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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 east of Egan Range (Class A) No. 1399

Last Review Date: 1998-06-30

citation for this record: **Sawyer, T.L., compiler, 1998, Fault number 1399, unnamed fault east of Egan Range, 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 series of subparallel to echelon normal faults discontinuously bounds the eastern front of the Egan Range and extends across piedmont slope and along margins of low hills in southernmost Steptoe Valley. Reconnaissance photogeologic mapping of the fault zone is the source of data. Trench investigations and studies of scarp morphology have not been completed.
Name comments	This fault includes the Ward Mine fault mapped and named by Schell (1981 #2844) and several faults to the south mapped by Schell (1981 #2844) and Dohrenwend and others (1991 #287; 1996 #2846). The fault extends from Ward Mountain, along the flank of the Egan Range and the west side of North Cave Valley, to west of Parker Station.

	Fault ID: Northern part of this fault refers to fault 130 of Schell (1981 #2844).
County(s) and State(s)	LINCOLN COUNTY, NEVADA WHITE PINE 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 of Dohrenwend and others (1991 #287; 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 field verification. Mapping by Dohrenwend and others (1991 #287; 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. Part of the fault was mapped initially by Brokaw and Shawe (1965 #113).
Geologic setting	This series of subparallel to echelon normal faults discontinuously bounds east front of the Egan Range and extends across piedmont slope and along margins of low hills in southernmost Steptoe Valley.
Length (km)	63 km.
Average strike	N6°W
Sense of movement	Normal *Comments:* Not studied in detail; sense of movement inferred from topography. Sense of movement noted in part by Brokaw and Shawe (1965 #113).
Dip Direction	E
Paleoseismology studies	

Geomorphic expression	The fault is marked by abrupt well-defined fault scarps that juxtapose Eocene against Paleozoic bedrock (Brokaw and Shawe, 1965 #113) or Quaternary alluvium against bedrock, and by lineaments on Quaternary alluvium and/or erosional surfaces, and by lineaments and scarps on Tertiary deposits (Schell, 1981 #2844; Dohrenwend and others, 1991 #287; 1996 #2846).
Age of faulted surficial deposits	Quaternary , Tertiary, and Paleozoic (Brokaw and Shawe, 1965 #113; Dohrenwend and others, 1991 #287; 1996 #2846).
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* Although timing of the most recent event is not well constrained, reconnaissance studies by Dohrenwend and others (1991 #287; 1996 #2846) and Schell (1981 #2844) suggest a Quaternary time based on photogeologic interpretation.
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.
References	#113 Brokaw, A.L., and Shawe, D.R., 1965, Geologic map and sections of the Ely 3 SW quadrangle, White Pine County, Nevada: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-449, 1 sheet, scale 1:24,000. #287 Dohrenwend, J.C., Schell, B.A., and Moring, B.C., 1991, Reconnaissance photogeologic map of young faults in the Lund 1° by 2° quadrangle, Nevada and Utah: U.S. Geological Survey Miscellaneous Field Studies Map MF-2180, 1 sheet, scale 1:250,000. #2480 Dohrenwend, J.C., Schell, B.A., and Moring, B.C., 1992, Reconnaissance photogeologic map of young faults in the Ely 1° by 2° quadrangle, Nevada and Utah: U.S. Geological Survey

	Miscellaneous Field Studies Map MF-2181, 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. #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.