BACK TO BASICS OF SEQUENCE STRATIGRAPHY:

EARLY MIOCENE AND MID-CRETACEOUS EXAMPLES FROM THE NEW JERSEY PALEOSHELF

KENNETH G. MILLER, CHRISTOPHER J. LOMBARDI, JAMES V. BROWNING,

WILLIAM J. SCHMELZ, GABRIEL GALLEGOS, GREGORY S. MOUNTAIN, KIMBERLY E. BALDWIN

*Department of Earth and Planetary Sciences and Institute of Earth, Oceans, and Atmospheric Sciences, Rutgers University, Piscataway, NJ 08854, USA*

Supplementary Online Fig. 1. Enlargement of Fig. 6. Panel A, Portion of uninterpreted MCS Line 529 focused on Myr sequence m5.4; Panel B, interpreted version with sequence boundaries in red, TS in blue, MFS in green, and internal reflections in yellow. Panel C. Systems tracts with LST in brown, TST in green, and HST in pink

Supplementary Online Fig. 2. Well-log transect of from the GSD to the OCS showing biostratigraphic data. See Fig. 9 and 11 for caption. Logs were hung on the top of the Albian (red line). Wells are general oriented updip (left) to downdip (right), with the Gulf 718-1 projected using structural contours; the relative position of the four outer shelf wells (far right) is arbitrary. Blue shaded zone is the correlation of the Sable Shale of Libby-French (1984) originally thought to separate the upper Logan and lower Logan Canyon sandstones. Biostratigraphic picks are shown in colors: yellow = upper to middle Cenomanian, purple = lower Cenomanian, red = top Albian, green = top Aptian, and orange-tan = Barremian; open circles are biostratigraphic picks that disagree with other correlations. Numbers are keyed to biostratigraphic markers in Supplementary Online Tables 1 and 2.

Supplementary Online 3. Shaded gamma log, permeability data from side wall cores (SWC; magenta point) and cores (blue points) (data after Scholle, 1980), and well-log interpretation (this study) for COST B-2 well.

Supplementary Online Material Table Captions

SOM Table 1. Biostratigraphic taxa used to help correlate the coreholes illustrated in Figs. 12, 13, SOM Fig. 2, and SOM Table 2. Species numbers are used in small circles in Figs. 12, 13 and SOM Fig. 2 to identify the taxon used to provide age estimates. Taxon name is generally the name found in the original biostratigraphy reports, and no attempt has been made here to revise the species or genus assignments. Ranges given are from the sources listed in the right column.

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SOM Table 2. Species and depths in boreholes. Ages or stages are listed at left. Species listed are taken from paleontology reports for the boreholes as listed at the top of each column. Numbers to the left of species names correspond to the numbers in SOM Table 1. Numbers to the right of species names are the depths in the boreholes, in feet below Kelly bushing, where the taxon was found. Numbers at the right of columns are the depths in the boreholes, in feet below Kelly bushing, listed in the paleontology reports for the tops of the ages listed. Numbers in red are the depths to the sequence boundary at the top of the Logan Canyon 1 sequence. Numbers in green are the depths to the sequence boundary at the base of Logan Canyon 1 sequence. Numbers in blue are the depths to the sequence boundary at the base of Logan Canyon 2 sequence. Numbers in purple are the depths to the sequence boundary at the base of Logan Canyon 3 sequence.

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