Hydrovolcanism and the Origin of the Catahoula Formation, Gulf of Mexico Coastal Plain

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ABSTRACT

Bailey's long forgotten 1924 hypothesis that the Catahoula Formation is a consequence of local volcanism was confirmed, in large measure, by the discovery of the remains of tuff rings in Live Oak County and adjacent regions. Other evidence of past endogenic forces was further confirmed in 1977 with the discovery of what was interpreted to be a massive igneous intrusion subjacent to Catahoula volcaniclastics in Live Oak and McMullen counties. However, be that as it may, a persisting belief is that all volcaniclastics, of whatever variety, abundance, magnitude, and geological age, must have their origin in the Trans-Pecos and/or the Sierra Madre Occidental of Mexico. Thus a contrast of a local versus a distant origin of the Catahoula is presented emphasizing the profound dichotomy of the two views. Consideration of parsimony strongly favors endogenic origins of all volcaniclastics of the Catahoula in contrast with the near total absence of empirical evidence favoring a distant province.

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