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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.

Lakeside Mountains (west side) fault (Class B) No. 2384

Last Review Date: 1999-10-01

Compiled in cooperation with the Utah Geological Survey

citation for this record: **Black, B.D., compiler, 1999, Fault number 2384, Lakeside Mountains (west 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 02:59 PM.**

Synopsis	Poorly understood lineament along the western flank of the Lakeside Mountains west of Great Salt Lake. The feature is either a Quaternary fault or a shoreline feature of Lake Bonneville. Owing to the uncertainity of the origin of this feature, we consider it to be a Class B feature.
Name comments	**Fault ID:** Refers to fault number 7-5 of Hecker (1993 #642).
County(s) and	TOOELE COUNTY, UTAH

State(s)	TOOELE COUNTY, UTAH
Physiographic province(s)	BASIN AND RANGE
Reliability of location	Good Compiled at 1:250,000 scale. *Comments:* Mapped or discussed by Young (1955 #5019), Moore and Sorensen (1979 #4512), and Arabasz and others (1989 #4515). Fault trace from mapping of Moore and Sorensen (1979 #4512).
Geologic setting	Northwest trending range-front fault(?) along the western flank of the Lakeside Mountains and southeast side of Puddle Valley in western Utah. Surficial geology of the valley is dominated by deposits of late Pleistocene Lake Bonneville.
Length (km)	4 km.
Average strike	N25°W
Sense of movement	Normal
Dip Direction	SW
Paleoseismology studies	
Geomorphic expression	Lineament is along bedrock-alluvium contact. Arabasz and others (1989 #4515) include the feature as a fault (queried as to activity) in a seismic-source compilation for the region. They referenced T.P. Barnhard as identifying the feature as a lineament that is probably not related to faulting; the lineament parallels topography and thus may be a shoreline feature. Owing to the uncertainity of the origin of this feature, we consider it to be a Class B feature.
Age of faulted surficial deposits	Deposits of late Pleistocene Lake Bonneville (undifferentiated).
Historic earthquake	
Most recent prehistoric	late Quaternary (<130 ka)

deformation	*Comments:* Timing of possible faulting controlled by age of deposits on which the lineament is mapped. These are deposits of late Pleistocene Lake Bonneville (undifferentiated, <130 ka).
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr
Date and Compiler(s)	1999 Bill D. Black, Utah Geological Survey
References	#4515 Arabasz, W.J., Pechmann, J.C., and Brown, E.D., 1989, Evaluation of seismicity relevant to the proposed siting of a Superconducting Supercollider (SSC) in Tooele County, Utah: Utah Geological and Mineral Survey Miscellaneous Publication 89-1, p. 107. #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. #4512 Moore, W.J., and Sorensen, M.L., 1979, Geologic map of the Tooele 1° x 2° quadrangle, Utah: U.S. Geological Survey Miscellaneous Investigations Map I-1132, scale 1:250,000. #5019 Young, J.C., 1955, Geology of the southern Lakeside Mountains, Utah: Utah Geological and Mineral Survey Bulletin 56, p. 116.