Figure F1. A. Site U1444 location (after Emmel and Curray, 1984). (Continued on next page.)

Figure F1 (continued). Site U1444 (B) seismic line and (C) line-drawing interpretation (after Schwenk and Spieß, 2009). In the line drawing, gray indicates buried channel-levee systems and bold black lines indicate seismic unconformities (Uc and Ud).

Figure F2. Lithostratigraphic summary, Site U1444. All unit divisions are plotted relative to Hole U1444A. Details of each core are available in the visual core description logs.

Figure F3. Lithostratigraphic summary with selected physical property and geochemical data from Holes U1444A and U1444B plotted against depth. MS = magnetic susceptibility, NGR = natural gamma radiation.

Figure F4. Smear slide data, Holes U1444A and U1444B.

Figure F5. Turbidite thickness and maximum grain size class, Site U1444.

Figure F6. Line-scan images of major lithologies and representative turbidite compositions, Site U1444. A. Silty sand, Unit I. B. Sandy silt, Unit I. C. Silty clay, Unit II. D. Nannofossil-rich clay with foraminifers, Unit II. E. Organic-rich turbidite, Unit I. F. Mica-rich turbidite, Unit II. G. Glauconite-rich turbidite, Unit II. H. Quartz-rich turbidite, Unit IV.

Figure F7. Photomicrographs of main sedimentary components, Site U1444. PPL = plane-polarized light, XPL = cross-polarized light. A, B. Quartz, feldspar, and mica-rich silty sand, Unit I. C, D. Silty clay with quartz and woody fragments, Unit I. E. Nannofossil-rich clay with silt and foraminifers, Unit II. F. Silty clay with pyrite, Unit II. G, H. Thin black layer within Unit I, silty clay rich in woody fragments. I. Thin greenish black layer in Unit IV, containing clayey silt with pyrite framboids, plant debris, quartz, and mica. J. Vitric volcanic ash layer, Unit II.

Figure F8. XRD diffractograms of bulk powders, Hole U1444A. A. Dark-colored turbidite, Unit II. B. Hemipelagic clay, Unit II. C. Dark-colored turbidite, Unit II. D. Light-colored turbidite, Unit II.

Figure F9. XRD diffractograms of oriented clay aggregates treated with ethylene glycol, Hole U1444A. A. Unit II. B. Unit III. C. Unit IV.

Figure F10. Summary of biostratigraphic events identified in Hole U1444A. T = top (last occurrence), B = bottom (first occurrence). For biozone schemes used, see **Biostratigraphy** in the Expedition 353 methods chapter (Clemens et al., 2016). Note that depth is CSF-A, not CCSF-A.

Figure F11. Biostratigraphy and paleomagnetic reversal-based age-depth plot, Hole U1444A. Mean sedimentation rates based on linear regression are shown for intervals with higher data resolution. Vertical error bars show the depth range of the identified biostratigraphic events. Horizontal error bars show the possible age ranges for the oldest samples studied for nannofossils and planktonic foraminifers. Shading indicates intervals with low calcareous microfossil abundances. Orange dashed lines mark the approximate depths of two large changes in the seismic character of the sedimentary package (termed seismic unconformities but not necessarily implying the presence of a hiatus), which were previously identified by Schwenk and Spieß (2009), called Unconformities Uc and Ud following these authors. Note that depth is CSF-A, not CCSF-A.

Figure F12. Headspace methane profile, Hole U1444A.

Figure F13. Calcium carbonate, TOC (red), and TN (blue) contents, Hole U1444A.

Figure F14. Interstitial water alkalinity, sulfate, ammonium, bromide, phosphate, silicate, Fe, Ba, B, Li, Mn, K, Mg, Ca, and Sr, Site U1444. Error bars represent two standard deviations of repeated measurements of IAPSO seawater or a pore water sample (see **Geochemistry** and Tables **T5** and **T6**, all in the Expedition 353 methods chapter [Clemens et al., 2016]).

Figure F15. Downhole variations in declination, inclination, and intensity after 10 mT AF demagnetization, Hole U1444A. Declinations between 7 and 112 m CSF-A were corrected using the Icefield MI-5 tool orientation data.

Figure F16. Downhole variations in declination, inclination, and intensity after 10 mT AF demagnetization, Hole U1444B. None of the cores were oriented.

Figure F17. Zoomed-in true declination and inclination data after 10 mT AF demagnetization, Hole U1444A.

Figure F18. Stepwise AF demagnetization results, Sample 353-U1444A-14X-4W, 48–50 cm (117.48–117.50 m CSF-A). A. Orthogonal vector plot (red symbols = points used in PCA, blue lines = calculated ChRM direction. B. NRM intensity versus AF demagnetization field with an equal area projection of NRM directions.

Figure F19. Variations in the ChRM inclination of discrete samples, Hole U1444A. Red dashed line = GAD (26.7° for the present-day latitude of the site). The tentative polarity timescale is presented accordingly with key ages marked. Black and white intervals = normal and reversed polarity, respectively, gray = polarity not determined.

Figure F20. Stepwise AF demagnetization results, Sample 353-U1444A-5H-1W, 88–90 cm (32.82–32.84 m CSF-A). A. Orthogonal vector plot (red symbols = points used in PCA, blue lines = calculated ChRM direction). B. NRM intensity versus AF demagnetization field with an equal area projection of NRM directions.

Figure F21. Equal area lower hemispheric projection of NRM after AF demagnetization (typically 80 mT). Solid symbols = positive inclination, open symbols = negative inclination.

Figure F22. Plot of the r_G parameter (see text), which roughly quantifies the relative contribution of GRM to the NRM, calculated for discrete samples, Hole U1444A.

Figure F23. Physical properties including *P*-wave velocity; MS from WRMSL, STMSL, and point SHMSL; GRA bulk density from WRMSL, STMSL, and MAD (green stars); porosity (blue stars); L*, a*, and b*; and NGR, Hole U1444A. MS, bulk density, NGR, and *P*-wave data were conditioned to remove outliers related to end caps and gaps in the core (see the **Expedition 353 methods** chapter [Clemens et al., 2016]).

Figure F24. Physical properties including MS from WRMSL and point SHMSL; GRA bulk density from WRMSL; L*, a*, and b*; and NGR, Hole U1444B. MS, bulk density, and NGR data were conditioned to remove outliers related to end caps and gaps in the core (see the **Expedition 353 methods** chapter [Clemens et al., 2016]).

Figure F25. SHIL RGB color data, Hole U1444A.

Figure F26. SHIL RGB color data, Hole U1444B.

Figure F27. Downhole temperature data, Hole U1444A.