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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 Pike Peak (Class A) No. 1296

Last Review Date: 1998-07-19

citation for this record: **Adams, K., compiler, 1998, Fault number 1296, unnamed faults west of Pike Peak, 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 group of predominately north-striking faults bounds the west side of the Wassuk Range from Burro Mountain south to just south of Rattlesnake Creek and also includes distributed faults between the Wassuk Range and the East Walker River. Along much of their lengths, many of the faults only involve bedrock but young movement is demonstrated by faults that displace Quaternary. Reconnaissance photogeologic mapping and bedrock mapping of the faults are the sources of data. Trench investigations and detailed studies of scarp morphology have not been completed.
Name comments	Refers to a group of faults on west side of the Wassuk Range and mapped by Slemmons (1966, unpublished Walker Lake 1? X 2? sheet), Dohrenwend (1982 #2481; 1982 #2870; 1982 #2871), and

	Stewart and others (1981 #2892; 1982 #2873).
County(s) and State(s)	LYON COUNTY, NEVADA MINERAL COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:100,000 scale. *Comments:* Locations primarily based on 1:62,500 maps of Dohrenwend (1982 #2871) and Stewart and others (1981 #2892) and 1:250,000-scale maps of Dohrenwend (1982 #2481; 1982 #2870). Small-scale mapping of Dohrenwend (1982 #2871) 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 predominately north-striking group of faults bounds the west side of the Wassuk Range from Burro Mountain south to just south of Rattlesnake Creek and also includes distributed faults between the Wassuk Range and the East Walker River.
Length (km)	20 km.
Average strike	N2°E
Sense of movement	Normal *Comments:* Normal sense of motion from Stewart and others (1981 #2892) and inferred from topography.
Dip Direction	W; E
Paleoseismology studies	
Geomorphic expression	Faults are expressed as range-bounding normal faults on the west side of the Wassuk Range, as intermontane faults defined by aligned drainages and saddles in the low hills to the west of the Wassuks, and as short east-facing scarps on Pleistocene alluvium (Dohrenwend, 1982 #2481).
Age of faulted surficial	Pleistocene through Tertiary. Faults displace upper Pleistocene and older Pleistocene erosional surfaces (Stewart and others, 1981

deposits	#2892), Pleistocene alluvium (Dohrenwend, 1982 #2481), and Tertiary bedrock (Stewart and others, 1981 #2892; 1982 #2873).
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 mapping by Dohrenwend (1982 #2481; 1982 #2870).
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 Kenneth Adams, Piedmont Geosciences, Inc.
References	#2481 Dohrenwend, J.C., 1982, Map showing late Cenozoic faults in the Walker Lake 1° by 2° quadrangle, Nevada-California: U.S. Geological Survey Miscellaneous Field Studies Map MF-1382-D, 1 sheet, scale 1:250,000. #2870 Dohrenwend, J.C., 1982, Surficial geologic map of the Walker Lake 1° by 2° quadrangle, Nevada-California: U.S. Geological Survey Miscellaneous Field Studies Map MF-1382-C, 1 sheet, scale 1:250,000. #2871 Dohrenwend, J.C., 1982, Reconnaissance surficial geologic map of the Aurora quadrangle, Nevada and California: U.S. Geological Survey Miscellaneous Field Studies Map MF-1373, scale 1:62,500. #2873 Stewart, J.H., Carlson, J.E., and Johannesen, D.C., 1982, Geologic map of the Walker Lake 1° by 2° quadrangle, California and Nevada: U.S. Geological Survey Miscellaneous Field Studies Map MF-1382-A, scale 1:250,000. #2892 Stewart, J.H., Reynolds, M.W., Johannesen, D.C., and Dohrenwend, J.C., 1981, Geologic map of the Mount Grant quadrangle, Lyon and Mineral Counties, Nevada: U.S. Geological Survey Miscellaneous Field Studies Map MF-1278, scale

	1:62,500.

Questions or comments?

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