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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 fault south of Santa Renia Mountains (Class A) No. 1543

Last Review Date: 1999-01-20

citation for this record: **Adams, K., compiler, 1999, Fault number 1543, unnamed fault south of Santa Renia Mountains, 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 02:36 PM.**

Synopsis	This short north-northeast striking intra-plateau fault is west of the Tuscarora Mountains and south of the Santa Renia Mountains along a tributary to Antelope Creek. The fault displaces Quaternary-Tertiary alluvium. The fault is apparently expressed as a west-facing scarp. Bedrock mapping of the fault is the source of data. Trench investigations and detailed studies of scarp morphology have not been completed.
Name comments	Refers to a fault west of the Tuscarora Mountains and south of the Santa Renia Mountains mapped by Coats (1987 #2861).
County(s) and State(s)	ELKO COUNTY, NEVADA
Physiographic	BASIN AND RANGE

province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:100,000 scale. *Comments:* Fault location is based on 1:250,000-scale bedrock map of Coats (1987 #2861).
Geologic setting	This short north-northeast striking intra-plateau fault is west of the Tuscarora Mountains and south of the Santa Renia Mountains along a tributary to Antelope Creek.
Length (km)	1 km.
Average strike	N23°E
Sense of movement	Normal *Comments:* Not studied in detail; normal sense of movement inferred from topography.
Dip Direction	SW
Paleoseismology studies	
Geomorphic expression	The fault is apparently expressed as a short west-facing scarp.
Age of faulted surficial deposits	Quaternary-Tertiary. Fault displaces Quaternary-Tertiary alluvium (Coats, 1987 #2861)
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* Although timing of most recent event is not well constrained, a Quaternary time is suspected based on the geologic mapping of Coats (1987 #2861).
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 and modest height of the topographic lineament of Tertiary bedrock.
Date and Compiler(s)	1999 Kenneth Adams, Piedmont Geosciences, Inc.
References	#2861 Coats, R.R., 1987, Geology of Elko County, Nevada: Nevada Bureau of Mines and Geology Bulletin 101, 112 p., scale 1:250,000.