Figure F1. Site locations and bathymetric map of the Guaymas Basin from Teske et al. (2021) showing steep fault bounded north/south margins of the basin and active graben produced by seafloor spreading. Inset shows the tectonic setting of the Guaymas Basin, Gulf of California, as well as the map area (yellow box). Leg 64 and Expedition 385 site locations are indicated by yellow and green circles, respectively. Relevant seismic lines (brown, pink, and black) are shown crossing Expedition 385 drill sites.

Figure F2. Ternary clastic (sand/silt/clay) and ribbon biogenic classification schemes used to create Expedition 385 columns. Hemipelagic sediment classification schemes from Leg 64 (Curray, Moore, et al., 1982) and Expedition 385 (Teske et al., 2021) are shown. Clastic classification scheme from Expedition 385 includes a modification reflecting the Leg 64 scheme in the center. Color scheme shows how Leg 64 lithologies were simplified and grouped.

Figure F3. Lithostratigraphic columns created during Expedition 385 from core data recovered mainly in each Hole A at Sites U1545–U1552 (Teske et al., 2021). See site locations in Figure F1. A single stratigraphic unit was determined at each site (Unit I). The columns were meant to emphasize differences between lithostratigraphic subunits (A, B, C, D; interpreted as diagenetic overprinting) and highlight the presence of thicker gravity-flow units and mafic sills. Modified from Teske et al. (2021).

Figure F4. Lithostratigraphic columns produced from core data recovered at five Leg 64 sites. From Curray, Moore, et al. (1982).

Figure F5. Schematic showing the simplification of lithologies into seven sedimentary and three other (igneous/metamorphic) lithologic data sets and their analysis to produce detailed stratigraphic columns for Expedition 385 sites. Stage 1 shows how various lithologies were grouped under parent lithologies to be plotted on the new columns. Stage 2 shows the use of the DESClogik database to classify lithologies and their thickness intervals for each section of core. Stage 3 shows how the lithologies were summed on a core by core basis. Stage 4 shows how the data calculated for each core was plotted based on recovery to produce new, detailed stratigraphic columns.

Figure F6. Schematic showing how lithologic data sets were analyzed to produce detailed stratigraphic columns for Leg 64 sites. Example shows how DSDP Site 480 Core 6 was dissected into its respective main lithologies and how total thickness and percent of lithology based on recovered core were plotted on the unified stratigraphic column, similar to the method used for Expedition 385 column construction.

Figure F7. Detailed stratigraphic columns generated in this study for Expedition 385 sites.

Figure F8. Expedition 385 shipboard generated column (left), gamma ray log (middle), and stratigraphic column generated from this study (right) for Hole U1545A.

Figure F9. Expedition 385 shipboard generated column (left), gamma ray log (middle), and stratigraphic column generated from this study (right) for Hole U1546A.

Figure F10. Expedition 385 shipboard generated column (left), gamma ray log (middle), and stratigraphic column generated from this study (right) for Hole U1547A.

Figure F11. Expedition 385 shipboard generated column (left), gamma ray log (middle), and stratigraphic column generated from this study (right) for Hole U1548A.

Figure F12. Expedition 385 shipboard generated column (left), gamma ray log (middle), and stratigraphic column generated from this study (right) for Hole U1549A.

Figure F13. Expedition 385 shipboard generated column (left), gamma ray log (middle), and stratigraphic column generated from this study (right) for Hole U1550A.

Figure F14. Expedition 385 shipboard generated column (left), gamma ray log (middle), and stratigraphic column generated from this study (right) for Hole U1551A.

Figure F15. Expedition 385 shipboard generated column (left), gamma ray log (middle), and stratigraphic column generated from this study (right) for Hole U1552A.

Figure F16. Detailed stratigraphic columns generated in this study for Leg 64 sites.

Figure F17. Leg 64 shipboard generated column (left), gamma ray log (middle), and stratigraphic column generated from this study (right) for Site 477. See Figures F7 and F16 for legends.

Figure F18. Leg 64 shipboard generated column (left), gamma ray log (middle), and stratigraphic column generated from this study (right) for Site 478. See Figures F7 and F16 for legends.

Figure F19. Leg 64 shipboard generated column (left), gamma ray log (middle), and stratigraphic column generated from this study (right) for Site 481. See Figures F7 and F16 for legends.

Figure F20. Leg 64 shipboard generated column (left), gamma ray log (middle), and stratigraphic column generated from this study (right) for Site 479. See Figures F7 and F16 for legends.

Figure F21. Leg 64 shipboard generated column (left) and stratigraphic column generated from this study (right) for Site 480. See Figures F7 and F16 for legends.