

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 faults in the northern the Red Hills (Class A) No. 1262

Last Review Date: 2000-11-24

citation for this record: Redsteer, M.H., compiler, 2000, Fault number 1262, unnamed faults in the northern the 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 faults are located on the northwestern and northeastern ends of the Red Hills, which lie between the Spring Valley to the south, and the Antelope valley to the north. The consists of northeast-trending down-to-the-east and down-to-thewest displacement faults that bound blocks of Paleozoic carbonates and Tertiary volcanic rocks within a larger region of Quaternary alluvium. The faults extend from the just south of Red Rocks southward about 10 km on the western side of the Red Hills and about 5 km on the eastern side of the Red Hills. These faults were mapped 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 consist of northeast-trending, down-to-the-east and down-to-the-west scarps in the southern Antelope Valley. The faults extend from the just south of Red Rocks southward about 10 km on the west side of the Red Hills and about 5 km on the east side of the Red Hills.
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.
	Comments: Location based on 1:250,000-scale map of Dohrenwend and others (1992 #2480). Mapping based on photogeologic analysis of primarily 1:24,000-scale color aerial photography supplemented with 1:60,000-scale black-and-white aerial photography, transferred by inspection to 1:62,500-scale topographic maps and photographically reduced and directly 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	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. The Red Hills are comprised of blocks of Paleozoic carbonates and Tertiary volcanic rocks within a larger region of Quaternary alluvium (Hose and Blake, 1976 #4341).
Length (km)	12 km.
Average strike	N16°E
Sense of movement	Normal
Dip Direction	W; E
Paleoseismology studies	
Geomorphic expression	The faults mapped Dohrenwend and others (1992 #2480) border resistant Paleozoic bedrock knobs surrounded by unconsolidated

	Quaternary sediment, and are expressed as an irregular north-trending ridge just south of the road that skirts Red Rocks on the south.
Age of faulted surficial deposits	Paleozoic, Tertiary, and Quaternary surficial deposits.
Historic earthquake	
Most recent	undifferentiated Quaternary (<1.6 Ma)
prehistoric deformation	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.
	#4341 Hose, R.K., and Blake, M.C., Jr., 1976, Geology and mineral resources of White Pine County, Nevada: Nevada Bureau of Mines and Geology Bulletin 85, 105 p.

Questions or comments?

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