## **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 fault near Pinto Peak (Class A) No. 1475

Last Review Date: 1998-07-19

*citation for this record:* Sawyer, T.L., compiler, 1998, Fault number 1475, unnamed fault near Pinto 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 02:05 PM.

**Synopsis** This widely distributed zone of short normal faults is comprised of several intra-plateau faults near Nellie Spring Mountain and in the hills to the north, a few piedmont faults in Grassy Canyon northeast of Nellie Spring Mountain, and locally along the east side of Long Valley east of Black Hills. Many of the faults in this zone are expressed as topographic lineaments on Tertiary volcanic and sedimentary rocks (and are thus considered as Class C features). However, the ones shown here appear to juxtapose Quaternary piedmont-slope deposits against Tertiary bedrock or are marked by scarps on Quaternary piedmont-slope deposits, providing evidence of young movement. Reconnaissance photogeologic mapping of the fault zone and geologic mapping of the region are the sources of data. Trench investigations and detailed studies of scarp morphology have not been conducted.

Name comments	Refers to faults mapped by Dohrenwend and Moring (1991 #281) near Nellie Spring Mountain and in the hills to the north, east of Long Valley.
County(s) and State(s)	WASHOE COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:100,000 scale.
	<i>Comments:</i> Fault locations are based on 1:250,000-scale map of Dohrenwend and Moring (1991 #281), which is from 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 and then reduced and transferred to 1:250,000-scale topographic maps.
Geologic setting	This widely distributed zone of short normal faults has several intra-plateau faults near Nellie Spring Mountain and in the hills to the north and has a few piedmont faults in Grassy Canyon northeast of Nellie Spring Mountain and locally along the east side of Long Valley east of Black Hills (Dohrenwend and Moring, 1991 #281).
Length (km)	27 km.
Average strike	N16°W
Sense of movement	Normal <i>Comments:</i> Not studied in detail; sense of movement is inferred from topography and a from a few scarps mapped by Dohrenwend and Moring (1991 #281).
Dip Direction	W; E
Paleoseismology studies	
Geomorphic expression	Most of the faults in this zone are commonly expressed as prominent lineaments on Tertiary basalt and sedimentary rocks (and are thus considered as Class C features). However, several faults appear to juxtapose Quaternary piedmont-slope deposits against Tertiary bedrock and two faults are marked by scarps on

	Quaternary piedmont-slope deposits, suggesting young movement on faults in the zone (Dohrenwend and Moring, 1991 #281).	
Age of faulted surficial deposits	piedmont-slope deposits are offset and faulted against Tertiary	
Historic earthquake		
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) <i>Comments:</i> The timing of most recent event is not well constrained, a Quaternary time is suggested based on reconnaissance photogeologic mapping of Dohrenwend and Moring (1991 #281).	
Recurrence interval		
Slip-rate category	Less than 0.2 mm/yr <i>Comments:</i> A low slip rate is inferred from general knowledge of slip rates estimated for other faults in the region and height of topographic escarpments on Tertiary basalt.	
Date and Compiler(s)	1998 Thomas L. Sawyer, Piedmont Geosciences, Inc.	
References	#281 Dohrenwend, J.C., and Moring, B.C., 1991, Reconnaissance photogeologic map of young faults in the Vya 1° by 2° quadrangle, Nevada, Oregon, and California: U.S. Geological Survey Miscellaneous Field Studies Map MF-2174, 1 sheet, scale 1:250,000.	

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