## **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 <u>interactive fault map</u>.

## unnamed faults between Jakes Valley and White River Valley (Class A) No. 1226

Last Review Date: 2000-10-25

*citation for this record:* Redsteer, M.H., and Sawyer, T.L., compilers, 2000, Fault number 1226, unnamed faults between Jakes Valley and White River Valley, 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 02:16 PM.

| Synopsis | These fault include north-south and east-west trending             |
|----------|--|
|          | escarpment and lineations that are preserved in low foothills      |
|          | between Jakes Valley and White River Valley. The fault juxtapose   |
|          | Pennsylvanian and Permian limestones against Quaternary            |
|          | sediment. The faults could be related to the Preston fault [1389], |
|          | which is a distributed zone range-front and piedmont normal        |
|          | faults that bound west margin of northern White River Valley to    |
|          | the south. The east-west faults form the southern termination of   |
|          | some of the north-south trending lineations in this group.         |
|          | Reconnaissance photogeologic mapping is the source of data.        |
|          | Trench investigations and detailed studies of scarp morphology     |
|          | have not been completed.   |
|          |  |

|                              | <ul> <li>Refers to an arbitrary group of faults and lineaments located in the low hills that separate southern Jakes Valley from northern White River Valley as mapped by Dohrenwend and others (1991 #287; 1992 #2480). One of the longest of the faults in this group was referred to as the Jakes Wash fault by Schell (1981 #2843). The faults extend from near Midway Well on the west to near Preston Reservoir on the east. They could be related to the Preston fault [1389], which is a distributed zone range-front and piedmont normal faults that bound western margin of northern White River Valley to the south.</li> <li>Fault ID: Includes fault 55 of Schell (1981 #2843).</li> </ul> |
|------------------------------|---|
| County(s) and<br>State(s)    | WHITE PINE COUNTY, NEVADA   |
| Physiographic<br>province(s) | BASIN AND RANGE   |
| J J                          | Good<br>Compiled at 1:100,000 scale.  |
|                              | <i>Comments:</i> Location based on 1:250,000-scale map of<br>Dohrenwend and others (1991 #287; 1992 #2480). Mapping<br>based on photogeologic analysis of 1:24,000-scale color aerial<br>photography supplemented with 1:60,000-scale black-and-white<br>aerial photography, transferred to 1:62,500-scale topographic<br>maps and photographically reduced and transferred to 1:250,000-<br>scale topographic maps, with subsequent mapping by<br>photogeologic analysis of 1:58,000-nominal-scale color-infrared<br>photography transferred directly to 1:100,000-scale topographic<br>quadrangle maps enlarged to scale of the photographs.  |
| Geologic setting             | This unnamed group of faults are in low foothills between the<br>White Pine Range to the west, and the Egan Range to the<br>northeast, where the two mountain ranges broaden and join, and<br>are not separated by a valley.  |
| Length (km)                  | 20 km.  |
| Average strike               | N34°E   |
| Sense of<br>movement         | Normal  |
| Dip Direction                | E; W; S   |

| Paleoseismology<br>studies                |  |
|---|--|
| Geomorphic<br>expression                  | These faults juxtapose bedrock against Quaternary sediment (Dohrenwend and others, 1991 #287; 1992 #2480).   |
| Age of faulted<br>surficial<br>deposits   | Paleozoic and Quaternary. Dohrenwend and others (1991 #287;<br>1992 #2480) show most of the faults included in this group as<br>juxtaposing bedrock against Quaternary alluvium, although only<br>one fault scarp on surficial materials has been mapped.  |
| Historic<br>earthquake                    |  |
| Most recent<br>prehistoric<br>deformation | undifferentiated Quaternary (<1.6 Ma)<br><i>Comments:</i> Although timing of most recent prehistorical event is<br>not well constrained, Dohrenwend and others (1991 #287; 1992<br>#2480) suggested a Quaternary time based on a reconnaissance<br>photogeologic study.  |
| Recurrence<br>interval                    |  |
| Slip-rate<br>category                     | Less than 0.2 mm/yr<br><i>Comments:</i> Low slip-rate category is assigned on the basis of<br>poor geomorphic preservation, general lack of mapped fault<br>scarps, and relative inactivity of similar distributed faults in the<br>Basin and Range province.  |
| Date and<br>Compiler(s)                   | 2000<br>Margaret Hisa Redsteer, U.S. Geological Survey<br>Thomas L. Sawyer, Piedmont Geosciences, Inc.   |
| References                                | <ul> <li>#287 Dohrenwend, J.C., Schell, B.A., and Moring, B.C., 1991,<br/>Reconnaissance photogeologic map of young faults in the Lund<br/>1° by 2° quadrangle, Nevada and Utah: U.S. Geological Survey<br/>Miscellaneous Field Studies Map MF-2180, 1 sheet, scale<br/>1:250,000.</li> <li>#2480 Dohrenwend, J.C., Schell, B.A., and Moring, B.C., 1992,</li> </ul> |
|   | Reconnaissance photogeologic map of young faults in the Ely 1°<br>by 2° quadrangle, Nevada and Utah: U.S. Geological Survey<br>Miscellaneous Field Studies Map MF-2181, 1 sheet, scale<br>1:250,000.   |

| #2843 Schell, B.A., 1981, Faults and lineaments in the MX      |
|--|
| Sitting 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.   |

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