

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 Kobeh Valley (Class A) No. 1185

Last Review Date: 2000-09-13

citation for this record: Lidke, D.J., compiler, 2000, Fault number 1185, unnamed faults of Kobeh Valley, 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.

East-facing scarps and other linear features present on Quaternary piedmont deposits of the north-central part of the Kobeh Valley characterize this group of short, north-striking faults. There is evidence along these scarps for at least one Quaternary faulting event that probably is no older than late Pleistocene and may as young as latest Pleistocene to Holocene in age. These faults have not been studied in detail and almost nothing is known about their nature, character, and movement history. The only known sources of data for these faults consist of photogeologic mapping supplemented by some field verification.
Refers to short, north-striking faults mapped by Schell (1981 #2844) and Dohrenwend and others (1992 #283) in the north-central part of the Kobeh Valley, these faults are not known to

	have been previously named. These faults form a short, narrow, north-striking zone of faults, which is about 3-4 km in length directly west of the middle part of Colts Creek.
County(s) and State(s)	EUREKA COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	
	Comments: Location based on 1:250,000-scale maps of Schell (1981 #2844) and Dohrenwend and others (1992 #283). Mapping by Schell (1981 #2843; 1981 #2844) included field verification, but was based primarily on photogeologic analysis of 1:24,000-scale, color, aerial photography that was supplemented by analysis of some 1:60,000-scale, black-and-white, aerial photography. Faults identified on the aerial photographs were transferred by inspection to 1:62,500-scale topographic maps that were photographically reduced to 1:250,000-scale for final compilation of the faults on 1:250,000-scale topographic maps. Mapping by Dohrenwend and others (1992 #283) was based on photogeologic analysis of 1:58,000-nominal-scale, color-infrared photography transferred directly to 1:100,000-scale topographic maps enlarged to the scale of the photographs; these maps were then reduced and compiled at 1:250,000-scale.
Geologic setting	This group of short, north-striking faults form a relatively narrow zone of deformation that is relatively isolated in the north-central part of the Kobeh Valley. It is marked by east-facing scarps and linear features present on Quaternary deposits (Schell, 1981 #2844; Dohrenwend and others, 1992 #283). The east-facing scarps are on Quaternary deposits suggesting mostly down-to-the-east offsets along these faults that may somehow be related to continued Quaternary down-dropping of the Kobeh Valley relative to the adjacent mountain ranges. These faults have not been studied in detail and information about the nature and amounts of offset along these faults has not been reported.
Length (km)	4 km.
Average strike	N2°E
Sense of	Normal

movement	Comments: Not specifically reported, however, the easterly facing direction of the scarps suggests down-to-the-east offsets, which in this extensional regime probably reflects principally normal, dipslip movement along easterly dipping faults.
Dip Direction	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	This group of very short faults is chiefly expressed by north striking, east-facing scarps and some linear features on Quaternary piedmont-slope deposits of the Kobeh Valley (Schell, 1981 #2844; Dohrenwend and others, 1992 #283).
Age of faulted surficial deposits	Schell (1981 #2844) indicated on his map that Quaternary deposits are faulted; however, he did not constrain the age of these deposits any more tightly than broadly Quaternary age range. Dohrenwend and others (1992 #283) assigned a latest Pleistocene to Holocene age, with indicated uncertainty, to some faulted deposits along this zone. Some of these deposits were mapped by Lehner and others (1961 #4363) as Quaternary alluvium and others as older Quaternary alluvium.
Historic earthquake	
Most recent prehistoric deformation	late Quaternary (<130 ka) Comments: The timing of the most recent prehistoric faulting event is not well constrained. Mapping studies by Schell (1981 #2844) and Dohrenwend and others (1992 #283) are in agreement that one or more Quaternary faulting events have occurred along faults of this group. Reconnaissance photogeologic mapping studies by Dohrenwend and others (1992 #283), further suggest that the most recent faulting event may be as young as latest Pleistocene to Holocene (0-30 ka) in age.
Recurrence	

interval		
_	Less than 0.2 mm/yr	
category	Comments: Not reported; low slip rate selected on the basis of the	
	faults geomorphic expression.	
Date and	2000	
Compiler(s)	David J. Lidke, U.S. Geological Survey	
References	#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 1:250,000. #4363 Lehner, R.E., Tagg, K.M., Bell, M.M., and Roberts, R.J., 1961, Preliminary geologic map of Eureka County, Nevada: U.S. Geological Survey Mineral Investigations Field Studies Map MF-178, 1 sheet, scale 1:250,000.	
	#2843 Schell, B.A., 1981, Faults and lineaments in the MX Sitting Region, Nevada and Utah, Volume I: Technical report to U.S. Department of [Defense] the Air Force, Norton Air Force Base, California, under Contract FO4704-80-C-0006, November 6, 1981, 77 p.	
	#2844 Schell, B.A., 1981, Faults and lineaments in the MX Siting Region, Nevada and Utah, Volume II: Technical report to U.S. Department of [Defense] the Air Force, Norton Air Force Base, California, under Contract FO4704-80-C-0006, November 6, 1981, 29 p., 11 pls., scale 1:250,000.	

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