STRATAL GEOMETRY AND FACIES RELATIONSHIPS OF THE MIDDLE EOCENE UPPER CLAIBORNE GROUP IN THE SUBSURFACE OF SOUTHEASTERN MISSISSIPPI AND SOUTHWESTERN ALABAMA

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Background

Comprehensive temporal and paleoenvironmental interpretations of fossiliferous Cenozoic sediments have proven to be a historically challenging endeavor in the US Gulf Coastal Plain. Limited outcrop access coupled with complex facies relationships along depostional strike have lead to varied interpretations of the Middle Eocene upper Claiborne Group in MS and AL. A subsurface study is employed here to help better understand the lateral extent and geometry of strata in this setting. This in turn will help inform a comprehensive study of their paleocommunities.

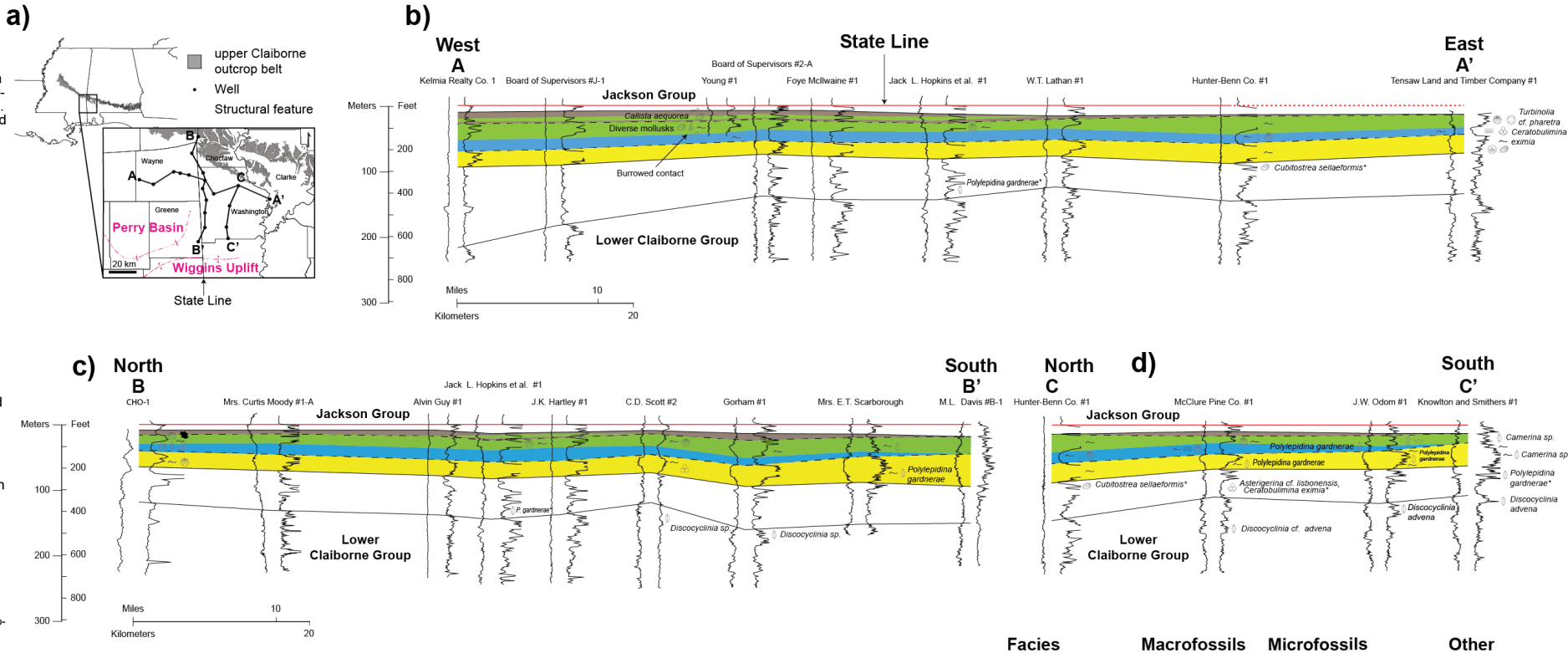

Figure 1. a) Map detailing the study area, locations of structural features are approximate after Thompson (2009). b) Depositional strike section A - A', geophysical logs shown are spontaneous potential (left) and resistivity (right). c) Depositional dip section B - B'. d) Depositional dip section C - C'. **Note:** the larger benthic foram Polylepidina gardnerae is an index fossil for the Bartonian of the Gulf Coastal Plain.

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