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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 north of Hermanas (Class A) No. 2076

Last Review Date: 2016-01-06

Compiled in cooperation with the New Mexico Bureau of Geology & Mineral Resources

citation for this record: **Machette, M.N., and Jochems, A.P., compilers, 2016, Fault number 2076, unnamed faults north of Hermanas, 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 02:22 PM.**

Synopsis	Little is known about these faults other than they offset Pliocene to Quaternary deposits of the Mimbres Formation. No detailed studies address the faults or their surface expression.
Name comments	These faults are shown by Seager (1995 #975) as a broad zone on the northeast flank of the Cedar Mountains, about 7 km north-northeast of Hermanas, New Mexico.
County(s) and State(s)	LUNA COUNTY, NEW MEXICO
Physiographic	

Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:24,000 scale. *Comments:* Mapped using generalized trace of the fault from 1:125,000-scale map of Seager (1995 #975) combined with accurate placement using photogrammetric methods.
Geologic setting	These faults lie along the southwestern margin of the Hermanas basin (Seager, 1995 #975) and northeast flank of the Cedar Mountains. They are primarily down to the east-northeast, toward the center of the basin.
Length (km)	5 km.
Average strike	N16°W
Sense of movement	Normal
Dip Direction	E *Comments:* Although no dips are shown on the map of Seager (1995 #975), his cross section F showed the faults as having a high-angle dip.
Paleoseismology studies	
Geomorphic expression	No information is available about the geomorphic expression of the faults other than their presence at the surface. No detailed studies address the faults or their surface expression.
Age of faulted surficial deposits	These faults offset deposits of Miocene fanglomerates and the Mimbres Formation (Pliocene to Pleistocene) according to mapping of Seager (1995 #975). The Mimbres is largely correlative with the Palomas and Camp Rice formations to the east.
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* The faults are considered to be Quaternary in age

	because they are present at the surface and because the upper part of the Mimbres is reported to be Quaternary in age.
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr *Comments:* A low slip rate is inferred from the small apparent offset associated with the Quaternary (?) surface of the Mimbres Formation and from rates of more conspicuous Quaternary faults in the region.
Date and Compiler(s)	2016 Michael N. Machette, U.S. Geological Survey, Retired Andrew P. Jochems, New Mexico Bureau of Geology & Mineral Resources
References	#975 Seager, W.R., 1995, Geology of southwest quarter of Las Cruces and northwest El Paso 1° x 2° sheets, New Mexico: New Mexico Bureau of Mines and Mineral Resources Geologic Map 60, 5 sheets, scale 1:125,000.