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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.

Limestone Hills fault (Class A) No. 1429

Last Review Date: 1998-06-28

citation for this record: **Sawyer, T.L., compiler, 1998, Fault number 1429, Limestone Hills fault, 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 down-to-the-west range-front normal fault bounds west flank of the north-northwest-trending Limestone Hills. Reconnaissance photogeologic mapping of this fault is the source of data. Trench investigations and studies of scarp morphology have not been completed.
Name comments	Refers to Limestone Hills fault mapped and named by Schell (1981 #2844) and subsequently mapped by Dohrenwend and others (1991 #287). Fault extends from about 8 km southeast of Atlanta, northward along west flank of Limestone Hills, to about 3 km north of Wells Summit. **Fault ID:** Refers to fault 125 on Plate A6 in Schell (1981 #2844).
County(s) and State(s)	LINCOLN COUNTY, NEVADA
Physiographic	BASIN AND RANGE

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). Original 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 map, and field verification. Mapping by Dohrenwend and others (1991 #287) 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 down-to-the-west range-front normal fault bounds west flank of the north- to northwest-trending Limestone Hills.
Length (km)	13 km.
Average strike	N13°W
Sense of movement	Normal *Comments:* (Schell, 1981 #2844).
Dip Direction	W
Paleoseismology studies	
Geomorphic expression	The fault is predominantly marked by abrupt, well-defined fault scarps and to a lesser extent by less well-defined scarps juxtaposing Quaternary alluvium against bedrock (Dohrenwend and others, 1991 #287).
Age of faulted surficial deposits	Quaternary and Tertiary (Schell, 1981 #2844; Dohrenwend and others, 1991 #287)
Historic earthquake	

Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* Although timing of most recent prehistorical event is not well constrained, Schell (1981 #2843; 1981 #2844) and Dohrenwend and others (1991 #287) suggested 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.
References	#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. #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.