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 of southern Clan Alpine Mountains (Class A) No. 1188

Last Review Date: 2000-09-20

citation for this record: Lidke, D.J., compiler, 2000, Fault number 1188, unnamed faults of southern Clan Alpine Mountains, 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 02:17 PM.

	This short and discontinuous north-striking zone of faults is mainly characterized by a north-striking fault that juxtaposes bedrock against Quaternary piedmont-slope deposits and by piedmont scarps that branch to the north-northeast from the main fault. There is evidence along the fault for at least one rupture event that probably is no older than late Pleistocene in age. The fault zone has not been studied in detail and little is actually known with certainty about its nature, character, and movement history. Reconnaissance photogeologic mapping is the only known source of data for these faults.
comments	Refers to a discontinuous, north-striking zone of faults as mapped by Dohrenwend and others (1992 #283) along the eastern side of a north-trending, spur-like ridge that branches south from the

	southeastern end of the Clan Alpine Mountains. These faults had not been named. The faults extend from near the mouth of Camp Creek Canyon discontinuously north along the eastern side of the ridge to about 1 km northwest of White Rock Spring.
County(s) and State(s)	CHURCHILL COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:250,000 scale.
	<i>Comments:</i> Location is from 1:250,000-scale map of Dohrenwend and others (1992 #283) that shows mapping based on photogeologic analysis of 1:58,000-nominal-scale, color-infrared photography, that was transferred directly to 1:100,000-scale topographic maps enlarged to the scale of the photographs. The 1:100,000-scale fault maps were reduced and compiled at 1:250,000-scale for final publication.
Geologic setting	This north-striking zone of faults are comprised on a main range (hill) front fault that places Tertiary bedrock of the Clan Alpine Mountains against Quaternary piedmont-slope deposits of Camp Creek Valley (Dohrenwend and others, 1992 #283). The fault shows down-to-the-east offset, and the scarp that branches northeast from the northern part of the fault faces eastward. Stratigraphic relations across the fault as well as the east-facing direction of the scarp, imply mostly down-to-the-east Quaternary offset along the fault zone that probably reflects some continued uplift of the Clan Alpine Mountains relative to adjacent valley areas, such as the valley along Camp Creek. These faults are subparallel to but east of fault [1187]. Together they form a horst- like structure. The fault zone has not been studied in detail and information about the nature and amounts of offset along the fault zone have not been reported.
Length (km)	15 km.
Average strike	N12°E
Sense of movement	Normal
movement	<i>Comments:</i> Not specifically reported, however, the down-to-east fault and the east-facing scarps consistently indicate down-to-the-

	east offsets, which in this extensional regime, probably reflect principally normal, dip-slip movement along easterly-dipping faults.
Dip Direction	W Comments: Not reported but probably steep, based on dip measurements of other Quaternary faults in localities nearby and elsewhere in the Basin and Range Province.
Paleoseismology studies	
Geomorphic expression	The northern part of this fault zone is expressed by a north- striking, down-to-the-east fault and by an east-facing scarp that branches off to the north-northeast (Dohrenwend and others, 1992 #283). The southern part of the fault zone is expressed by a north- striking, fault-related lineament that is present on Quaternary piedmont-slope deposits (Dohrenwend and others, 1992 #283).
surficial	Dohrenwend and others (1992 #283) assigned early to middle Pleistocene and late Pleistocene ages to surficial deposits that have faults scarps.
Historic earthquake	
Most recent prehistoric deformation	late Quaternary (<130 ka) <i>Comments:</i> The timing of the most recent prehistoric faulting event is not well constrained. Reconnaissance photogeologic mapping by Dohrenwend and others (1992 #283) indicates that the most recent prehistoric faulting event probably is no older than late Pleistocene (<130 ka) in age.
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr <i>Comments:</i> Not reported; low slip rate selected on the basis of the faults geomorphic expression.
Date and Compiler(s)	2000 David J. Lidke, U.S. Geological Survey

#283 Dohrenwend, J.C., Schell, B.A., and Moring, B.C., 1992,
Reconnaissance photogeologic map of young faults in the Millett
1° by 2° quadrangle, Nevada: U.S. Geological Survey Miscellaneous Field Studies Map MF-2176, 1 sheet, scale
Miscellaneous Field Studies Map MF-2176, 1 sheet, scale
1:250,000.

<u>Questions or comments?</u>

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