

# 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 north of Wells Station Summit (Class A) No. 1383

Last Review Date: 1998-07-11

*citation for this record:* Sawyer, T.L., compiler, 1998, Fault number 1383, unnamed fault north of Wells Station Summit, 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 02:14 PM.

<b>Synopsis</b>	Small group of short, down-to-the-west normal faults bounding west flank of the southern Horse Range, north of Wells Station Summit, and has one fault on the floor of a small intermountain valley. Reconnaissance photogeologic mapping of faults is the source of data. Detailed studies have not been conducted to confirm Quaternary movement on these faults.
<b>Name comments</b>	Refers to faults mapped by Dohrenwend and others (1991 #287). The fault zone consists of several short faults that extend from Wells Station Summit, north along west side of southernmost Horse Range, to about 9 km southeast of Red Mountain.
<b>County(s) and State(s)</b>	NYE COUNTY, NEVADA
<b>Physiographic</b>	

<b>Topographic province(s)</b>	BASIN AND RANGE
<b>Reliability of location</b>	<p>Good Compiled at 1:100,000 scale.</p> <p><i>Comments:</i> Location based on 1:250,000-scale map of Dohrenwend and others (1991 #287); mapped by photogeologic analysis of 1:58,000-nominal-scale color-infrared photography transferred directly to 1:100,000-scale topographic quadrangle maps enlarged to scale of the photographs, then reduced and compiled at 1:250,000.</p>
<b>Geologic setting</b>	Small group of short, down-to-the-west normal faults bounding west flank of the southern Horse Range, north of Wells Station Summit, and has one fault on the floor of a small intermountain valley.
<b>Length (km)</b>	5 km.
<b>Average strike</b>	N4°E
<b>Sense of movement</b>	<p>Normal</p> <p><i>Comments:</i> Not studied in detail; sense of movement inferred from topography.</p>
<b>Dip Direction</b>	W
<b>Paleoseismology studies</b>	
<b>Geomorphic expression</b>	The fault is expressed by abrupt hillslope-piedmont transitions juxtaposing Quaternary deposits against bedrock and by lineaments on Quaternary deposits and (or) erosional surfaces (Dohrenwend and others, 1991 #287).
<b>Age of faulted surficial deposits</b>	Quaternary
<b>Historic earthquake</b>	
<b>Most recent prehistoric deformation</b>	<p>undifferentiated Quaternary (&lt;1.6 Ma)</p> <p><i>Comments:</i> Although timing of most recent event is not well</p>

	constrained, Dohrenwend and others (1991 #287) suggested a Quaternary time based on a reconnaissance photogeologic study.
<b>Recurrence interval</b>	
<b>Slip-rate category</b>	Less than 0.2 mm/yr  <i>Comments:</i> A low slip rate is inferred from general knowledge of slip rates estimated for other faults in the region.
<b>Date and Compiler(s)</b>	1998 Thomas L. Sawyer, Piedmont Geosciences, Inc.
<b>References</b>	#287 Dohrenwend, J.C., Schell, B.A., and Moring, B.C., 1991, Reconnaissance photogeologic map of young faults in the Lund 1° by 2° quadrangle, Nevada and Utah: U.S. Geological Survey Miscellaneous Field Studies Map MF-2180, 1 sheet, scale 1:250,000.

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