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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 north of Pequop Mountains (Class A) No. 1587

Last Review Date: 1998-10-05

citation for this record: **Oswald, J.A., and Sawyer, T.L., compilers, 1998, Fault number 1587, unnamed faults north of Pequop Mountains, 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 group of parallel to subparallel normal faults includes a range-front fault bounding north end of the Pequop Mountains, intermontane faults within the Pequop Mountains, and piedmont faults that extend northward to Toano Draw. These faults juxtapose Quaternary alluvium against bedrock, form lineaments on Quaternary alluvium. Geologic and 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Refers to faults mapped by Coats (1987 #2861) and Dohrenwend and others (1991 #290) and locally by Slemmons (1964, unpublished Wells 1? X 2? sheet). Fault extends from the north end of the Pequop Mountains northward into Toano Draw.

County(s) and State(s)	ELKO COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:100,000 scale. *Comments:* Location primarily based on 1:250,000-scale fault map of Dohrenwend and others (1991 #290) and 1:250,000-scale geologic map of Coats (1987 #2861); mapping by Dohrenwend and others (1991 #290) 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 group of parallel to subparallel normal faults includes a range-front fault bounding north end of the Pequop Mountains, intermontane faults within the Pequop Mountains, and piedmont faults that extend northward to Toano Draw (Slemmons, 1964, unpublished Wells 1? X 2? sheet); Coats, 1987 #2861; Dohrenwend and others, 1991 #290).
Length (km)	16 km.
Average strike	N9°W
Sense of movement	Normal *Comments:* Not studied in detail; sense of movement is inferred from topography.
Dip Direction	E; W
Paleoseismology studies	
Geomorphic expression	Faults juxtapose Quaternary alluvium against bedrock and form lineaments on Quaternary piedmont-slope surface north of Pequop Mountains (Slemmons, 1964, unpublished Wells 1? X 2? sheet; Coats, 1987 #2861; Dohrenwend and others, 1991 #290).
Age of faulted surficial deposits	Late Pleistocene (?); Quaternary. The fault displaces alluvium interpreted from geologic and photogeologic mapping to be Quaternary (Coats, 1987 #2861; Dohrenwend and others, 1991

	#290) to late Pleistocene in age (Slemmons, 1964, unpublished Wells 1? X 2? sheet).
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* The timing of most recent event is not well constrained and the two map sources differ greatly. Slemmons (1966, unpublished Wells 1? X 2? sheet) shows piedmont scarps as being late Quaternary in age. Dohrenwend and others (1991 #290) do not map those scarps, and show the mapped faults as undifferentiated Quaternary. The assigned age category is based on the sole published source.
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 John A. Oswald, Piedmont Geosciences, Inc. Thomas L. Sawyer, Piedmont Geosciences, Inc.
References	#2861 Coats, R.R., 1987, Geology of Elko County, Nevada: Nevada Bureau of Mines and Geology Bulletin 101, 112 p., scale 1:250,000. #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.