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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.

Pavant Range fault (Class A) No. 2442

Last Review Date: 2004-07-01

Compiled in cooperation with the Utah Geological Survey

citation for this record: **Black, B.D., Hylland, M.D., and Hecker, S., compilers, 2004, Fault number 2442, Pavant Range 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 02:56 PM.**

Synopsis	Poorly understood Holocene (?) fault that bounds the western part of Scipio Valley. Timing based on the morphology of the fault scarps.
Name comments	**Fault ID:** Refers to fault number 8-21 of Hecker (1993 #642).
County(s) and State(s)	MILLARD COUNTY, UTAH
Physiographic province(s)	BASIN AND RANGE

Reliability of location	Good Compiled at 1:62,500 scale. *Comments:* Mapped or discussed by Bucknam and Anderson (1979 #517), Oviatt (1992 #4544), and Hintze and Davis (2002 #6754, 2003 #6741). Fault traces from 1:100,000-scale mapping of Oviatt (1992 #4544).
Geologic setting	North-trending range-front normal fault along the eastern base of the Pavant Range in western Scipio Valley. The fault zone is south of and on trend with the Scipio fault zone [2441], and both structures dip eastward beneath the valley. Scipio Valley is an elongate north-south graben bounded on the east and west by high-angle normal faults. Unconsolidated deposits in the valley are mainly lake deposits and alluvium.
Length (km)	14 km.
Average strike	N3°W
Sense of movement	Normal
Dip Direction	E
Paleoseismology studies	
Geomorphic expression	Scarps on colluvial-veneered bedrock. The scarps appear fresh, although scarps on alluvium at canyon mouths appear more subdued.
Age of faulted surficial deposits	Holocene (?) alluvium and undifferentiated colluvium.
Historic earthquake	
Most recent prehistoric deformation	latest Quaternary (<15 ka) *Comments:* Based on scarp morphology (Bucknam and Anderson; 1979 #517).
Recurrence interval	
Slip rate	

Slip-rate category	Less than 0.2 mm/yr
Date and Compiler(s)	2004 Bill D. Black, Utah Geological Survey Michael D. Hylland, Utah Geological Survey Suzanne Hecker, U.S. Geological Survey
References	#517 Bucknam, R.C., and Anderson, R.E., 1979, Map of fault scarps on unconsolidated sediments, Delta 1° x 2° quadrangle, Utah: U.S. Geological Survey Open-File Report 79-366, 21 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. #6754 Hintze, L.F., and Davis, F.D., 2002, Geologic map of the Tule Valley 30' x 60' quadrangle and parts of the Ely, Fish Springs, and Kern Mountains 30' x 60' quadrangles, northwest Millard County, Utah: Utah Geological Survey Map 186, scale 1:100,000. #6741 Hintze, L.F., and Davis, F.D., 2003, Geology of Millard County, Utah: Utah Geological Survey Bulletin 133, 305 p. #4544 Oviatt, C.G., 1992, Quaternary geology of the Scipio Valley area, Millard and Juab Counties, Utah: Utah Geological Survey Special Studies 79, 16 p., scale 1:100,000.