

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 <u>interactive fault map</u>.

unnamed fault on west side of Moorman Ridge (Class A) No. 1222

Last Review Date: 2000-10-24

citation for this record: Redsteer, M.H., compiler, 2000, Fault number 1222, unnamed fault on west side of Moorman Ridge, 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 02:16 PM.

Synopsis	This fault is defined by a north-south-trending, down-to-the-west escarpment that defines the west side of Moorman Ridge, parallel but east of Cottonwood Creek. A southern trace of the fault immediately north of Ephsum Spring is herein considered to be a pre-Quaternary fault and is not shown on the map. Fault juxtaposes bedrock against Quaternary sediment. Reconnaissance, photogeologic mapping is the source of data. Trench investigations and detailed studies of scarp morphology have not been completed.	
	Refers to fault mapped by Dohrenwend and others (1992 #2480) on the west side of Moorman Ridge.	
County(s) and	WHITE DINE COLINTY NEVADA	

State(s)	WHILE FINE COUNTI, INEVADA		
Physiographic province(s)	BASIN AND RANGE		
Reliability of location	Good Compiled at 1:100,000 scale.		
	Comments: Location based on 1:250,000-scale map of Dohrenwend and others (1992 #2480). Mapping based on photogeologic analysis of 1:24,000-scale color aerial photography supplemented with 1:60,000-scale black-and-white aerial photography, transferred to 1:62,500-scale topographic maps and photographically reduced and transferred to 1:250,000-scale topographic maps, and subsequent mapping by photogeologic analysis of 1:58,000-nominal-scale color-infrared photography transferred directly to 1:100,000-scale topographic quadrangle maps enlarged to scale of the photographs.		
Geologic setting	This unnamed fault zone is located within the White Pine Range that lies between Jakes Valley to the east, and the Railroad Valley to the west. This structure is parallel to the north-trending range-front Jakes Valley fault [1223] and is an expression of east-west Basin and Range extension.		
Length (km)	5 km.		
Average strike	N13°E		
Sense of movement	Normal		
Dip Direction	W		
Paleoseismology studies			
Geomorphic expression	Northern fault juxtaposes Quaternary sediment against bedrock, and are well defined by an abrupt change in elevation at the range-front, whereas southern fault is defined topographically by a topographic ridge (lineament) parallel to the western range-front. This fault runs parallel to Cottonwood Creek and is most likely an influence on the straight, north-south linear stream morphology. Dohrenwend and others (1992 #2480) show the faults as juxtaposing bedrock against Quaternary alluvium; no fault scarps in surficial materials have been noticed		

Age of faulted surficial deposits	Paleozoic, Tertiary, and Quaternary. Dohrenwend and others (1992 #2480) show the northern of two faults as juxtaposing bedrock against Quaternary alluvium, although no fault scarps in surficial materials have been noticed.
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) Comments: Dohrenwend and others (1992 #2480) considered the last fault movement to be of Quaternary age.
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr Comments: Low slip-rate category is assigned on the basis of poor geomorphic preservation, lack of mapped fault scarps, and relative inactivity of similar distributed faults in the Basin and Range province.
Date and Compiler(s)	2000 Margaret Hisa Redsteer, U.S. Geological Survey
References	#2480 Dohrenwend, J.C., Schell, B.A., and Moring, B.C., 1992, Reconnaissance photogeologic map of young faults in the Ely 1° by 2° quadrangle, Nevada and Utah: U.S. Geological Survey Miscellaneous Field Studies Map MF-2181, 1 sheet, scale 1:250,000.

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