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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.

Pony Spring fault (Class A) No. 1419

Last Review Date: 1998-06-29

citation for this record: **Sawyer, T.L., compiler, 1998, Fault number 1419, Pony Spring 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 short, northeast- to east-northeast-striking normal fault bounds north front of the Fairview Range, and several obliquely oriented splay faults on piedmont slope of eastern Muleshoe Valley. 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 the Pony Spring fault mapped and named by Schell (1981 #2844; 1981 #2857; 1981 #2858) and also mapped by Dohrenwend and others (1991 #287). Fault extends from Muleshoe Valley northwestward across the north end of Fairview Range to Pony Springs. **Fault ID:** Refers to fault 83 on Plate A6 in Schell (1981 #2844) and shown on Drawing 3-2 in Schell (1981 #2857; 1981 #2858).
County(s) and	LINCOLN COUNTY, NEVADA

State(s)	LINCOLN 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) and 1:125,000-scale map of Schell (1981 #2857). Mapping by Schell (1981 #2843; 1981 #2857) 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 supplemented by 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 short, northeast- to east-northeast-striking normal fault bounds north front of the Fairview Range, and several obliquely oriented splay faults on piedmont slope of eastern Muleshoe Valley.
Length (km)	10 km.
Average strike	N36°E
Sense of movement	Normal *Comments:* (Schell, 1981 #2844)
Dip Direction	NW
Paleoseismology studies	
Geomorphic expression	The fault is marked by abrupt well-defined fault scarps juxtaposing Quaternary alluvium against bedrock (Dohrenwend and others, 1991 #287) and by scarps on Quaternary deposits (Schell, 1981 #2844; 1981 #2857).
Age of faulted surficial	Middle to late Quaternary (Schell, 1981 #2857); Quaternary

surficial deposits	(Dohrenwend and others, 1991 #287).
Historic earthquake	
Most recent prehistoric deformation	middle and late Quaternary (<750 ka) *Comments:* Although timing of the most recent event is not well constrained, Schell (1981 #2857, Drawing 3-2) depicted faults at the southwest end of the fault zone cutting middle to late Quaternary alluvial deposits.
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. #2857 Schell, B.A., 1981, MX Siting Investigation, geotechnical evaluation, verification study, Muleshoe Valley, NV, Volume I—Synthesis: Technical report to U.S. Department of [Defense] the Air Force, Norton Air Force Base, California, November 6, 1981, scale 1:125,000.

	#2858 Schell, B.A., 1981, MX Siting Investigation, Geotechnical Evaluation, Verification Study, Lake Valley, NV, Volume I—Synthesis: Technical report to U.S. Department of [Defense] Air Force, Norton Air Force Base, California, November 6, 1981, scale 1:125,000.