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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 near Ninemile Mountain (Class A) No. 1585

Last Review Date: 1998-10-05

citation for this record: **Sawyer, T.L., and Oswald, J.A., compilers, 1998, Fault number 1585, unnamed faults near Ninemile Mountain, 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 distributed group of subparallel normal faults bounds the east front of Ninemile Ridge, the west front of Ninemile Mountain, and the east and west fronts of Tony Mountain. These range front faults juxtapose Quaternary alluvium against bedrock; the east front of Tony Mountain is abrupt and well defined. Reconnaissance photogeologic mapping of fault related features is the source of data. Trench investigations and studies of scarp morphology have not been conducted along the fault.
Name comments	Refers to faults mapped by Dohrenwend and others (1991 #290) bounding the east side of Ninemile Ridge, west front of Ninemile Mountain, and the east and west sides of Tony Mountain.
County(s) and	ELKO COUNTY, NEVADA

State(s)	ELKO 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 map of Dohrenwend and others (1991 #290); mapping by 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	Group of subparallel, normal faults bound to east front of Ninemile Ridge and west front of Ninemile Mountains and, to the north, Tony Mountain (Dohrenwend and others, 1991 #290).
Length (km)	13 km.
Average strike	N4°W
Sense of movement	Normal *Comments:* Not studied in detail; sense of movement is inferred from topography.
Dip Direction	W; E
Paleoseismology studies	
Geomorphic expression	The faults are expressed by range-front escarpments along which Quaternary alluvium is juxtaposed against bedrock; the east front of Tony Mountain is abrupt and well defined (Dohrenwend and others, 1991 #290).
Age of faulted surficial deposits	Quaternary. These fault displace alluvium interpreted from photogeologic mapping to be Quaternary in age (Dohrenwend and others, 1991 #290).
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* Although timing of the most recent event is not well

	constrained, Dohrenwend and others (1991 #290; 1996 #2846) suspected a Quaternary time based on reconnaissance photogeologic studies.
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. John A. Oswald, Piedmont Geosciences, Inc.
References	#290 Dohrenwend, J.C., McKittrick, M.A., and Moring, B.C., 1991, Reconnaissance photogeologic map of young faults in the Wells 1° by 2° quadrangle, Nevada, Utah, and Idaho: U.S. Geological Survey Miscellaneous Field Studies Map MF-2184, 1 sheet, scale 1:250,000. #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.