

LIST OF MAP UNITS

The complete description of map units and references are in the accompanying Author's Notes

SURFICIAL DEPOSITS

HUMAN-MADE DEPOSITS

- af Artificial fill (Historic)
- mw Mine waste (Historic)

ALLUVIAL DEPOSITS

- Qa1 Alluvial unit one (Holocene)
- Qao Alluvium and organic-rich sediment (Holocene and upper Pleistocene)
- Qa2 Alluvial unit two (upper Pleistocene)
- Qa2y Alluvial unit two, younger subunit (upper Pleistocene)
- Qa2o Alluvial unit two, older subunit (upper Pleistocene)
- Qa3 Alluvial unit three (upper middle Pleistocene)
- Qa4y Alluvial unit four, younger subunit (middle Pleistocene)
- Qa4o Alluvial unit four, older subunit (middle Pleistocene)
- Qtg Older gravel deposits (Pleistocene and/or Tertiary)

MASS-WASTING DEPOSITS

- Qc Colluvium (Holocene and upper Pleistocene)
- Qls Landslide deposits (Quaternary)

ALLUVIAL AND MASS-WASTING DEPOSITS

- Qf Fan deposits (Holocene and upper Pleistocene)
- Qac Alluvium and colluvium (Holocene and upper Pleistocene)

LACUSTRINE DEPOSITS

- Ql Lacustrine deposits (Historic)

UNDIFFERENTIATED SURFICIAL DEPOSITS

- Q Quaternary sedimentary deposits (shown only on cross sections)

BEDROCK

- Tw Wagontongue Formation (Miocene)
- Ts Sedimentary rocks (Oligocene?)

Antero Formation

- Ta Tuffaceous member (Oligocene)
- Tal Limestone member (Oligocene)

- Tlc Tallahassee Creek Conglomerate (Eocene)
- Twm Wall Mountain Tuff (Eocene)
- Tad Andesitic and dacitic volcanic rocks (Eocene)
- Tgp Granite porphyry (Paleocene)

South Park Formation

- Tsc Coarse-grained conglomeratic member (Paleocene)

- Kp Pierre Shale (Upper Cretaceous)
- Kn Niobrara Formation (Upper Cretaceous)
- Kb Benton Group (Upper Cretaceous)
- Kd Dakota Sandstone (Lower Cretaceous)
- Jm Morrison Formation (Upper Jurassic)
- Pg Garo Formation (Permian)
- PPm Maroon Formation (Lower Permian and Upper and Middle Pennsylvanian)
- FL Fairplay limestone member
- SL Silverheels limestone member
- Pm Minturn Formation (Middle Pennsylvanian)
- wol White Quail Limestone Member
- RL Robinson Limestone Member
- Unnamed limestone beds
- Evaporite facies, Minturn Formation (Middle Pennsylvanian)
- Unnamed limestone beds
- PPmm Maroon and Minturn Formations, undivided (Lower Permian to Middle Pennsylvanian)

Contact — Approximately located

Bedding lines

Fault — Dashed where approximately located, dotted where concealed, queried where uncertain. U = upthrown side, D = downthrown side. Apparent lateral slip shown by arrows, although apparent lateral slip could be due to offset of dipping beds by dip-slip or oblique-slip fault

Axial trace of anticline — dashed where approximately located, dotted where concealed

Axial trace of syncline — dashed where approximately located, dotted where concealed

Strike and dip of sedimentary rocks — Angle of dip shown in degrees

Estimated strike and dip of sedimentary rocks — Angle of dip less than 30 degrees

Paleocurrent direction

Strike and dip of volcanic flow layering — Angle of dip shown in degrees

Area with float consisting of angular pieces of late Paleozoic sedimentary rocks. Area may be underlain by island of late Paleozoic sedimentary rocks or by Tertiary conglomerate rich in angular clasts of late Paleozoic rocks.

Sinkhole

Topographic depression - probably due to evaporite dissolution

Topographic riser in outwash terrace or fan

Area with gravel deposits too thin to map

Vuggy limestone or carbonate-cemented conglomerate

Water

G156 Location and identification number of sample with major-element chemical analysis (see Appendix A in booklet for analysis)

G164 Location and identification number of sample with major-element chemical analysis and Ar-Ar age date (see Appendix A in booklet for analysis and Table 1 for age date)

A-A' Alignment of cross section

GEOLOGIC MAP OF THE GARO QUADRANGLE, PARK COUNTY, COLORADO

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