

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 on south side of the Antelope Range (Class A) No. 1633

Last Review Date: 1999-03-10

citation for this record: Adams, K., compiler, 1999, Fault number 1633, unnamed faults on south side of the Antelope Range, 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 02:35 PM.

Synopsis	These apparently related short faults include east-west-striking piedmont faults on the south side of the Antelope Range and a single northwest-striking piedmont fault on the northeast side of the range. These faults are expressed by prominent topographic lineaments on early to middle Pleistocene alluvium and Tertiary and older bedrock. Reconnaissance photogeologic mapping and regional geologic mapping are the sources of data. Trench investigations and detailed studies of scarp morphology have not been conducted.
Name comments	Refers to east-west-striking piedmont faults on the south side of the Antelope Range, northeast of Imlay Summit and northwest of Rye Patch Reservoir. Also includes a single northwest-striking piedmont fault on the northeast side of the range southwest of

	Haystack Butte.
County(s) and State(s)	PERSHING COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:100,000 scale. <i>Comments:</i> Fault locations based on 1:250,000-scale map of Dohrenwend and others (1991 #285) which was produced by 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 group consists of east-west-striking piedmont faults on the south side of the Antelope Range and a single northwest-striking piedmont fault on the northeast side of the range.
Length (km)	9 km.
Average strike	N66°W
Sense of movement	Normal <i>Comments:</i> Not studied in detail; sense of movement inferred from topography.
Dip Direction	S; E
Paleoseismology studies	
Geomorphic expression	Faults are expressed by prominent topographic lineaments on Quaternary alluvium and Tertiary and older bedrock (Johnson, 1977 #2569; Dohrenwend and others, 1991 #285).
Age of faulted surficial deposits	Although the faults primarily displace Tertiary and older rocks (Johnson, 1977 #2569), Quaternary alluvium also appears to be faulted (Dohrenwend and others, 1991 #285).
Historic earthquake	
Most recent prehistoric	undifferentiated Quaternary (<1.6 Ma)

deformation	<i>Comments:</i> Although timing of most recent event is not well constrained, a Quaternary time is suggested based on reconnaissance photogeologic mapping of Dohrenwend and others (1991 #285).
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)	1999 Kenneth Adams, Piedmont Geosciences, Inc.
References	#285 Dohrenwend, J.C., McKittrick, M.A., and Moring, B.C., 1991, Reconnaissance photogeologic map of young faults in the Lovelock 1° by 2° quadrangle, Nevada and California: U.S. Geological Survey Miscellaneous Field Studies Map MF-2178, 1 sheet, scale 1:250,000. #2569 Johnson, M.G., 1977, Geology and mineral deposits of Pershing County, Nevada: Nevada Bureau of Mines and Geology Bulletin 89, 115 p., scale 1:250,000.

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