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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 fault northwest of Andesite Ridge (Class A) No. 1360

Last Review Date: 1998-08-01

citation for this record: **Sawyer, T.L., compiler, 1998, Fault number 1360, unnamed fault northwest of Andesite Ridge, 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 northeast-striking zone of linear left-oblique-slip faults extends from northern Hot Creek Valley along the margins of Pritchards Canyon and northwest flank of Andesite Ridge, and onto piedmont slope in southern Little Smoky Valley. Reconnaissance photogeologic mapping of these faults and bedrock mapping are the sources of data. Trench investigations and detailed studies of scarp morphology have not been completed.
Name comments	Refers to faults mapped by Dixon and others (1972 #2937), Schell (1981 #2844), and also mapped by Dohrenwend and others (1996 #2846). The fault extends from northernmost Hot Creek Valley, northward through Pritchards Canyon, into southern Little Smoky Valley.

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 *Comments:* Location based on 1:250,000-scale maps of Schell (1981 #2844) and unpublished map of the Tonopah 1?x2? sheet by J.C. Dohrenwend published at 1:100,000-scale by Dohrenwend and others (1996 #2846). 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 subsequent field verification. Mapping by Dohrenwend and others (1996 #2846) 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 northeast-striking zone of linear left-oblique-slip faults extends from northern Hot Creek Valley along the margins of Pritchards Canyon and northwest flank of Andesite Ridge, and onto piedmont slope in southern Little Smoky Valley.
Length (km)	26 km.
Average strike	N26°E
Sense of movement	Left lateral *Comments:* Dixon and others (1972 #2937) show sinistral and normal slip along the most continuous fault within the fault zone. A dominant sinistral component is inferred from the prominent linearity of this fault for a distance of more than 12 km.
Dip Direction	NW
Paleoseismology studies	
Geomorphic	The fault is expressed by possible scarps juxtaposing Quaternary

expression	alluvium against bedrock, and by scarps and lineaments on Tertiary rocks (Dohrenwend and others, 1996 #2846).
Age of faulted surficial deposits	Quaternary alluvium (Kleinhampl and Ziony, 1985 #2851; Dohrenwend and others, 1996 #2846)
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* Although timing of most recent prehistorical event is not well constrained, Dohrenwend and others (1996 #2846) suggested a possible Quaternary time based on reconnaissance photogeologic studies. Dixon and others (1972 #2937) mapped the fault as displacing Quaternary to Tertiary alluvium. Kleinhampl and Ziony (1985 #2851) mapped the alluvium as Quaternary, also suggesting a Quaternary time.
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr *Comments:* No age or displacement data are reported that could constrain the slip rate. The late Quaternary characteristics of this fault (overall geomorphic expression, continuity of scarps, age of faulted deposits, etc.) support a low slip rate. Accordingly, the less than 0.2 mm/yr slip-rate category has been assigned to this fault.
Date and Compiler(s)	1998 Thomas L. Sawyer, Piedmont Geosciences, Inc.
References	#2937 Dixon, G.L., Hedlund, D.C., and Ekren, E.B., 1972, Geologic map of the Pritchards Station quadrangle, Nye County, Nevada: U.S. Geological Survey Miscellaneous Investigations Map I-728, scale 1:48,000. #2846 Dohrenwend, J.C., Schell, B.A., Menges, C.M., Moring, B.C., and McKittrick, M.A., 1996, Reconnaissance photogeologic map of young (Quaternary and late Tertiary) faults in Nevada, *in* Singer, D.A., ed., Analysis of Nevada's metal-bearing mineral resources: Nevada Bureau of Mines and Geology Open-File Report 96-2, 1 pl., scale 1:1,000,000.

	#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.