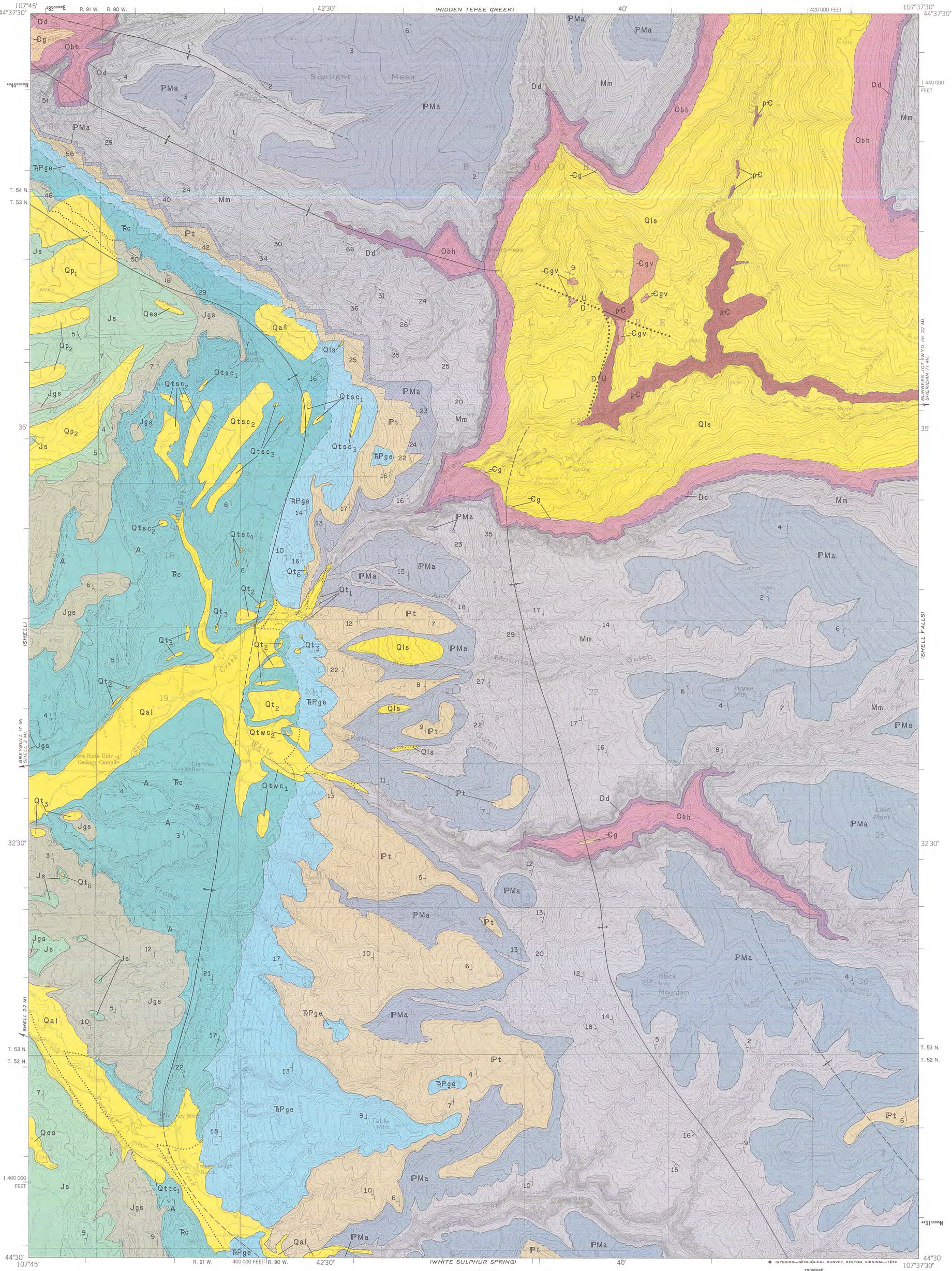
THE GEOLOGICAL SURVEY OF WYOMING
Gary B. Glass, State Geologist

Map Series 16

MS-16



EXPLANATION

Quaternary

Terrace Levels
Qt Terraces along Shell Creek. Qt_1 is lowest surface; Qt_6 is highest. [*Qt_4 and Qt_5 are not present in Black Mountain Quadrangle].
Qtsc Terraces along Sunlight Creek.
Qtwc Terraces along White Creek.
Qttc Terrace along Trapper Creek.

Pediment — Qp_1, Qp_2
Dipping erosion surface developed on bedrock. [Qp_1 is closer to mountain front].

Erosion Surface — Qes
Nearly level erosion surface of unknown origin.

Landslide Material — Qls
Blocks of bedrock or loose slope debris.

Alluvium — Qal
Unconsolidated deposits of alluvium along stream valleys at or near present stream levels.

Alluvial Fan — Qaf
Unconsolidated fan-shaped deposits of alluvium.

Jurassic

Sundance Formation — Js
Lower part is green, fossiliferous shale with medial oomicrite and upper calcarenite. Upper part of Sundance not present. Thickness 100 feet.

Gypsum Spring Formation — Jgs
Red siltstone interbedded with carbonate with a basal massive gypsum. Thickness 200 feet.

Triassic

Chugwater Formation — Tc^A
Red calcareous siltstone and mudstone capped by the Alcova Limestone Member, a laterally continuous carbonate bed which has been mapped throughout the quadrangle (A). Thickness 600 feet.

Permian

Goose Egg Formation — TRPge
Upper part is interbedded gypsiferous carbonate and red siltstone. Lower part is red siltstone and shale. Thickness 225 feet.

Pennsylvanian

Tensleep Sandstone — Pt
Upper part is a massive cross-bedded quartz arenite. Lower part is interbedded dolomite, sandstone, and shale. Thickness 100 feet.

Mississippian

Amsden Formation — PMa
Reddish siltstone with a medial carbonate and a basal sandstone. Thickness 175 feet.

Madison Limestone — Mm
Bluish gray carbonate with upper *Condonophycus austini* layer. Thickness 850 feet.

Devonian

Darby Formation — Dd
Interbedded carbonate and green shale. Thickness 100 feet.

Ordovician

Bighorn Dolomite — Obh
Light gray, well-indurated dolomite. Thickness 400 feet.

Cambrian

Gallatin Limestone — Cg
Interbedded glauconitic shale and intramicrite. Thickness 800 feet.

Gros Ventre Formation — Cgv
Interbedded glauconitic shale and carbonate with a medial massive sandstone. Thickness 420 feet.

Precambrian

Archean Gneiss — pC
Quartzofeldspathic gneiss with numerous pegmatitic and aplitic dikes.

Formation Contact
Dashed where approximately located; dotted where concealed.

Fault — U / D
Dotted where inferred. [D denotes downthrown side, U denotes upthrown side].

Monocline
Trace of axial plane and direction of plunge. Dashed where approximately located. Small arrow on more inclined limb.

Anticline
Trace of axial plane and direction of plunge.

Syncline
Trace of axial plane. Dashed where approximately located.

Strike and dip of beds — 5 / 1

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Cartography by Fred H. Porter

SCALE 1:24 000
1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 KILOMETER
CONTOUR INTERVAL 40 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

GN 1°53' 33 MILS — MN 16° 284 MILS
UTM GRID AND 1960 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

WYOMING
QUADRANGLE LOCATION

ROAD CLASSIFICATION
Medium-duty — Light-duty
Unimproved dirt
U.S. Route

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1978

GEOLOGIC MAP OF BLACK MOUNTAIN QUADRANGLE, WYOMING

by
Mark E. Finley

1985