

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 in southern Red Hills (Class A) No. 1252

Last Review Date: 2000-11-16

citation for this record: Redsteer, M.H., compiler, 2000, Fault number 1252, unnamed faults in southern Red Hills, 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	These unnamed group of faults are located on the southern end of the Red Hills that lie between the Spring Valley to the south, and the Antelope Valley to the north. It consists of subparallel, north-trending west facing and east facing escarpments that extend approximately 4 to 5 km orthogonal to the general trend of these mountains. Faults were mapped by Dohrenwend and others (1992 #2480) as juxtaposing bedrock against Quaternary alluvium. Reconnaissance photogeologic mapping is the source of data. Trench investigations and detailed studies of scarp morphology have not been completed.
Name comments	These unnamed faults consists of subparallel north-trending, down-to-the- west and -east faults orthogonal to the northwest-trend of the Red Hills, and adjacent to their southern edge.

County(s) and State(s)	WHITE PINE COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:100,000 scale. <i>Comments:</i> 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, with 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	The Red Hills are located between the Antelope Range and Kern Mountains, and divide the Antelope Valley to the north, from the Spring Valley to the south. They are composed of Paleozoic carbonate and clastic rocks.
Length (km)	6 km.
Average strike	N11°E
Sense of movement	Normal
Dip Direction	W; E
Paleoseismology studies	
Geomorphic expression	The faults as mapped by Dohrenwend and others (1992 #2480) juxtapose resistant Paleozoic bedrock is against Quaternary sediment, producing an abrupt change in topography. Fault location coincides with ridge-spurs at the southern end of the Red Hills. The easternmost fault forms a scarp on Quaternary alluvium.
Age of faulted surficial deposits	Quaternary alluvium and Paleozoic bedrock. The easternmost fault forms a scarp on Quaternary piedmont-slope deposits on the southeastern flank of the Red Hills.

Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) <i>Comments:</i> 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 <i>Comments:</i> Low slip-rate category is assigned on the basis of poor geomorphic preservation, general 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.

[Questions or comments?](#)

[Facebook](#) [Twitter](#) [Google](#) [Email](#)

[Hazards](#)

[Design Ground Motions](#)[Seismic Hazard Maps & Site-Specific Data](#)[Faults](#)[Scenarios](#)

[Earthquakes](#)[Hazards](#)[Data](#)[Education](#)[Monitoring](#)[Research](#)

[Home](#)[About Us](#)[Contacts](#)[Legal](#)