

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](#).

Central Reveille fault zone (Class A) No. 1110

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Synopsis	The Central Reveille fault zone is a discontinuous intrabasin structure in its south part passing northward into a broad (approximately 6-km-wide) zone of distributed down-to-the west faults formed mainly on latest Tertiary volcanic rocks west of the main Reveille Range structural block (Schell, 1981 #2843; 1981 #2844). Photogeologic mapping is the main source of data for this fault. Nothing is reported of its displacement, recurrence time, or slip rate. Much of the fault is in Tertiary rock, so its Quaternary history is poorly understood.
Name comments	Name adapted here from an original name of Central Reveille fault given by Schell (1981 #2843) and also used by Piety (1995 #915). The structure is best characterized as a fault zone, especially in its north part where it broadens to about 6 km. These faults were mapped photogeologically by Schell (1981 #2844), Dohrenwend and others (1992 #289; 1996 #2846), and Reheis

	<p>(1992 #1604); they are also shown on a compilation of Quaternary faults by Piety (1995 #915). This fault zone extends from the south end of Reveille Valley, northeastward about 12 km along the valley axis and there, bends north, broadens to form a wide zone of faults, and extends northward along the west flank of the Reveille Range, where it joins with the Western Reveille Range fault zone [1364] and terminates near the north end of the Reveille Range.</p> <p>Fault ID: Referred to as CR by Piety (1995 #915) and as fault #109 by Schell (1981 #2843).</p>
County(s) and State(s)	NYE COUNTY, NEVADA
Physiographic province(s)	BASIN AND RANGE
Reliability of location	<p>Good Compiled at 1:250,000 scale.</p> <p><i>Comments:</i> Location is from Schell (1981 #2844) who compiled the fault zone on 1:250,000-scale topographic maps from photogeologic study of a combination of 1:24,000 color aerial photos and 1:60,000 black and white aerial photos.</p>
Geologic setting	<p>The Central Reveille fault zone is a discontinuous intrabasin structure in its south part where it strikes north-northwest passing northward into a 6-km-wide zone of generally north-striking down-to-the west faults as it enters an area of low hills formed mainly on latest Tertiary volcanic rocks (Schell, 1981 #2843). It spreads into this broad zone directly west of where the range-front fault to the east (the Western Reveille Range fault zone, 1364) dies out northward, possibly suggesting a distribution of strain from the range front toward Reveille Valley. The structural significance of the south part of the fault zone is not reported. The fault zone is not shown on the geologic map of northern Nye County (Cornwall, 1972 #1482).</p>
Length (km)	38 km.
Average strike	N4°E
Sense of movement	<p>Normal</p> <p><i>Comments:</i> The faults are inferred to be normal faults based on</p>

	their strike parallel to other normal faults in the region (Cornwall, 1972 #1482; Ekren and others, 1973 #2939; Schell, 1981 #2843).
Dip Direction	W <i>Comments:</i> Photogeologic mapping by Schell (1981 #2844) and Reheis (1992 #1604) indicates that most of the scarps face west, which may imply that the faults also dip in that direction.
Paleoseismology studies	
Geomorphic expression	Expressed as indistinct scarps on alluvial fan deposits (Schell, 1981).
Age of faulted surficial deposits	Pleistocene. Schell (1981 #2844) shows one scarp (<4 km long) in the medial part of southern Reveille Valley as formed on Pleistocene deposits. Reheis (1992 #1604) shows two short (<2 km) lineaments or scarps in the central part of Reveille Valley. One is portrayed as a lineament or scarp on surfaces of Tertiary deposits and the other as a topographic lineament within bedrock. This mapping, together with the numerous faults in the north part formed on Tertiary rock, leaves most of this fault in doubt as a Quaternary structure.
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) <i>Comments:</i> The probable age of the youngest displacement is estimated as early and middle Pleistocene, defined as 15 ka-1.8 Ma (Schell, 1981 #2843).
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr <i>Comments:</i> No age or displacement data are reported that could constrain the slip rate. The late Quaternary characteristics of this fault (overall geomorphic expression, continuity of scarps, age of faulted deposits, etc.) suggest a low slip rate. Accordingly, the less than 0.2 mm/yr slip-rate category has been assigned to this fault.

Date and Compiler(s)	1999 R. Ernest Anderson, U.S. Geological Survey, Emeritus
References	<p>#1482 Cornwall, H.R., 1972, Geology and mineral deposits of southern Nye County, Nevada: Nevada Bureau of Mines and Geology Bulletin 77, 49 p., 1 pl., scale 1:250,000.</p> <p>#289 Dohrenwend, J.C., Schell, B.A., McKittrick, M.A., and Moring, B.C., 1992, Reconnaissance photogeologic map of young faults in the Goldfield 1° by 2° quadrangle, Nevada and California: U.S. Geological Survey Miscellaneous Field Studies Map MF-2183, 1 sheet, scale 1:250,000.</p> <p>#2846 Dohrenwend, J.C., Schell, B.A., Menges, C.M., Moring, B.C., and McKittrick, M.A., 1996, Reconnaissance photogeologic map of young (Quaternary and late Tertiary) faults in Nevada, <i>in</i> Singer, D.A., ed., Analysis of Nevada's metal-bearing mineral resources: Nevada Bureau of Mines and Geology Open-File Report 96-2, 1 pl., scale 1:1,000,000.</p> <p>#2939 Ekren, E.B., Rogers, C.L., and Dixon, G.L., 1973, Geologic and Bouguer gravity map of the Reveille quadrangle, Nye County, Nevada: U.S. Geological Survey Miscellaneous Investigations Map I-806, scale 1:48,000.</p> <p>#915 Piety, L.A., 1995, Compilation of known and suspected Quaternary faults within 100 km of Yucca Mountain, Nevada and California: U.S. Geological Survey Open-File Report 94-112, 404 p., 2 pls., scale 1:250,000.</p> <p>#1604 Reheis, M.C., 1992, Aerial photographic interpretation of lineaments and faults in late Cenozoic deposits in the Cactus Flat and Pahute Mesa 1:100,000 quadrangles and the western parts of the Timpahute Range, Pahrnagat Range, Indian Springs, and Las Vegas 1:100,000 quadrangles, Nevada: U.S. Geological Survey Open-File Report 92-193, 14 p., 3 pls., scale 1:100,000.</p> <p>#2843 Schell, B.A., 1981, Faults and lineaments in the MX Siting Region, Nevada and Utah, Volume I: Technical report to U.S. Department of [Defense] the Air Force, Norton Air Force Base, California, under Contract FO4704-80-C-0006, November 6, 1981, 77 p.</p> <p>#2844 Schell, B.A., 1981, Faults and lineaments in the MX Siting</p>

Region, Nevada and Utah, Volume II: Technical report to U.S. Department of [Defense] the Air Force, Norton Air Force Base, California, under Contract FO4704-80-C-0006, November 6, 1981, 29 p., 11 pls., scale 1:250,000.

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