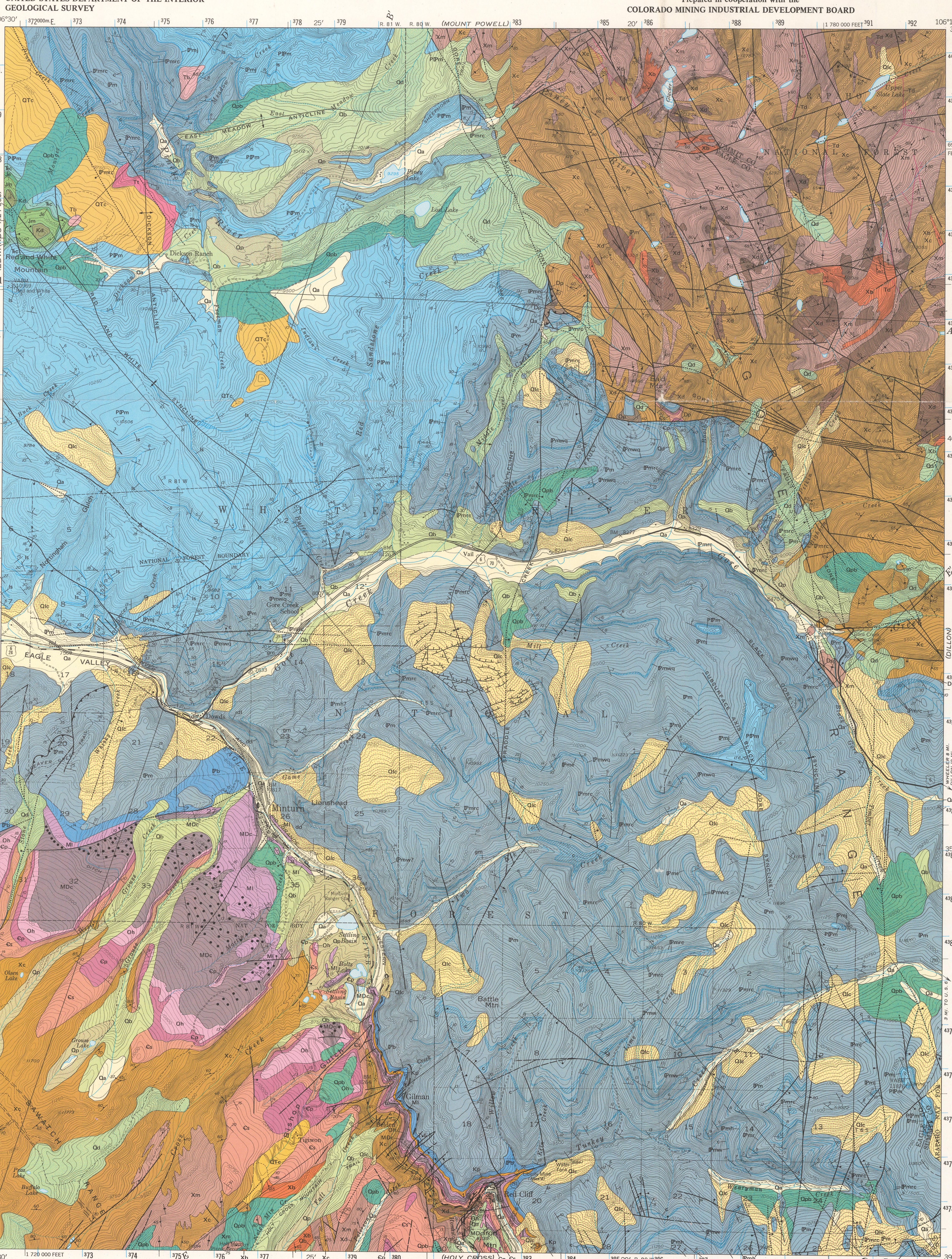
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the
COLORADO MINING INDUSTRIAL DEVELOPMENT BOARD

PROFESSIONAL PAPER 956
PLATE 1



Base from U.S. Geological Survey 1:62,500, 1934–50
Interstate Highway 70 as of 1970
10,000-foot grid based on Colorado coordinate system, central zone
1000-metre Universal Transverse Mercator grid ticks, zone 13, shown in blue

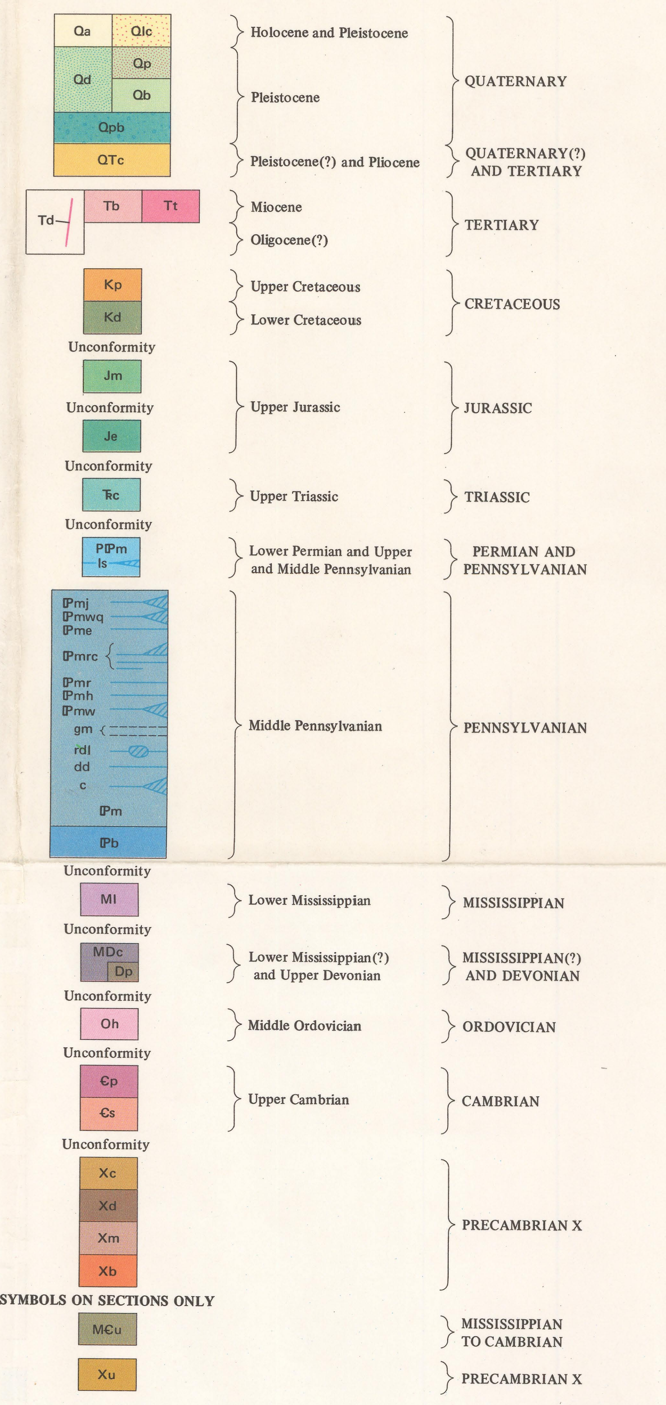
APPROXIMATE MEAN DECLINATION, 1977

SCALE 1:48 000

CONTOUR INTERVAL 50 FEET
DATUM IS MEAN SEA LEVEL

Geology by T. S. Lovering and Ogden Tweto, 1940–41, 1946, 1961

CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

- Qa — Alluvium (Holocene and Pleistocene)
- Qlc — Landslide and thick colluvium (Holocene and Pleistocene)
- Qd — Glacial drift (Pleistocene) of Pinedale and Bull Lake ages undivided
- Qp — Of Pinedale age
- Qb — Of Bull Lake age
- Qpb — Glacial drift (Pleistocene) of pre–Bull Lake age
- QTc — Preglacial colluvium (Pleistocene? and Pliocene)
- Tb — Basalt (Miocene)
- Tt — Tuff (Miocene)
- Td — Dike rocks (Miocene and Oligocene?) — Dacite and quartz basalt
- Kp — Pando Porphyry (Upper Cretaceous) — Quartz latite porphyry; in sill
- Kd — Dakota Sandstone (Lower Cretaceous) — Light-gray sandstone
- Jm — Morrison Formation (Upper Jurassic) — Interbedded light-gray sandstone, varicolored shales, and gray limestone
- Je — Entrada Sandstone (Upper Jurassic) — Buff to orange sandstone
- TRc — Chinle Formation (Upper Triassic) — Red and purple siltstone
- PIPm — Maroon Formation (Lower Permian and Upper and Middle Pennsylvanian) — Red sandstone, siltstone, and grit
- ls — Limestone bed
- IPm — Minturn Formation (Middle Pennsylvanian) — Grit, conglomerate, sandstone, and shale, and intercalated beds of carbonate rocks, predominantly gray, but red in upper part and in irregular zone near base
  - IPmj — Jacque Mountain Limestone Member
  - IPmwq — White Quail Limestone Member
  - IPme — Elk Ridge Limestone Member
  - IPmrc — Carbonate beds in Robinson Limestone Member
  - IPmr — Resolution Dolomite Member
  - IPmh — Hornsilver Dolomite Member
  - IPmw — Wearyman Dolomite Member
  - gm — Grit marker bed
  - rdl — Reef dolomite of Lionshead
  - dd — Dolomite bed of Dowds
  - c — Carbonate beds

  Blue lines representing carbonate units are dashed where approximately located or inferred; dotted where concealed
- IPb — Belden Formation (Middle Pennsylvanian) — Gray to black shale and thin beds of limestone. Local thin patches of regolithic mudstone of Molas Formation included at base (Lower Pennsylvanian)
- Ml — Leadville Limestone (or Dolomite) (Lower Mississippian) — Light-gray limestone or dark-gray dolomite
- MDc — Chaffee Group (Lower Mississippian? and Upper Devonian) — Consists, from top down, of Gilman Sandstone, Dyer Dolomite, and Parting Formation
- Dp — Parting Formation (Upper Devonian) — Along flank of Gore Range
- Oh — Harding Sandstone (Middle Ordovician) — White and green sandstone and shale
- Єp — Peerless Formation (Upper Cambrian) — Red, buff, and green dolomite and brown sandstone
- Єs — Sawatch Quartzite (Upper Cambrian) — White quartzite
- Xc — Cross Creek Granite (Precambrian X) — Granodiorite and quartz monzonite, porphyritic in part
- Xd — Diorite (Precambrian X) — Biotite-quartz diorite and hornblende diorite
- Xm — Migmatite (Precambrian X)
- Xb — Biotite gneiss (Precambrian X) — Biotite-quartz-plagioclase gneiss

SYMBOLS ON SECTIONS ONLY

- MЄu — Leadville Limestone, Chaffee Group, Harding Sandstone, Peerless Formation and Sawatch Quartzite, undivided
- Xu — Precambrian rocks, undivided

- Contact — Dashed where approximately located; dotted where concealed
- 75 Fault — Showing dip. Dashed where approximately located; dotted where concealed. Bar and ball on downthrown side
- Thrust fault — Dashed where approximately located. Sawteeth on upper plate
- Landslip fault or fissure — Hachures on downthrown side
- Shear zone
- Carbonate rocks replaced by jasperoid
- Folds — Showing approximately located trace of axial plane
  - Anticline
  - Syncline
- Strike and dip of bedding
  - 13 Inclined
  - Vertical
  - 70 Overturned
- 60 Strike and dip of foliation
  - 37 Plunge of lineation
  - Vertical
- Line of measurement, type section of Minturn Formation