

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 fault south of Highland Ridge (Class A) No. 1431

Last Review Date: 1998-06-28

citation for this record: Sawyer, T.L., compiler, 1998, Fault number 1431, unnamed fault south of Highland 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 02:05 PM.

Synopsis	This northerly striking down-to-the-east normal fault bounds west margin of small intermountain valley in the southern Snake Range. Quaternary movement is suspected on this fault based on reconnaissance photogeologic mapping. Trench investigations and studies of scarp morphology have not been completed.
Name comments	Refers to a short fault mapped by Dohrenwend and others (1991 #287). The fault bounds the west side of an intermontane valley in the southern Snake Range, south of Highland Ridge.
County(s) and State(s)	WHITE PINE COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE

Reliability of location	<p>Good Compiled at 1:100,000 scale.</p> <p><i>Comments:</i> Location based on 1:250,000-scale map of Dohrenwend and others (1991 #287); original 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.</p>
Geologic setting	<p>This northerly striking down-to-the-east normal fault bounds west margin of small intermountain valley in the southern Snake Range.</p>
Length (km)	<p>3 km.</p>
Average strike	<p>N14°E</p>
Sense of movement	<p>Normal</p> <p><i>Comments:</i> Not studied in detail; sense of movement inferred from topography.</p>
Dip Direction	<p>E</p>
Paleoseismology studies	
Geomorphic expression	<p>Fault is marked by a fault scarp juxtaposing Quaternary alluvium against bedrock (Dohrenwend and others, 1991 #287).</p>
Age of faulted surficial deposits	<p>Quaternary and Tertiary deposits (Dohrenwend and others, 1991 #287).</p>
Historic earthquake	
Most recent prehistoric deformation	<p>undifferentiated Quaternary (<1.6 Ma)</p> <p><i>Comments:</i> Although timing of most recent prehistorical event is not well constrained, Dohrenwend and others (1991 #287) suggested a Quaternary time based on a reconnaissance photogeologic study.</p>
Recurrence interval	

Slip-rate category	Less than 0.2 mm/yr <i>Comments:</i> A low slip rate is inferred from general knowledge of slip rates estimated for other faults in the region.
Date and Compiler(s)	1998 Thomas L. Sawyer, Piedmont Geosciences, Inc.
References	#287 Dohrenwend, J.C., Schell, B.A., and Moring, B.C., 1991, Reconnaissance photogeologic map of young faults in the Lund 1° by 2° quadrangle, Nevada and Utah: U.S. Geological Survey Miscellaneous Field Studies Map MF-2180, 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](#)