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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 in northern Jakes Valley (Class A) No. 1224

Last Review Date: 2000-10-25

citation for this record: **Redsteer, M.H., compiler, 2000, Fault number 1224, unnamed faults in northern Jakes Valley, 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 02:16 PM.**

Synopsis	This fault zone is defined by a series of subparallel northeast-trending lineaments that extend across the floor of northern Jakes Valley, suggesting Holocene movement. Reconnaissance photogeologic mapping and limited analysis of scarp morphology are the sources of data. Trench investigations and detailed studies of scarp morphology have not been completed.
Name comments	This fault zone is referred to as the Jakes Valley fault zone by Schell (1981 #2843) but it is distinct from the Jakes Valley fault zone [1223] of dePolo (1998 #2845). The fault extends across the floor of Jakes Valley from Hill 2347 south of U.S. Highway 50 to Cottonwood Pond on the eastern side of Moorman Ridge.
County(s) and	WHITE PINE COUNTY, NEVADA

State(s)	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 map of Dohrenwend and others (1992 #2480). Mapping 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 subsequent mapping by 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 unnamed fault zone lies within the Jakes Valley, southeast of Illipah, Nevada.
Length (km)	16 km.
Average strike	N41°E
Sense of movement	Normal
Dip Direction	NW
Paleoseismology studies	
Geomorphic expression	The fault zone is expressed by northeast-trending scarps and/or lineaments that extend across the floor of Jakes Valley from Hill 2347, south of U.S. Highway 50, to Cottonwood Pond on the east side of Moorman Ridge. The topographic expression of this fault zone is subtle, maximum scarp height reported is 2 m (Schell, 1981 #2843). Dohrenwend and others (1992 #2480) showed these valley floor structures as lineaments, not having noted displacement on them. Subdued morphology may be due to the nonresistant nature of valley-floor sediment and the modification of these features by alluvial sedimentation. Even so, northeast-trending scarps are aligned with the southwest spur of Hill 2347, and may have also produced local asymmetry to the shape of

	Jakes Valley.
Age of faulted surficial deposits	Holocene and Pleistocene valley floor and piedmont alluvium (Schell, 1981 #2843; Dohrenwend and others, 1992 #2480).
Historic earthquake	
Most recent prehistoric deformation	latest Quaternary (<15 ka) *Comments:* The age of displaced units in the fault zone ranges from early Pleistocene to Holocene (Schell, 1981 #2843; Dohrenwend and others, 1992 #2480). Dohrenwend and others (1992 #2480) indicates that displacement in the northern part of the fault zone is primarily Holocene (<10 ka). In addition, Schell (1981 #2843) indicates that fault in the southern part of this zone cut Holocene shoreline sediment.
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr *Comments:* Low slip-rate category is assigned on the basis of small scarp heights (small offset) and relative inactivity of similar distributed faults in the Basin and Range province.
Date and Compiler(s)	2000 Margaret Hisa Redsteer, U.S. Geological Survey
References	#2845 dePolo, C.M., 1998, A reconnaissance technique for estimating the slip rate of normal-slip faults in the Great Basin, and application to faults in Nevada, U.S.A.: Reno, University of Nevada, unpublished Ph.D. dissertation, 199 p. #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. #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.