

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Geologic reconnaissance map of the Montrose West quadrangle,
Montrose County, Colorado

By

William J. Hail, Jr. ¹

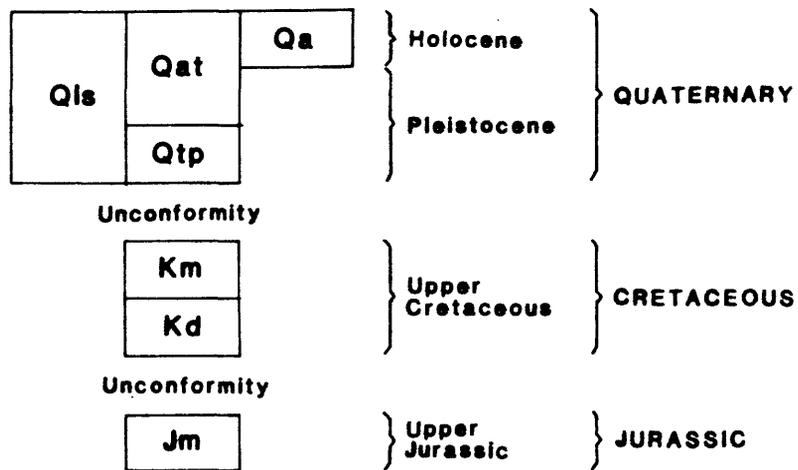
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This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature.

¹Denver, Colorado

CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

- Qa ALLUVIUM (HOLOCENE)--Mud, silt, sand, and gravel of present Uncompahgre River floodplain, including lowermost terrace. Includes minor fans and colluvial deposits at margins of unit
- Qat ALLUVIAL TERRACE DEPOSITS (HOLOCENE AND PLEISTOCENE)--Mud, silt, sand, and gravel of former Uncompahgre River floodplain and tributary drainages. Terrace flats at several levels as much as 120 ft (37 m) above alluvium of unit Qa. Holocene deposits are mostly alluvium in valleys of minor tributary drainages. Includes minor fans and colluvial deposits. Maximum thickness about 30 ft (9 m)
- Q1s LANDSLIDE DEPOSITS (HOLOCENE AND PLEISTOCENE)--Slumped ground, slides, and chaotic rock masses. Developed within nonresistant claystone or shale of the Morrison Formation or Mancos Shale
- Qtp TERRACE AND PEDIMENT DEPOSITS (PLEISTOCENE)--Sand and gravel in isolated outcrops, as much as 130 ft (40 m) above alluvium of unit Qat. Locally contains abundant detritus derived from Dakota Sandstone. Maximum thickness about 25 ft (8 m)
- Km MANCOS SHALE (CRETACEOUS)--Dark-gray to brown clay shale. Minor siltstone and sandstone. Thin petroliferous sandy limestone (Juana Lopez Member) about 150 ft (46 m) above base. Mancos is very soft, nonresistant, and mostly poorly exposed. Only lower part present. Maximum remaining thickness about 330 ft (101 m)
- Kd DAKOTA SANDSTONE (CRETACEOUS)--Sandstone, conglomeratic sandstone, conglomerate, and carbonaceous shale. Commonly comprises three units (in ascending order): (1) Light-gray to brown, cliff-forming, crossbedded to massive sandstone, containing conglomeratic lenses and in many places a basal conglomerate; (2) a less resistant medium to dark-gray unit of interbedded carbonaceous shale and thin-bedded sandstone; (3) a light-gray to brown, resistant, cliff and dip-slope-forming unit of fine-grained quartzitic sandstone. Basal contact sharply disconformable on underlying rocks. Thickness 120 to 150 ft (37 to 46 m)

Jm MORRISON FORMATION (JURASSIC)--Only part of the Brushy Basin Member is exposed in this quadrangle. Unit also includes discontinuous lenses of the Burro Canyon Formation of Cretaceous age at top. Brushy Basin Member consists of varicolored green, red, and gray claystone and mudstone, lesser sandstone and siltstone, and lenses of conglomerate and conglomeratic sandstone. Generally soft, nonresistant, poorly exposed, and subject to slumping and landsliding. Burro Canyon Formation consists of discontinuous channel-form conglomerate beds, and varicolored, mostly green, claystone. These beds are present at various places at the top of the mapped unit. A similar distribution pattern of these rocks was observed by Bush and others (1959, p. 332) in the nearby Placerville area. Because the presumed Burro Canyon beds are lithologically similar to beds in the Morrison Formation, and lie below the disconformity at the base of the Dakota Sandstone, they are here included with the Morrison Formation. Maximum thickness of outcropping beds of the Morrison Formation is about 240 ft (73 m). Maximum thickness of Burro Canyon beds is unknown; probably a few tens of feet

————— CONTACT--Approximately located.

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•———— FAULT--Bar and ball on downthrown side.

—— 6400 —— STRUCTURE CONTOUR--Approximately located. Drawn on the base of the Dakota Sandstone, showing elevation in feet above mean sea level. Contour interval 200 ft (about 61 m). Structure below 6,000 ft not shown.

REFERENCE

Bush, A.L., Bromfield, C.S., and Pierson, C.T., 1959, Areal geology of the Placerville quadrangle, San Miguel County, Colorado: U.S. Geological Survey Bulletin 1072-E, p. 299-384.