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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.

unnamed fault near Escalante (Class A) No. 2262

Last Review Date: 1997-06-11

Compiled in cooperation with the Colorado Geological Survey

citation for this record: **Widmann, B.L., compiler, 1997, Fault number 2262, unnamed fault near Escalante, 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 03:01 PM.**

Synopsis	This fault is on the northeast margin of the Uncompahgre Uplift, west of Delta. Although the fault is exposed in roadcut west of Delta, there is no reported surface expression of the fault (Kirkham and Rogers, 1981 #792). The roadcut exposure reveals about 1.2 m of offset at the base of pre-Bull Lake gravel.
Name comments	This is a generally east-west oriented fault on the northeast margin of the Uncompahgre Uplift northwest of the town of Huff. The fault is exposed near Escalante in a roadcut on Highway 50 about 14 km west of Delta, but there does not appear to have any

	surface expression. The fault was first described by Klein and Osterwald (1974 #2713) and mapped as a Quaternary fault by Kirkham and Rogers (1981 #792). **Fault ID:** Fault 74 in Kirkham and Rogers (1981 #792) and fault number Q12 of Widman and others (1998 #3441).
County(s) and State(s)	DELTA COUNTY, COLORADO
Physiographic province(s)	COLORADO PLATEAUS
Reliability of location	Poor Compiled at 1:250,000 scale. *Comments:* The fault was shown only at a scale of 1:500,000 by Kirkham and Rogers (1981 #792). It was transferred to a 1:250,000 scale base map, but the fault location is poorly controlled.
Geologic setting	This fault lies on the northeast margin of the Uncompahgre Uplift west of Delta. The Uncompahgre Uplift is a northwest-trending, east-tilted fault block. This is a high-angle normal fault that is down to the south. The south-dipping fault plane contains clay gouge as much as 1 cm thick, the hanging wall is marked by a 1.5-cm-thick brecciated zone, and gravel clasts are rotated in accordance with fault movement (Kirkham and Rogers, 1981 #792). The fault lies in a tectonically weakened area above the ancestral Garmesa and Douglass Creek fault zones (Stone, 1977 #2749).
Length (km)	2 km.
Average strike	N85°W
Sense of movement	Normal *Comments:* Kirkham and Rogers (1981 #792) listed this fault as normal.
Dip	49° SW *Comments:* Kirkham and Rogers (1981 #792) reported a dip of 49? SW in the roadcut on Highway 50, but main ip direction of fault is to S.

Paleoseismology studies	
Geomorphic expression	Although the fault is exposed in roadcut on Highway 50 west of Delta, there is no reported surface expression of the fault.
Age of faulted surficial deposits	Pre-Bull Lake gravel is offset by about 1.2 m across the fault (Kirkham and Rogers, 1981 #792).
Historic earthquake	
Most recent prehistoric deformation	undifferentiated Quaternary (<1.6 Ma) *Comments:* Pre-Bull Lake gravel is offset by the fault (Kirkham and Rogers, 1981 #792).
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr *Comments:* Widmann and others (1998 #3441) placed this structure within the <0.2 mm/yr slip-rate category based on 1.2 m of offset in pre-Bull Lake Quaternary deposits (Kirkham and Rogers, 1981 #792).
Date and Compiler(s)	1997 Beth L. Widmann, Colorado Geological Survey
References	#792 Kirkham, R.M., and Rogers, W.P., 1981, Earthquake potential in Colorado: Colorado Geological Survey Bulletin 43, 171 p., 3 pls. #2713 Klein, I., and Osterwald, F., 1974, Field trip road log for excursion II-rock mechanics, *in* International Society of Rock Mechanics, 3rd International Congress. #2749 Stone, D.S., 1977, Tectonic history of the Uncompahgre Uplift, *in* Veal, H.K., ed., Exploration Frontiers of the central and southern Rockies: Rocky Mountain Association of Geologists, 1977 Field Conference Guidebook, p. 23-30. #3441 Widmann, B.L., Kirkham, R.M., and Rogers, W.P., 1998, Preliminary Quaternary fault and fold map and database of

	Colorado: Colorado Geological Survey Open-File Report 98-8, 331 p., 1 pl., scale 1:500,000.

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