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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.

Mineral Mountains (northeast side) fault (Class B) No. 2490

Last Review Date: 1999-10-01

Compiled in cooperation with the Utah Geological Survey

citation for this record: **Black, B.D., and Hecker, S., compilers, 1999, Fault number 2490, Mineral Mountains (northeast side) 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 02:54 PM.**

Synopsis	Poorly understood Quaternary(?) fault on the northeast side of the Mineral Mountains. The fault is not well expressed, but its location is suggested by gravity data. Because the fault lacks documented scarps, its Quaternary age is conjectural; thus we categorize the fault as a Class B structure.
Name comments	**Fault ID:** Refers to fault number 9-29 of Hecker (1993 #642).
County(s) and	BEAVER COUNTY, UTAH

State(s)	MILLARD COUNTY, UTAH
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Poor Compiled at 1:250,000 scale. *Comments:* Mapped or discussed by Anderson and Bucknam (1979 #518), Anderson and Miller (1979 #4494), and Steven and others (1990 #4559). Fault traces from 1:250,000-scale mapping of Steven and others (1990 #4559).
Geologic setting	Northwest-trending normal fault on the northeast side of the Mineral Mountains. The Mineral Mountains are in an area of southwestern Utah underlain by extensive extrusive Tertiary volcanic rocks. In the mountains, volcanic rocks have been eroded to expose pre-existing Paleozoic and Mesozoic topography. In other areas, such as the Escalante Desert to the southwest, igneous rocks have been lowered by faulting and covered by lake deposits and alluvium.
Length (km)	14 km.
Average strike	N22°W
Sense of movement	Normal
Dip Direction	NE
Paleoseismology studies	
Geomorphic expression	The fault is mainly buried along the range front, but its location is indicated by gravity data (Steven and others, 1990 #4559). Because the fault lacks documented scarps, its Quaternary age is conjectural; thus we categorize the fault as a Class B structure.
Age of faulted surficial deposits	Quaternary (?).
Historic earthquake	
Most recent prehistoric	undifferentiated Quaternary (<1.6 Ma)

deformation	*Comments:*
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr
Date and Compiler(s)	1999 Bill D. Black, Utah Geological Survey Suzanne Hecker, U.S. Geological Survey
References	#4494 Anderson, L.W., and Miller, D.G., 1979, Quaternary fault map of Utah: Long Beach, California, Fugro, Inc, 35 p. pamphlet, scale 1:500,000. #518 Anderson, R.E., and Bucknam, R.C., 1979, Map of fault scarps in unconsolidated sediments, Richfield 1° x 2° quadrangle, Utah: U.S. Geological Survey Open-File Report 79-1236, 15 p. pamphlet, 1 sheet, scale 1:250,000. #642 Hecker, S., 1993, Quaternary tectonics of Utah with emphasis on earthquake-hazard characterization: Utah Geological Survey Bulletin 127, 157 p., 6 pls., scale 1:500,000. #4559 Steven, T.A., Morris, H.T., and Rowley, P.D., 1990, Geologic map of the Richfield 1° x 2° quadrangle, west-central Utah: U.S. Geological Survey Miscellaneous Investigations Map I-1901, scale 1:250,000.

Questions or comments?