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Quaternary Fault and Fold Database of the United States

As of January 12, 2017, the USGS maintains a limited number of metadata fields that characterize the Quaternary faults and folds of the United States. For the most up-to-date information, please refer to the interactive fault map.

unnamed faults near San Miguel Canyon (Class B) No. 2284

Last Review Date: 1998-01-06

Compiled in cooperation with the Colorado Geological Survey

citation for this record: **Widmann, B.L., compiler, 1998, Fault number 2284, unnamed faults near San Miguel Canyon, in Quaternary fault and fold database of the United States: U.S. Geological Survey website, https://earthquakes.usgs.gov/hazards/qfaults, accessed 12/14/2020 03:02 PM.**

Synopsis	This group of faults lies on the south end of the Uncompahgre Uplift. Although there was no reported evidence of Quaternary offset along these faults they were mapped as Quaternary faults by Lettis and others (1996 #4453; plate 2). They attributed fault activity to salt tectonism, and thus are considered to be Class B structures. The most recent movement on the faults herein considered to have occurred during the Quaternary based on the work of Lettis and others (1996 #4453).
Name	This unnamed group of faults includes 14 faults that generally

comments	trend northwest parallel to the San Miguel River. The faults are on the southeast end of the Uncompahgre Uplift. **Fault ID:** Fault number Q34 of Widman and others (1998 #3441).
County(s) and State(s)	SAN MIGUEL COUNTY, COLORADO MONTROSE COUNTY, COLORADO
Physiographic province(s)	COLORADO PLATEAUS
Reliability of location	Good Compiled at 1:250,000 scale. *Comments:* The faults were mapped at a scale of 1:250,000 by Williams (1964 #2789) and Lettis and others (1996). The fault trace used herein is from Lettis and others (1996 #4453).
Geologic setting	This group of faults are on the southeast end of the Uncompahgre Uplift, which is a northwest-trending, east-tilted fault block. These faults are down both to the northeast and southwest, and are considered to be salt-related rather than tectonic features (Lettis and others, 1996 #4453).
Length (km)	32 km.
Average strike	N53°W
Sense of movement	Normal
Dip Direction	SW; NE
Paleoseismology studies	
Geomorphic expression	No information is available about the Quaternary geomorphic expression of the fault.
Age of faulted surficial deposits	Faults in this group offset Jurassic to Cretaceous bedrock (Williams, 1964 #2789). Less than 1 percent of the cumulative fault length (100 km) extends through or beneath Quaternary deposits. Although there is no evidence of faulted Quaternary deposits along these faults, Lettis and others (1996 #4453) concluded they moved during the Quaternary but were related to salt tectonism.

Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* Although there is no direct evidence of faulted Quaternary deposits along these faults, they were mapped as Quaternary faults related to salt tectonism by Lettis and others (1996 #4453; plate 2).
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr *Comments:* Widmann and others (1998 #3441) placed these structures within the <0.2 mm/yr slip-rate category.
Date and Compiler(s)	1998 Beth L. Widmann, Colorado Geological Survey
References	#4453 Lettis, W., Noller, J., Wong, I., Ake, J., Vetter, U., and LaForge, R., 1996, Draft report, Seismotectonic evaluation of Colorado River storage project-Crystal, Morrow Point, Blue Mesa dams, Smith Fork project-Crawford dam, west-central Colorado: Technical report to U.S. Bureau of Reclamation, Denver, Colorado, 177 p. #3441 Widmann, B.L., Kirkham, R.M., and Rogers, W.P., 1998, Preliminary Quaternary fault and fold map and database of Colorado: Colorado Geological Survey Open-File Report 98-8, 331 p., 1 pl., scale 1:500,000. #2789 Williams, P.L., 1964, Geology, structure, and uranium deposits of the Moab quadrangle, Colorado and Utah: U.S. Geological Survey Miscellaneous Geologic Investigations I-360.