## **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 fault zone along Bluewing Mountains (Class A) No. 1620

Last Review Date: 1999-03-09

*citation for this record:* Sawyer, T.L., and Adams, K., compilers, 1999, Fault number 1620, unnamed fault zone along Bluewing Mountains, 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 02:26 PM.

| Synopsis | This short, gently arcuate zone includes range-bounding and          |
|----------|--|
|          | piedmont faults at and near (respectively) the northwestern front    |
|          | of the Bluewing Mountains that extend as intrabasin faults both      |
|          | northeast and southwest from the ends of the range into Kumiva       |
|          | Valley. The lowest part of valley is adjacent to the range-bounding  |
|          | faults, suggesting that the valley floor may have been tilted to the |
|          | southeast as a result of young movement on the fault zone. Range     |
|          | front faults juxtapose Quaternary alluvium against bedrock and       |
|          | are expressed as the abrupt front of the Bluewing Mountains.         |
|          | Northwest-facing scarps on Quaternary alluvium appear to locally     |
|          | mark piedmont faults in the central part of the zone.                |
|          | Reconnaissance photogeologic mapping and regional geologic           |
|          | mapping are the sources of data. Trench investigations and           |
|          | detailed studies of scarp morphology have not been conducted.        |
|          |  |

| Name<br>comments  | Refers to faults mapped by Slemmons (1974, unpublished<br>Lovelock 1? X 2? sheet) and Johnson (1977 #2569) in Kumiva   |
|---|--|
|   | Valley and along the northwest side of the Bluewing Mountains.   |
| County(s) and<br>State(s)   | PERSHING COUNTY, NEVADA  |
| Physiographic<br>province(s)  | BASIN AND RANGE  |
| Reliability of<br>location  | Good<br>Compiled at 1:100,000 scale.   |
|   | <i>Comments:</i> Fault locations are primarily based on 1:250,000-scale geologic map of Johnson (1977 #2569) and were checked against 1:250,000-scale photogeologic map of Slemmons (1974, unpublished Lovelock 1? X 2? sheet).  |
| Geologic setting  | These northeast-striking, down to the northwest faults bound the<br>entire northwestern side of the Bluewing Mountains on the east<br>side of Kumiva Valley (Johnson, 1977 #2569). The lowest part of<br>Kumiva Valley lies adjacent to these range-bounding faults.   |
| Length (km)   | 16 km.   |
|   |  |
| Average strike  | N48°E  |
| Average strike Sense of   | N48°E<br>Normal  |
| Average strike<br>Sense of<br>movement  | N48°E<br>Normal  |
| Average strike<br>Sense of<br>movement  | N48°E<br>Normal<br><i>Comments:</i> Not studied in detail; sense of movement is inferred<br>from topography.   |
| Average strike         Sense of         movement         Dip Direction                            | N48°E         Normal <i>Comments:</i> Not studied in detail; sense of movement is inferred from topography.         NW   |
| Average strikeSense of<br>movementDip DirectionPaleoseismology<br>studies                         | N48°E         Normal <i>Comments:</i> Not studied in detail; sense of movement is inferred from topography.         NW   |
| Average strikeSense of<br>movementDip DirectionPaleoseismology<br>studiesGeomorphic<br>expression | N48°E         Normal         Comments: Not studied in detail; sense of movement is inferred from topography.         NW         This short, gently arcuate zone has range-bounding and piedmont faults at and near, respectively, the northwest front of the Bluewing Mountains that extend as intrabasin faults both northeast and southwest from the ends of the range into Kumiva Valley; the lowest part of valley is adjacent to the range-bounding faults, suggesting that the valley floor may have been tilted to the southeast as a result of young movement on the fault zone (Johnson, 1977 #2569). |

| Age of faulted<br>surficial<br>deposits   | Johnson (1977 #2569) reported an undifferentiated Quaternary age for the faulted alluvium.   |
|---|--|
| Historic<br>earthquake                    |  |
| Most recent<br>prehistoric<br>deformation | undifferentiated Quaternary (<1.6 Ma)<br><i>Comments:</i> Although timing of most recent event is not well<br>constrained, a Quaternary time is suggested based on mapping of<br>Johnson (1977 #2569). |
| Recurrence<br>interval                    |  |
| Slip-rate<br>category                     | Less than 0.2 mm/yr<br><i>Comments:</i> A low slip rate is inferred from general knowledge of<br>slip rates estimated for other faults in the region.  |
| Date and<br>Compiler(s)                   | 1999<br>Thomas L. Sawyer, Piedmont Geosciences, Inc.<br>Kenneth Adams, Piedmont Geosciences, Inc.  |
| References                                | #2569 Johnson, M.G., 1977, Geology and mineral deposits of<br>Pershing County, Nevada: Nevada Bureau of Mines and Geology<br>Bulletin 89, 115 p., scale 1:250,000.                                     |

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