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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 near Browns Canyon (Class A) No. 1521

Last Review Date: 1999-01-27

citation for this record: **Adams, K., and Sawyer, T.L., compilers, 1999, Fault number 1521, unnamed faults near Browns Canyon, 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 02:50 PM.**

Synopsis	These two short intrabasin faults extend between the southern Hot Springs Range and the central Osgood Mountains from Browns Canyon northeastward to west side of the Dry Hills. The faults are expressed as south-facing scarps on late Quaternary alluvium. Reconnaissance photogeologic mapping of the faults is the source of data. Trench investigations and detailed studies of scarp morphology have not been completed.
Name comments	Refers to two faults mapped by Slemmons (1966, unpublished McDermitt 1? X 2? sheet) extending between the southern Hot Springs Range and the central Osgood Mountains from Browns Canyon northeast to west side of the Dry Hills.
County(s) and	HUMBOLDT COUNTY, NEVADA

State(s)	HUMBOLDT COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:100,000 scale. *Comments:* Fault locations are based on 1:250,000-scale map of Slemmons (1966, unpublished McDermitt 1? X 2? sheet); mapping from analysis of 1:60,000-scale AMS photography transferred to mylar overlaid onto a 1:250,000-scale topographic map using proportional dividers.
Geologic setting	These two short intrabasin faults extend between the southern Hot Springs Range and the central Osgood Mountains from Browns Canyon northeastward to west side of the Dry Hills (Slemmons, 1966, unpublished McDermitt 1? X 2? sheet).
Length (km)	3 km.
Average strike	N65°E
Sense of movement	Normal *Comments:* (Slemmons, 1966, unpublished McDermitt 1? X 2? sheet)
Dip Direction	S
Paleoseismology studies	
Geomorphic expression	Faults are expressed as two short south-facing scarps on late Quaternary alluvium (Slemmons, 1966, unpublished McDermitt 1? X 2? sheet).
Age of faulted surficial deposits	Late Quaternary. Slemmons (1966, unpublished McDermitt 1? X 2? sheet) reported that the faults displace late Quaternary alluvium.
Historic earthquake	
Most recent prehistoric deformation	late Quaternary (<130 ka) *Comments:* The timing of most recent event is not well

	constrained, a Quaternary time is suggested based on reconnaissance photogeologic mapping of Slemmons (1966, unpublished McDermitt 1? X 2? sheet). However, Dohrenwend and Moring (1991 #284) do not show any faults at this location.
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)	1999 Kenneth Adams, Piedmont Geosciences, Inc. Thomas L. Sawyer, Piedmont Geosciences, Inc.
References	#284 Dohrenwend, J.C., and Moring, B.C., 1991, Reconnaissance photogeologic map of young faults in the McDermitt 1° by 2° quadrangle, Nevada, Oregon, and Idaho: U.S. Geological Survey Miscellaneous Field Studies Map MF-2177, 1 sheet, scale 1:250,000.