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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.

Pleasant Valley fault zone, unnamed faults (Class A) No. 2425

Last Review Date: 1999-09-01

Compiled in cooperation with the Utah Geological Survey

citation for this record: **Black, B.D., and Hecker, S., compilers, 1999, Fault number 2425, Pleasant Valley fault zone, unnamed faults, 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 02:55 PM.**

Synopsis	Poorly understood unnamed Quaternary(?) faults along the east and west sides of the Pleasant Valley fault zone (shown in two separate areas on map).
Name comments	**Fault ID:** Refers to fault number 13-11 of Hecker (1993 #642).
County(s) and State(s)	CARBON COUNTY, UTAH UTAH COUNTY, UTAH
Physiographic	

Physiographic province(s)	COLORADO PLATEAUS
Reliability of location	Good Compiled at 1:60,000 scale. *Comments:* Fault traces from mapping of Foley and others (1986 #1165).
Geologic setting	North-trending normal faults bounding the eastern and western sides of the Pleasant Valley fault zone. The faults displace Cretaceous and Tertiary bedrock near the eastern edge of the Wasatch Plateau.
Length (km)	31 km.
Average strike	N6°W
Sense of movement	Normal
Dip Direction	E; W
Paleoseismology studies	
Geomorphic expression	The faults are less prominent than faults bounding the Pleasant Valley and Dry Valley grabens, often having little or no topographic expression and displacements less than 100 m (Foley and others, 1986 #1165). Other faults are associated with bedrock scarps and linear drainages, and have displacement similar to Pleasant and Dry Valley faults. However, Quaternary deposits are non-existent to evaluate the time of last movement on the faults.
Age of faulted surficial deposits	Tertiary.
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* Based on escarpment morphology (Foley and others, 1986 #1165).
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	#1165 Foley, L.L., Martin, R.A., Jr., and Sullivan, J.T., 1986, Seismotectonic study for Joes Valley, Scofield and Huntington North Dams, Emery County and Scofield Projects, Utah: U.S. Bureau of Reclamation Seismotectonic Report 86-7, 132 p., 3 pls. #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.