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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 west of The Wall (Class A) No. 1376

Last Review Date: 1998-07-11

citation for this record: **Sawyer, T.L., compiler, 1998, Fault number 1376, unnamed faults west of The Wall, 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 02:14 PM.**

Synopsis	This distributed group of short discontinuous, down-to-the-west normal faults bounds west side of The Wall, rim of the Lunar Lake caldera, and has two short faults at southern end of the Pancake Range north of Black Rock Summit. Reconnaissance photogeologic mapping and limited analysis of scarp morphology are the sources of data. Trench investigations and detailed studies of scarp morphology have not been completed.
Name comments	Refers to faults mapped by Schell (1981 #2844) and by Dohrenwend and others (1991 #287). These discontinuous faults extend along west side of the southern Pancake Range from The Wall, west of Black Rock Summit, to Wood Canyon. **Fault ID:** Refers to fault 98 on Plate A6 of Schell (1981 #2844).

County(s) and State(s)	NYE COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:100,000 scale. *Comments:* Location based on 1:250,000-scale maps of Schell (1981 #2844) and of Dohrenwend and others (1991 #287). Original mapping by Schell (1981 #2843; 1981 #2844) based on photogeologic analysis of primarily 1:24,000-scale color aerial photography supplemented with 1:60,000-scale black-and-white aerial photography, transferred by inspection to 1:62,500-scale topographic maps and photographically reduced and directly transferred to 1:250,000-scale topographic maps, and field verification. Mapping by Dohrenwend and others (1991 #287) based on 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.
Geologic setting	This distributed group of short discontinuous, down-to-the-west normal faults bounds west side of The Wall (horst block), rim of the Lunar Lake caldera (Kleinhampl and Ziony, 1985), and has two short faults at southern end of the Pancake Range north of Black Rock Summit.
Length (km)	24 km.
Average strike	N16°E
Sense of movement	Normal *Comments:* Schell (1981 #2843)
Dip Direction	W
Paleoseismology studies	
Geomorphic expression	The fault is expressed by abrupt scarps juxtaposing Quaternary alluvium against bedrock and by a scarp on Quaternary deposits (Schell, 1981 #2843; Dohrenwend and others, 1991 #287).
Age of faulted	

Age of faulted surficial deposits	Quaternary (Schell, 1981 #2843; 1981 #2844; Dohrenwend and others, 1991 #287).
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* Although the timing of most recent prehistorical event is not well constrained, Schell (1981 #2843; 1981 #2844) and Dohrenwend and others (1991 #287) suggested an late Pleistocene time based on photogeologic analysis.
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.
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. #2851 Kleinhampl, F.J., and Ziony, J.I., 1985, Geology of Northern Nye County, Nevada: Nevada Bureau of Mines and Geology Bulletin 99A, 172 p. #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.