Jump to Navigation

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.

Coal Valley fault (Class A) No. 1394

Last Review Date: 1998-06-29

citation for this record: **Sawyer, T.L., compiler, 1998, Fault number 1394, Coal Valley 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 02:14 PM.**

Synopsis	This short zone of echelon, northeast-striking faults obliquely crosses northern Coal Valley. Reconnaissance photogeologic mapping of the fault and limited study of scarp morphology are the source of data. Trench investigations and detailed studies of scarp morphology have not been completed.
Name comments	Named and mapped by Schell (1981 #2844). The fault obliquely crosses the floor of north Coal Valley, east of the Golden Gate Range. **Fault ID:** Refers to fault 19 on Plates A6 and A9 in Schell (1981 #2844).
County(s) and State(s)	NYE COUNTY, NEVADA 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). 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 maps, 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 short zone of echelon, northeast-striking faults obliquely crosses the floor of north Coal Valley.
Length (km)	7 km.
Average strike	
Sense of movement	Normal
Dip Direction	NW
Paleoseismology studies	
Geomorphic expression	The fault is marked by low (d0.3 m) subtle (d1?) scarps and by lineaments that cross high-stand shorelines in Coal Valley (Schell, 1981 #2844).
Age of faulted surficial deposits	latest Pleistocene (~15 ka) lacustrine to late Pleistocene (Schell, 1981 #2844).
Historic earthquake	
Most recent prehistoric deformation	latest Quaternary (<15 ka) *Comments:* Although timing of the most recent event is not well constrained, Schell (1981 #2843; 1981 #2844) suggested a

	Holocene time based on scarp morphology, spatial distribution, and development of desert pavement, desert varnish, and soils of faulted deposits. Dohrenwend and others (1991 #287; 1996 #2846) also indicate a Holocene time, based on a reconnaissance photogeologic study.
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. #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.