

# 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 faults near Jaussaud Creek (Class A) No. 708

Last Review Date: 2002-12-10

*citation for this record:* Personius, S.F., compiler, 2002, Fault number 708, unnamed faults near Jaussaud Creek, 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 02:03 PM.

<b>Synopsis</b>	The unnamed faults near Jaussaud Creek are north-northeast-trending, down-to-the east (?) normal faults, primarily mapped in Miocene Columbia River Basalt Group rocks in the Blue Mountains of northeastern Oregon. No evidence of fault scarps Quaternary deposits has been described, but airphoto and DEM analysis has been to infer middle to late Quaternary displacement.
<b>Name comments</b>	These two unnamed faults are located near Jaussaud Creek in the Blue Mountains northeastern Oregon.
<b>County(s) and State(s)</b>	WALLOWA COUNTY, OREGON
<b>Physiographic province(s)</b>	COLUMBIA PLATEAU
<b>Reliability of</b>	Good

<b>location</b>	<p>Compiled at 1:100,000 scale.</p> <p><i>Comments:</i> Location of fault from ORActiveFaults (<a href="http://www.oregongeology.org/arcgis/rest/services/Public/ORActiveFaults/MapServer">http://www.oregongeology.org/arcgis/rest/services/Public/ORActiveFaults/MapServer</a> downloaded 06/02/2016) attributed to Swanson and Wright (1983 #5037).</p>
<b>Geologic setting</b>	<p>Faults near Jaussaud Creek are mapped mostly in Miocene basalts of the Columbia River Basalt Group (Walker, 1979 #3576; Swanson and Wright, 1983 #5037; Walker and MacLeod, 1991 #3646). The fault traces mapped by Pezzopane (1993 #3544) and Weldon and others (2002 #5648) are similar to but do not precisely coincide with several mapped faults in this area; Walker (1979 #3576), Swanson and Wright (1983 #5037), and Walker (1991 #3646) map north-trending faults with both east and west dips in this area.</p>
<b>Length (km)</b>	6 km.
<b>Average strike</b>	N18°E
<b>Sense of movement</b>	<p>Normal</p> <p><i>Comments:</i> Faults near Jaussaud Creek are mapped as high-angle or normal faults (Walker, 1979 #3576; Swanson and Wright, 1983 #5037; Walker and MacLeod, 1991 #3646; Pezzopane, 1993 #3544).</p>
<b>Dip Direction</b>	<p>E</p> <p><i>Comments:</i> Pezzopane (1993 #3544) maps these faults down-east, but similar faults mapped in the same general location have both east and west dips (Walker, 1979 #3576; Swanson and Wright, 1983 #5037; Walker and MacLeod, 1991 #3646).</p>
<b>Paleoseismology studies</b>	
<b>Geomorphic expression</b>	<p>The geomorphic expression of these faults has not been described, and the fault traces as mapped by Pezzopane (1993 #3544) and Weldon and others (2002 #5648) are marked by significant escarpments or linear features on 1:24,000-scale topographic maps.</p>
<b>Age of faulted surficial deposits</b>	<p>Faults near Jaussaud Creek are mapped mostly in Miocene basalts of the Columbia River Basalt Group, and are not shown offsetting Quaternary deposits on existing geologic maps (Walker, 1979 #3576; Swanson and Wright, 1983 #5037; Walker and MacLeod, 1991 #3646).</p>
<b>Historic earthquake</b>	

<b>Most recent prehistoric deformation</b>	<p>latest Quaternary (&lt;15 ka)</p> <p><i>Comments:</i> No existing geologic maps show these faults cutting Quaternary deposits (Walker, 1979 #3576; Swanson and Wright, 1983 #5037; Walker and MacLeod, 1991 #3646), but Pezzopane (1993 #3544) used air photo reconnaissance and Weldon and others (2002 #5648) used reconnaissance of air photos and 1:100,000-scale DEM to infer middle to late Quaternary (&lt;700–780 ka) displacement. Age category assigned from ORActiveFaults (<a href="http://www.oregongeology.org/arcgis/rest/services/Public/ORActiveFaults/MapServer">http://www.oregongeology.org/arcgis/rest/services/Public/ORActiveFaults/MapServer</a>, downloaded 06/02/2016).</p>
<b>Recurrence interval</b>	
<b>Slip-rate category</b>	<p>Less than 0.2 mm/yr</p> <p><i>Comments:</i> No slip data have been published on these faults. Their lack of significant geomorphic expression in Miocene bedrock suggests low rates of long-term slip.</p>
<b>Date and Compiler(s)</b>	<p>2002 Stephen F. Personius, U.S. Geological Survey</p>
<b>References</b>	<p>#3544 Pezzopane, S.K., 1993, Active faults and earthquake ground motions in Oregon, Eugene, Oregon, University of Oregon, unpublished Ph.D. dissertation, 208 p.</p> <p>#5037 Swanson, D.A., and Wright, T.L., 1983, Geologic map of the Wenaha Tule Wilderness, Washington and Oregon: U.S. Geological Survey Miscellaneous Field Studies Map MF-1536, 1 sheet, scale 1:48,000.</p> <p>#3576 Walker, G.W., 1979, Reconnaissance geologic map of the Oregon part of the Grangeville quadrangle, Baker, Union, Umatilla, and Wallowa Counties, Oregon: Geological Survey Miscellaneous Investigations Map I-1116, 1 sheet, scale 1:250,000.</p> <p>#3646 Walker, G.W., and MacLeod, N.S., 1991, Geologic map of Oregon: U.S. Geological Survey, Special Geologic Map, 2 sheets, scale 1:500,000.</p> <p>#5648 Weldon, R.J., Fletcher, D.K., Weldon, E.M., Scharer, K.M., and McCrory, 2002, An update of Quaternary faults of central and eastern Oregon: U.S. Geological Survey Open-File Report 02-301 (CD-ROM), 26 sheets, scale 1:100,000.</p>

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