Jump to Navigation

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 near Bartome Knoll (Class A) No. 1539

Last Review Date: 1999-01-20

citation for this record: **Adams, K., and Sawyer, T.L., compilers, 1999, Fault number 1539, unnamed fault near Bartome Knoll, 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 02:36 PM.**

Synopsis	This east-striking intra-plateau fault crosses the Owyhee Desert northwest of Twelvemile Flat and north of Bartome Knoll. Although the fault apparently displaces only Tertiary volcanic and sedimentary rocks, young movement is suspected based its expression as a south-facing topographic lineament; otherwise the fault appears to have little geomorphic expression. Reconnaissance photogeologic mapping of the faults is the source of data.
Name comments	Refers to a fault mapped by Slemmons (1966, unpublished McDermitt 1:250,000-scale mapt) in the Owyhee Desert northwest of Twelvemile Flat and north of Bartome Knoll.
County(s) and	ELKO COUNTY, NEVADA

State(s)	ELKO COUNTY, NEVADA
Physiographic province(s)	COLUMBIA PLATEAU
Reliability of location	Good Compiled at 1:100,000 scale. *Comments:* The location of the fault is based on 1:250,000-scale map of Slemmons (1966, unpublished); mapping from analysis of 1:60,000-scale AMS photography transferred to mylar overlaid onto a 1:250,000-scale topographic map using proportional dividers.
Geologic setting	This east-striking intra-plateau fault crosses the Owyhee Desert northwest of Twelvemile Flat and north of Bartome Knoll (Slemmons, 1966, unpublished McDermitt 1:250,000-scale map). Dohrenwend and Moring (1991 #284) do not show this fault but do show a Tertiary fault on strike and to the west.
Length (km)	3 km.
Average strike	N80°E
Sense of movement	Normal *Comments:* (Slemmons, 1966, unpublished McDermitt 1:250,000-scale map)
Dip Direction	S
Paleoseismology studies	
Geomorphic expression	Although the fault apparently displaces only Tertiary volcanic and sedimentary rocks, young movement is suspected based its expression as a south-facing topographic lineament; otherwise the fault appears to have little geomorphic expression (Slemmons, 1966, unpublished McDermitt 1:250,000-scale map).
Age of faulted surficial deposits	Tertiary. The fault displaces only Tertiary volcanic and sedimentary rocks (Coats, 1987 #2861).
Historic earthquake	

Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* Although timing of most recent event is not well constrained, a Quaternary time is suspected based on reconnaissance photogeologic mapping by Slemmons (1966, unpublished McDermitt 1:250,000-scale map). Dohrenwend and Moring (1991 #284) do not document the existence of this fault but do show an older Tertiary fault nearby.
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr *Comments:* A low slip rate is inferred from general knowledge of slip rates estimated for other faults in the region and the modest height of the topographic lineament on Tertiary bedrock.
Date and Compiler(s)	1999 Kenneth Adams, Piedmont Geosciences, Inc. Thomas L. Sawyer, Piedmont Geosciences, Inc.
References	#2861 Coats, R.R., 1987, Geology of Elko County, Nevada: Nevada Bureau of Mines and Geology Bulletin 101, 112 p., scale 1:250,000. #284 Dohrenwend, J.C., and Moring, B.C., 1991, Reconnaissance photogeologic map of young faults in the McDermitt 1° by 2° quadrangle, Nevada, Oregon, and Idaho: U.S. Geological Survey Miscellaneous Field Studies Map MF-2177, 1 sheet, scale 1:250,000.